REDACTED VERSION

3242
Valero Refining

9586107

EPAHQ104001089

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/24/2009**

Dear **Craig Byard**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3242

Expiration Date 3/24/2011

Generator: Valero Refining Company-Houston Plant
Address: 9701 Manchester
Houston, TX 77012-2408

Waste Information

Name of Waste: Sour Water
TCEQ Waste Code #: 0070603H
Container Type:
Detailed Description of Process Generating Waste:
From hydroblasting heat exchangers at sulfide unit.
Color: grey to black **Odor:** slight organic smell **pH:** 7
Physical State:
Incompatibilities: NON KNOWN
Safety Related Data/Special Handling:
LEVEL C

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

#3242 GB JR OL

CES Environmental Services, Inc.

CES Environmental Services - Houston Facility	CES Environmental Services - Port Arthur Facility
4904 Griggs Road, Houston, TX 77021	2420 S. Gulfway Dr., Port Arthur, TX 77641
Phone (713) 676-1460 Fax: (713) 676-1460	Phone (713) 676-1460 Fax: (713) 676-1460
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900	U.S. EPA ID Number: TXR000079307 ISWR Number: 88585
TCEQ Industrial Solid Waste Permit Number: 30948	

SECTION 1: Generator Information

Company: Valero Refining Company - Houston
Address: 9701 Manchester
City: Houston **State:** TX **Zip:** 77012
Contact: Merle Kirk **Title:**
Phone Number: (713) 923-3539 **Fax Number:** (713) 923-3561
24/hr Phone Number: (713) 923-3539
US EPA ID No: TXD053624193
State ID No: 30520 **SIC Code:**

SECTION 2: Billing Information ☑ Same as Above

Company: Environmental Disposal Solutions
Address: P.O. Box 58198
City: Webster **State:** TX **Zip:** 77598
Contact: Craig Byard **Title:**
Phone Number: (281) 910-0877 **Fax Number:**

SECTION 3: General Description of the Waste

Name of Waste: Sour Water
Detailed Description of Process Generating Waste:

From hydroblasting heat exchangers at sulfide unit.

Physical State: ☑ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color: Grey to black **Odor:** Slight organic smell

Specific Gravity (water=1): 1 **Density:** 8.34 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ Single-phase ☐ Multi-phase

Container Type: ☐ Drum ☐ Tote ☑ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☐ Monthly ☑ Yearly ☐ One-Time
Quantity: 2

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☑ Yes ☐ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☑ D003 (Reactive)

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

D018

Is this an "F" or "K" Listed waste or mixed with one? ☑ Yes ☐ No

If "Yes", then please list ALL applicable codes: ; K050, D003, D018, F037

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: 0070603H

Proper US DOT Shipping Name: Environmentally Hazardous Substance, N.O.S. (benzene)

Class: 9 **UN/NA:** UN3082 **PG:** III **RQ:** 10

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>140F		7		0	mg/l	0	mg/l	0-5	%
Oil & Grease		**TOC**		**Zinc**		**Copper**		**Nickel**	
>1500	mg/l	>1500	mg/l	.065	mg/l	.023	mg/l	.281	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Water	95-100	%
Scale / Dirt	0-5	%
Residual Oil Compounds	0-1	%
Benzene	<1	%
Sulfides	0-.1	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Level C

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. Lab Report - Water phase only# 0309-27

SECTION 7: Incompatibilities

Please list ALL Incompatibilities (if any):

None Known

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	BRL
TCLP Volatiles:	Benzene
TCLP Semi-Volatiles:	BRL
Reactivity:	NON
Corrosivity:	NON
Ignitability:	NON

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☑ YES ☐ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory: Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☑ Rinse/wash waters from petroleum sources

- [ ] Interceptor wastes
- [ ] Off-specification fuels
- [ ] Underground storage remediation waste
- [ ] Tank clean-out from petroleum or oily sources
- [ ] Non-contact used glycols
- [ ] Aqueous and oil mixtures from parts cleaning operations
- [ ] Wastewater from oil bearing paint washes

***Organics Subcategory*: Subpart C**

- [ ] Landfill leachate
- [ ] Contaminated groundwater clean-up from non-petroleum sources
- [ ] Solvent-bearing wastes
- [ ] Off-specification organic product
- [ ] Still bottoms
- [ ] Byproduct waste glycol
- [ ] Wastewater from paint washes
- [ ] Wastewater from adhesives and/or epoxies formulation
- [ ] Wastewater from organic chemical product operations
- [ ] Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- [ ] Metals Subcategory
- [x] Oils Subcategory
- [ ] Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on [x] generator knowledge and/or [ ] analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Craig Byard **Date:** 3-24-09

Printed Name/Title: Craig Byard President

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: Prabhakar Thapa
Date: 3-24-09 [x] Approved [ ] Rejected
Approval Number:

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$0.35 / gallon + $70/ hr Transportation + CSFC

2. Contamination Limit (maximum limit before surchages apply):

3. Surcharge Pricing:

4. Special Testing Requirements:

TOC, PH, Phenols, Metals, %solids, % oil ; Make sure no solids are generated after treating water. If solids are generated, they need to be segregated and disposed of as hazardous waste

5. Treatment and Handling Protocol:

~~Discharge without treatment to WWTP~~

Heat to drive off Benzene Discharge without creating solid. If solids are generated They must be segregated

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☑ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

what up w/ profile?

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

To: Gary Brauckman
Cc: Matt Bowman, Prabhaker, Joe Camp, Clint Hopkins

Date: 3/16/09

From: Miles Root

Lab Memo: 09-048

Subject: **Valero Evaluation 0309-27**

A sample of water and oil sludge from Valero through Environmental Disposal Solutions has been evaluated for processing at CES. This sample is evaluation 0309-27 and is water generated from the cleaning of heat exchanger bundles. The potential volume of this stream is 10,000 gallons/year. Overall, this K listed waste releases hydrogen sulfide when acidified and is not recommended for treatment at CES.

This material is classified as K050 listed waste for being heat exchanger bundle cleaning sludge from the petroleum refining industry. This material is truly sludge with no recoverable oils. This sludge has the consistency of pudding. This sample is approximately 60% sludge with water. The water can be decanted from the sludge, but then must be heated and acidified in order for it to be broken out cleanly. Upon acidification, this water releases hydrogen sulfide, as confirmed with lead acetate paper. It is for this reason that this material should not be processed at CES.

The pH of this water is 7. Its flash point is greater than 140 deg F. After heating and acidification, the treated water has a TOC of 3506 ppm. Metals and phenols are acceptable on this water. Since this is a K listed waste, all of the solids from this treat would need to be separated out as hazardous waste. In practice this could generally be done in our small filter press, but the hydrogen sulfide is the real issue here.

This stream is not recommended due to the issue with hydrogen sulfide generation. The sulfides present in the sludge are the source, but the water is contaminated none the less. A beaker of acidified material was enough to fill my lab with a rather unpleasant odor, even under a hood. The table below summarizes the analytical testing.

Valero	
Evaluation 0309-27	
Solids, vol%	10
Acidified Odor	Hydrogen Sulfide
pH	7
Phenols, ppm	2
TOC, mg/L	3,506
Oily Sludge, vol%	60
Treatability	H_2S release
Metals, ppm	
Ni	0.281
Zn	0.065
Cu	0.023
Cd	0.116

Jennifer Rust

From: Gary Brauckman
Sent: Monday, March 23, 2009 3:51 PM
To: Jennifer Rust
Cc: Miles Root
Subject: FW: Valero Evaluation 0309-27

D018 F037
K050 K048 K049

Jenny:

Please set up a profile for this material to come to CES. Profile needs to be sent to Craig at Env. Disp. Sol and he will get Valero to sign it. Price this material at 35 cents per gallon plus trans at $70.00/hour plus FSC. They have about 8,000 gallons. Please refer to the Valero Evaluation 0309-27.

GB

Rise water from Rctr B

From: Miles Root
Sent: Monday, March 23, 2009 3:46 PM
To: Gary Brauckman
Subject: RE: Valero Evaluation 0309-27

We can receive the water without issues. I didn't run the sample without treatment, (and there wasn't too much of this water portion available), but for sure it will make good "equalization" water for us. This water phase does not contain any sulfides. This water should come in very clean looking with low metals.
Miles

From: Gary Brauckman
Sent: Monday, March 23, 2009 3:34 PM
To: Miles Root
Subject: RE: Valero Evaluation 0309-27

I will re-read it next time, I was under the assumption that the whole sample was tested and the water portion contained sulfides. If this is the case then we can still receive this material here and treat it here at CES, right?

Let me know, I believe we talked about discharging without treatment.

GB

From: Miles Root
Sent: Monday, March 23, 2009 3:23 PM
To: Gary Brauckman
Subject: RE: Valero Evaluation 0309-27

You can use this report. The analytical was done on the water phase. PACES received the sludge for the sulfide testing, since the water itself does not contain sulfides, as stated in the report.

From: Gary Brauckman
Sent: Monday, March 23, 2009 3:12 PM
To: Miles Root
Subject: RE: Valero Evaluation 0309-27

Miles:

EPAHO104001098

We are looking at taking only the water phase and this should represent about 8,000 gallons. I thought you had sent some of this sample to PA and that there was some sulfide material and that we were thinking about sending the water to PA as feed stock. Did you prepare a separate report for the water phase? If not then I will need one.

Thanks

GB

From: Miles Root
Sent: Monday, March 23, 2009 2:46 PM
To: Gary Brauckman
Subject: RE: Valero Evaluation 0309-27

From: Gary Brauckman
Sent: Monday, March 23, 2009 2:22 PM
To: Miles Root
Subject: RE: Valero Evaluation 0309-27

Miles:

Regarding this stream the customer is ready to ship, I need to get an evaluation report on this, I couldn't find it.

Thanks

Gary B

From: Miles Root
Sent: Monday, March 16, 2009 3:28 PM
To: Matt Bowman; Gary Brauckman
Cc: Prabhaker Thangudu; Joe Camp; Clinton Hopkins
Subject: RE: Valero Evaluation 0309-27

I'm sending a sample to PACES so that Suzi can test it tomorrow.
Miles

From: Matt Bowman
Sent: Monday, March 16, 2009 2:48 PM
To: Miles Root; Gary Brauckman
Cc: Prabhaker Thangudu; Joe Camp; Clinton Hopkins
Subject: RE: Valero Evaluation 0309-27

Lets run a titration first and check on the sulfur values. If the material is brought in as a feedstock rather than a waste, then the K-codes will not apply on the solids (after we have used it as a feedstock).

From: Miles Root
Sent: Monday, March 16, 2009 2:40 PM
To: Matt Bowman; Gary Brauckman
Cc: Prabhaker Thangudu; Joe Camp; Clinton Hopkins
Subject: RE: Valero Evaluation 0309-27

EPAHO104001099

We don't want oily/sludgy water that will need disposal from RV1. I don't believe that this water has economically recoverable sulfides. Also, any solids that are generated from processing this material are a K listed waste as well, regardless of how many. And, there will be some.
In theory, we could treat the entire water load at PACES (having already put the sludge portion into a class 1 box), recover a trace amount of hydrogen sulfide from the water, dispose of the solids that are formed into a class 1 box, and send the treated RV1 water to System 1. We would need to recover more money than if we were running our NaSH business for the day, as it would cost that same amount of time and money to do this, and we would not be making a product that we could market with this low level sulfide. Disposal costs of all of the solids generated and their segregation and disposal must also be figured in as well.

Miles Root
Laboratory and Quality Assurance Manager
CES Environmental Services, Inc.
4904 Griggs Road
Houston, TX 77021
Cell: 832-607-6678
Fax: 713-748-8664

From: Matt Bowman
Sent: Monday, March 16, 2009 2:25 PM
To: Miles Root; Gary Brauckman
Cc: Prabhaker Thangudu; Joe Camp; Clinton Hopkins
Subject: RE: Valero Evaluation 0309-27

Miles, what about using this as a feedstock in our nash production? Can we do a titration at PACES?
Gary, is this stuff really going to have this much solids?

From: Miles Root
Sent: Monday, March 16, 2009 2:12 PM
To: Gary Brauckman
Cc: Matt Bowman; Prabhaker Thangudu; Joe Camp; Clinton Hopkins
Subject: Valero Evaluation 0309-27

The attached memo details the work on Valero evaluation 0309-27.

Miles Root
Laboratory and Quality Assurance Manager
CES Environmental Services, Inc.
4904 Griggs Road
Houston, TX 77021
Cell: 832-607-6678
Fax: 713-748-8664

EPAHO104001100

3243
Duco, Inc

EPAHO104001101

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/25/2009**

Dear **Bill Martin**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3243

Expiration Date 3/25/2011

Generator: Duco, Inc.
Address: 16661 Jacinto Port Blvd
Houston, TX 77015

Waste Information

Name of Waste: Emtpy Resin Containers & debris
TCEQ Waste Code #: 30019022
Container Type:
Detailed Description of Process Generating Waste:
Epoxy resin cans that have been emptied and crushed, placed in drum with rags, cardboa containers & debris from using the resin in the plant
Color: Varies **Odor:** Slight **pH:** 7
Physical State:
Incompatibilities: Strong Acids, Bases & Oxidizing agents
Safety Related Data/Special Handling:
Level D

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

#3243

GB
JR
IS

~~Need waste code~~

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility 4904 Griggs Road, Houston, TX 77021 Phone (713) 676-1460 Fax: (713) 676-1460 U.S. EPA ID Number: TXD008950461 ISWR Number: 30900 TCEQ Industrial Solid Waste Permit Number: 30948	☐ CES Environmental Services - Port Arthur Facility 2420 S. Gulfway Dr., Port Arthur, TX 77641 Phone (713) 676-1460 Fax: (713) 676-1460 U.S. EPA ID Number: TXR000079307 ISWR Number: 88585

SECTION 1: Generator Information

Company: Duco, Inc.
Address: 16661 Jacinto Port Blvd
City: Houston **State:** TX **Zip:** 77015
Contact: Bill Martin **Title:** QHS & E Manager
Phone Number: (281) 249-2842 **Fax Number:** (281) 457-6794
24/hr Phone Number: (713) 560-0678
US EPA ID No: TXD000807966
State ID No: 33041 **SIC Code:**

SECTION 2: Billing Information - ☑ **Same as Above**

Company:
Address:
City: **State:** **Zip:**
Contact: **Title:**
Phone Number: **Fax Number:**

SECTION 3: General Description of the Waste

Name of Waste: Empty Resin containers & debris

Detailed Description of Process Generating Waste:
Epoxy resin cans that have been emptied & placed in drum with rags, carboard containers, debris from using the resin in plant operations.

Physical State: ☐ **Liquid** ☐ **Sludge** ☐ **Powder**
☑ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: Varies **Odor:** Slight

Specific Gravity (water=1): N/A **Density:** N/A lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☐ **Single-phase** ☐ **Multi-phase**

Container Type: ☑ **Drum** ☐ **Tote** ☐ **Truck** ☐ **Other (explain)**

Frequency: ☐ **Weekly** ☑ **Monthly** ☐ **Yearly** ☐ **One-Time**
Quantity: 2

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: 30019022

Proper US DOT Shipping Name: Non-RCRA, Non-DOT Regulated Material

Class: N/A UN/NA: N/A PG : N/A RQ: N/A

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>150		7		BRL	mg/l	BRL	mg/l	100	%
Oil & Grease		**TOC**		**Zinc**		**Copper**		**Nickel**	
<1500	mg/l	>1500	mg/l	BRL	mg/l	BRL	mg/l	BRL	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Empty Expoxy Resin Cans	40-90	%
Rags, Gloves, PPE	0-10	%
Cardboard / Plastic	0-10	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Standard PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. MSDS

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

Strong Acids, Strong Bases & Strong Oxidizing agents

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	BRL
TCLP Volatiles:	BRL
TCLP Semi-Volatiles:	BRL
Reactivity:	Non-Reactive
Corrosivity:	Non-Corrosive
Ignitability:	>150

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory*: *Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory*: *Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory ***: Subpart C***

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** 3/24/2009

Printed Name/Title: Bill Martin, QHSE Mgr.

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: _____
Date: 3-25-09 ☑ Approved ☐ Rejected
Approval Number: _____

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$65 / DM + TRANSPORTATION

2. Contamination Limit (maximum limit before surchages apply):

3. Surcharge Pricing:

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

BULK TO CLASS 1 BOX or Class II

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

DUCO INC. MREF: 0036

SAFETY DATA SHEET
according to applicable EC directive

HUNTSMAN

Ident-No: RENGEL SW 404

Version 5
Revision Date 29.01.2004

Print Date 28.02.2004

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product information

Trade name	:	RENGEL SW 404
Use	:	Resin for tooling systems
Company	:	Huntsman Advanced Materials (Europe)BVBA Everslaan 45 3078 Everberg / Belgium
Telephone	:	+41619661599
Telefax	:	+41619661589
Emergency telephone number	:	+41 61 966 40 00 (in France ORFILA : +33(0)145425959)

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature

Epoxy resin containing mineral filler preparation

Hazardous components

Chemical Name	CAS-No.	Symbol(s):	R-phrase(s)	Concentration [%]
silicon carbide EC-No.: 206-991-8	409-21-2			40.00 - 55.00
reaction product: bisphenol A-(epichlorhydrin); epoxy resin (number average molecular weight < 700)	25068-38-6	Xi, N	R36/38 R43 R51/53	20.00 - 28.00
bisphenol F-epoxy resin	9003-36-5	Xi, N	R36/38 R43 R51/53	4.00 - 10.00
butanediol diglycidyl ether EC-No.: 219-371-7	2425-79-8	Xn	R20/21 R36/38 R43 R52/53	2.00 - 8.00
silicon dioxide, chemically prepared EC-No.: 231-545-4	7631-86-9			1.00 - 5.00

3. HAZARDS IDENTIFICATION

Irritating to eyes and skin.
May cause sensitization by skin contact.
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

4. FIRST AID MEASURES

Inhalation	:	Move to fresh air. Call a physician immediately.
Eye contact	:	Rinse immediately with plenty of water for at least 15 minutes. If eye irritation persists, consult a specialist.
Skin contact	:	Wash off with soap and plenty of water.

DUCO INC. MREF: 0036

If skin irritation persists, call a physician.

Ingestion : Immediately give plenty of water (if possible charcoal slurry).
Do not induce vomiting.
Obtain medical attention.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Water spray.
Carbon dioxide (CO2).
Foam.
Dry powder.

Extinguishing media which must not be used for safety reasons : High volume water jet.

Special protective equipment for fire-fighters : Wear self-contained breathing apparatus and protective suit.

Further information : Burning produces obnoxious and toxic fumes.
Carbon oxides.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions : Keep away from sources of ignition - No smoking.
Avoid contact with skin, eyes and clothing.
Do not breathe vapours/dust.

Environmental precautions : Prevent product from entering drains.
Do not contaminate surface water.
Avoid subsoil penetration.

Methods for cleaning up : Soak up with inert absorbent material and dispose of as hazardous waste.

7. HANDLING AND STORAGE

Handling

Advice on safe handling : Provide sufficient air exchange and/or exhaust in work rooms.
Avoid formation of aerosol.
Ensure adequate ventilation.
Handle and open container with care.

Storage

Further information on storage conditions : Keep away from food, drink and animal feeding stuffs.
Keep container tightly closed.
Keep at temperatures between 2 and 40°C.

Storage hazard class : Storage class 10, Environmentally hazardous liquids

EPAHO104001110

DUCO INC. MREF: 0036

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Control parameters	Update	Basis
silicon carbide	409-21-2	10 mg/m3 5 mg/m3		EH40 OES EH40 OES
silicon dioxide, chemically prepared	7631-86-9	3 mg/m3		EH40 OES

Engineering measures

No special precautions required.

Personal protective equipment

Respiratory protection : No special protective equipment required.

Eye protection : Tightly fitting safety goggles.
Face-shield.

Hand protection : rubber or plastic gloves

Skin and body protection : Protective suit.
Safety shoes.

Protective measures : Keep away from sources of ignition - No smoking.
Avoid contact with skin, eyes and clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form : paste

Colour : blue

Odour : slight

pH : approx.7
at (20 °C)
1:1 in water

Boiling point : > 200 °C

Thermal decomposition : > 200 °C

Flash point : 150 °C
Method: DIN 51758 (Pensky-Martens Closed Cup)

Vapour pressure : < 0.01 Pa
at 20 °C

DUCO INC. MREF: 0036

Information	Prevent product from entering drains. Do not contaminate surface water.

13. DISPOSAL CONSIDERATIONS

Container	:	Empty containers can be landfilled after cleaning, when in compliance with the Environmental Protection (Duty of Care) Regulations 1991.
Product	:	Waste Key Number: 070208 Must be incinerated, when in compliance with local regulations.

14. TRANSPORT INFORMATION

Land transport

ADR:

UN-No:	3082
Class:	9
Classification code:	M6
Packaging group:	III
Risk No.:	90
ADR/RID-Labels:	9
Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, *N.O.S.*
contains:	BISPHENOL A EPOXY RESIN

RID:

UN-No:	3082
Class:	9
Packaging group:	III
Risk No.:	90
ADR/RID-Labels:	9
Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
contains:	BISPHENOL A EPOXY RESIN

Sea transport

IMDG:

UN-No:	3082
Class:	9
Packaging group:	III
ADR/RID-Labels:	9
MFAG:	
EmS:	F-A S-F
Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
contains:	(BISPHENOL A EPOXY RESIN)

EPAHO104001112

DUCO INC. MREF: 0036

Density	:	1.9 g/cm3 at 25 °C
Water solubility	:	at 20 °C Note: practically insoluble
Miscibility with water	:	immiscible at 20 °C
Viscosity, dynamic	:	55 - 80 Pa.s at 25 °C

10. STABILITY AND REACTIVITY

Conditions to avoid	:	Note: Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours).
Materials to avoid	:	Strong acids and strong bases. Strong oxidizing agents.
Hazardous decomposition products	:	Carbon oxides. Burning produces obnoxious and toxic fumes.

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity	:	LD50 rat Dose: > 5,000 mg/kg
Eye irritation	:	irritating rabbit
Skin irritation	:	irritating rabbit dermal
Sensitization	:	Causes sensitization. guinea pig dermal
Further information	:	Epoxy resins with an average molecular weight of less than 700 may cause sensitization.

12. ECOLOGICAL INFORMATION

Elimination information (persistence and degradability)

Biodegradability	:	Result: Not readily biodegradable.

Ecotoxicity effects

Further information on ecology

Additional ecological	:	Avoid subsoil penetration.

DUCO INC. MREF: 0036

Air transport

IATA-DGR:

UN/ID No.:	UN 3082
Class:	9
Packaging group:	III
Packing instruction (cargo aircraft):	914
Max. Qty/Pack.: *(999.00 = No limit)*	999.00 L
Packing instruction (passenger aircraft):	914
Max. Qty/Pack.: *(999.00 = No limit)*	999.00 L
ADR/RID-Labels:	9
Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
contains:	(BISPHENOL A EPOXY RESIN)

15. REGULATORY INFORMATION

Labelling according to EEC Directive

Labelling required

Symbol(s):	:	Xi	Irritant
		N	Dangerous for the environment
R-phrase(s)	:	R36/38	Irritating to eyes and skin.
		R43	May cause sensitization by skin contact.
		R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S-phrase(s)	:	S28	After contact with skin, wash immediately with plenty of soap and water.
		S37/39	Wear suitable gloves and eye/face protection.
		S61	Avoid release to the environment. Refer to special instructions/Safety data sheets.

Exceptional labelling of special preparations : Contains epoxy constituents. See information supplied by the manufacturer.

Hazardous components which must be listed on the label : reaction product: bisphenol A-(epichlorhydrin); epoxy resin (number average molecular weight < 700)

butanedioldiglycidyl ether
EC-No.: 219-371-7

National legislation

EPAHO104001114

DUCO INC. MREF: 0036

Notification status

: EINECS yes

: TSCA yes

: DSL yes

: AICS yes

: KECI (KR) yes

: ENCS (JP) yes

16. OTHER INFORMATION

List of R-phrases (Section 2)

R20/21	Harmful by inhalation and in contact with skin.
R36/38	Irritating to eyes and skin.
R43	May cause sensitization by skin contact.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

The provision of Safety Data Sheets comes under Regulation 6 of CHIP (CHIP is the recognised abbreviation for the Chemicals Hazard Information and Packaging Regulations). This is an addition to the Health and Safety at Work Act 1974.Users of products supplied by Huntsman Advanced Materials should take appropriate measures to ensure working practices are in accordance with the Control of Substances Hazardous to Health Regulations (COSHH).
All information is based on results gained from experience and tests and is believed to be accurate but is given without acceptance of liability for loss or damage attributable to reliance thereon as conditions of use lie outside our control. Users should always carry out sufficient tests to establish the suitability of any products for their intended applications. No statements shall be incorporated in any contract unless expressly agreed in writing nor construed as recommending the use of any product in conflict of any patent. All goods are supplied subject to Huntsman Advanced Materials General Conditions of Sale.

Jennifer Rust

From: BcMartin@ducoinc.com
Sent: Monday, March 23, 2009 5:25 AM
To: Jennifer Rust
Subject: New Waste Stream-Rengel SW 404

Probably not, however, I have never watched what happens over a year to this. It has not been mixed with the hardener. The residual resin is kinda like toothpaste in terms of consistancy.

Bill Martin
Quality, Health, Safety and Environmental Manager – DUCO Inc.

DUCO Inc., a Technip Company – 16661 Jacintoport Blvd – Houston – TX 77015 – bcmartin@ducoinc.com www.technip.com
Tel (Direct) +1 (281) 249 2842 - Switchboard +1 (281) 249 2800 - Fax +1 (281) 457 6794 – Mobile +1 (713) 560 0678

Jennifer Rust
<jrust@cesenviron
mental.com>
03/20/2009 04:23
PM

To
"BcMartin@ducoinc.com"
<BcMartin@ducoinc.com>
cc
Gary Brauckman
<gbrauckman@cesenvironmental.com>
Subject
RE: New Waste Stream-Rengel SW 404

EPAHO104001116

I will have a final answer & profile for you Monday - I believe this will be non-hazardous class 1, but I need to do some digging & confirm - there is no free flowing resin?g

Thank You!

Jennifer Rust

Direct: 713-800-7913
Cell: 713-367-8581

-----Original Message-----
From: BcMartin@ducoinc.com [mailto:BcMartin@ducoinc.com]
Sent: Friday, March 20, 2009 4:19 PM
To: Jennifer Rust
Cc: BoHouse@ducoInc.com
Subject: New Waste Stream-Rengel SW 404

Jennifer,

For the most part, we use an Epoxy here called Rengel SW 404. They come in small cans about 1 gallon in size. When we use what we can we crush the can and place into a 55 gallon drum. Also some of the cleanup and packing materials which are also tainted with the product are placed in there as well.

We currently have 2 drums of the stuff. How can we dispose of it ?

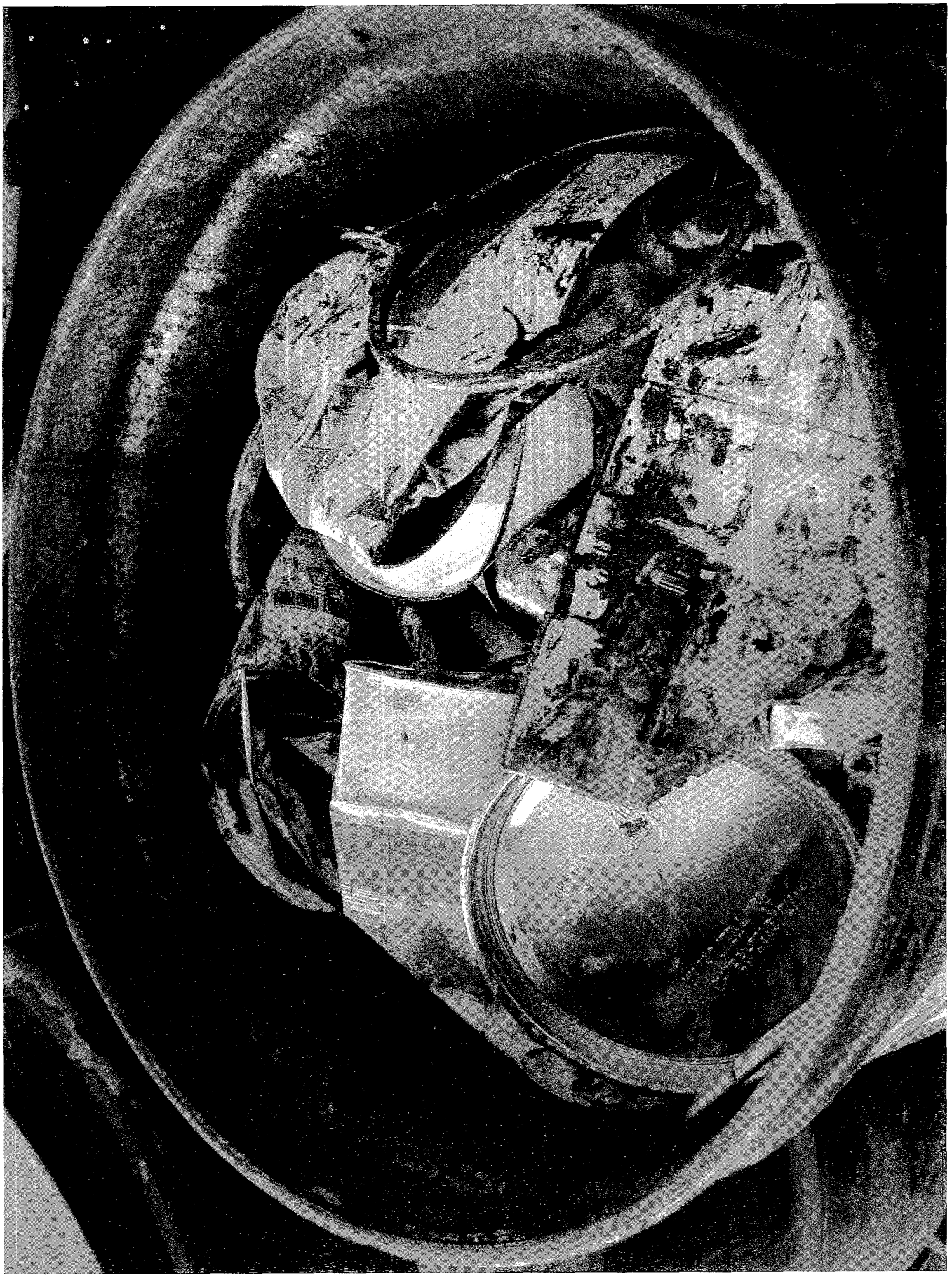
I have included some photos and a MSDS of it. Please call and advise.

(See attached file: Drums with SW 404 Epoxy.pdf)

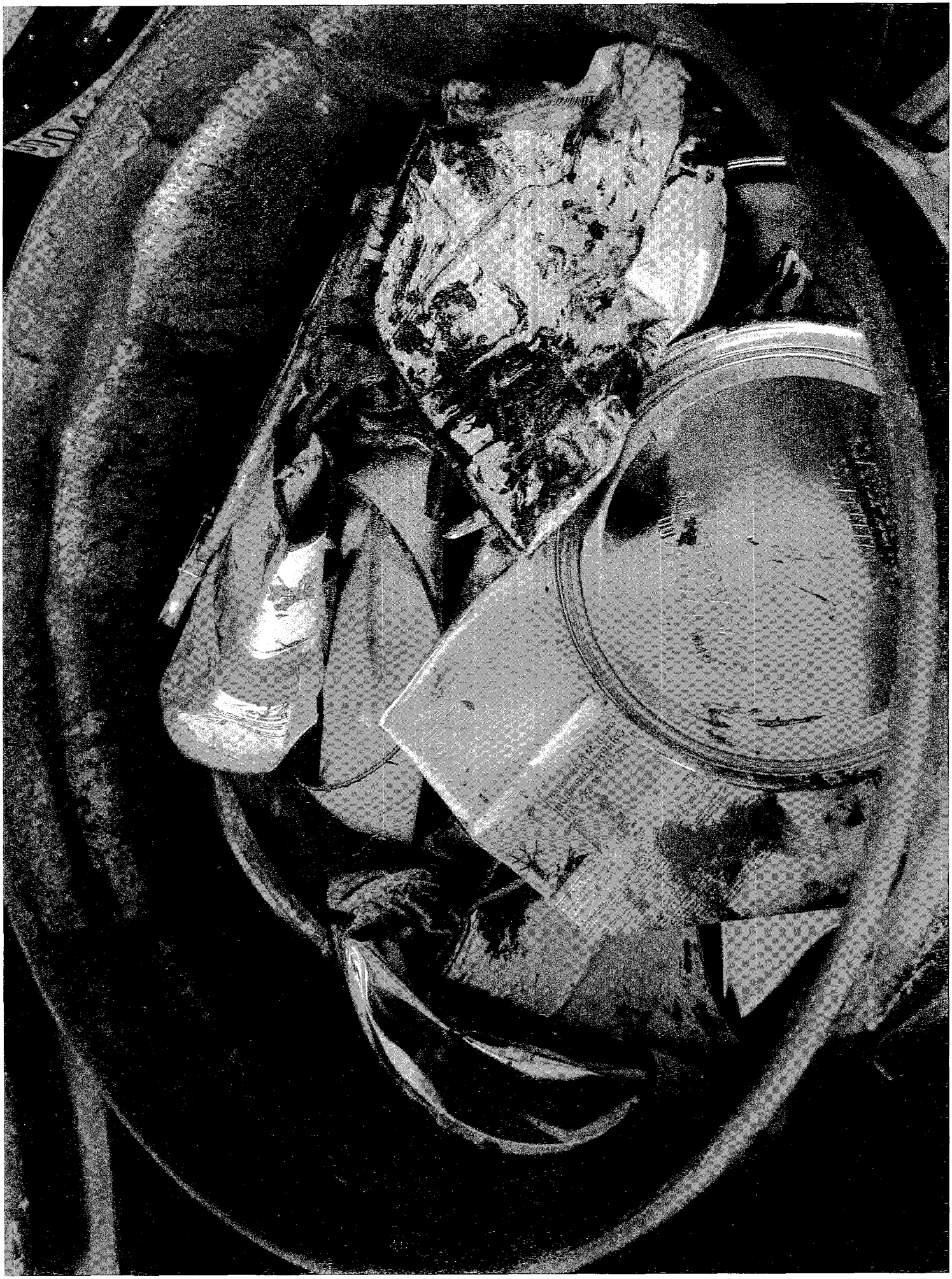
(See attached file: DUCO MREF 0036, Rengel SW404.pdf) Bill Martin Quality, Health, Safety and Environmental Manager – DUCO Inc.

DUCO Inc., a Technip Company – 16661 Jacintoport Blvd – Houston – TX 77015
– bcmartin@ducoinc.com www.technip.com
Tel (Direct) +1 (281) 249 2842 - Switchboard +1 (281) 249 2800 - Fax +1
(281) 457 6794 – Mobile +1 (713) 560 0678

EPAHO104001117



EPAHO104001118



EPAHO104001119

3244
Duco, Inc.

EPAHO104001122

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/25/2009**

Dear **Bill Martin**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3244

Expiration Date 3/25/2011

Generator: Duco, Inc.
Address: 16661 Jacinto Port Blvd
Houston, TX 77015

Waste Information

Name of Waste: Lead Acid Batteries
TCEQ Waste Code #: UNIV309H
Container Type:
Detailed Description of Process Generating Waste:
Spent Batteries
Color: Varies **Odor:** none **pH:** <2
Physical State:
Incompatibilities: OXIDIZERS, BASES
Safety Related Data/Special Handling:
LEVEL C

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

#3244

GB
JR

Universal

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility 4904 Griggs Road, Houston, TX 77021 Phone (713) 676-1460 Fax: (713) 676-1460 U.S. EPA ID Number: TXD008950461 ISWR Number: 30900 TCEQ Industrial Solid Waste Permit Number: 30948	☐ CES Environmental Services - Port Arthur Facility 2420 S. Gulfway Dr., Port Arthur, TX 77641 Phone (713) 676-1460 Fax: (713) 676-1460 U.S. EPA ID Number: TXR000079307 ISWR Number: 88585

SECTION 1: Generator Information

Company: Duco, Inc.
Address: 1661 Jacinto Port Blvd
City: Houston **State:** TX **Zip:** 77015
Contact: Bill Martin **Title:** QHS & E Manager
Phone Number: 281-249-2842 **Fax Number:** 281-457-6794
24/hr Phone Number: 713-560-0678
US EPA ID No: TXD000807966
State ID No: 33041 **SIC Code:**

SECTION 2: Billing Information - ☑ **Same as Above**

Company:
Address:
City: **State:** **Zip:**
Contact: **Title:**
Phone Number: **Fax Number:**

SECTION 3: General Description of the Waste

Name of Waste: Lead Acid batteries
Detailed Description of Process Generating Waste:

Spent batteries

Physical State: ☑ **Liquid** ☐ **Sludge** ☐ **Powder**
☑ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: Varies **Odor:** none

Specific Gravity (water=1): 1.5 **Density:** 12 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ **Single-phase** ☐ **Multi-phase**

Container Type: ☐ **Drum** ☐ **Tote** ☐ **Truck** ☑ **Other (explain)**

Frequency: ☐ **Weekly** ☐ **Monthly** ☑ **Yearly** ☐ **One-Time**
Quantity: 3 pallets

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☑ D009 ☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: UNIV309H

Proper US DOT Shipping Name: Batteries, wet filled with acid

Class: 8 **UN/NA:** UN2794 **PG :** III **RQ:** N/A

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
>200	<2	BRL mg/l	BRL mg/l	80-100 %

Oil & Grease	TOC	Zinc	Copper	Nickel
<1500 mg/l	<1500 mg/l	BRL mg/l	BRL mg/l	BRL mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Lead Acid Batteries	100	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Level C

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. None

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

Oxidizers, Bases

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	Universal D008, D002
TCLP Volatiles:	Not Regulated
TCLP Semi-Volatiles:	Not Regulated
Reactivity:	Non-Reactive
Corrosivity:	<2
Ignitability:	>200 degrees

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO
If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory*: *Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory*: *Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory **: *Subpart C***

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** 3/24/2009

Printed Name/Title: Bill Martin, QHSE Mgr., DUCO Inc.

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: _____
Date: 3-25-09 ☑ Approved ☐ Rejected
Approval Number: _____

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$0.50 / LB, $70 / HR

2. Contamination Limit (maximum limit before surchages apply):

3. Surcharge Pricing:

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

RECYCLE

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

3245
Reagens, Inc

EPAHO104001130

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/25/2009**

Dear **Ben DeLaRosa**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3245

Expiration Date 3/25/2011

Generator: Reagens, Inc.
Address: 9640 Bayport Blvd.
Pasadena, TX 77507

Waste Information

Name of Waste: Mixture of Sodium salt of Oleic Acid & Water
TCEQ Waste Code #: Class II
Container Type:
Detailed Description of Process Generating Waste:
Offspec product. Generator certifiies no RCRA metals and no petroleum hydrocarbons ; present in stream.
Color: yellowish white **Odor:** burnt chemical **pH:** 5-9
Physical State:
Incompatibilities: STRONG ACIDS, OXIDIZERS
Safety Related Data/Special Handling:
LEVEL D

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

Attn: Gary Brauckman.

GB
JR

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility 4904 Griggs Road, Houston, TX 77021 Phone (713) 676-1460 Fax: (713) 676-1460 U.S. EPA ID Number: TXD008950461 ISWR Number: 30900 TCEQ Industrial Solid Waste Permit Number: 30948	☐ CES Environmental Services - Port Arthur Facility 2420 S. Gulfway Dr., Port Arthur, TX 77641 Phone (713) 676-1460 Fax: (713) 676-1460 U.S. EPA ID Number: TXR000079307 ISWR Number: 88585

SECTION 1: Generator Information #3245

Company: Reagens, Inc.
Address: 9640 Bayport Blvd.
City: Pasadena **State:** TX **Zip:** 77507
Contact: Prashanth Pabbati **Title:** Asst. Plant Manager
Phone Number: 281-291-8484 x 122 **Fax Number:** 281-291-8486
24/hr Phone Number:
US EPA ID No: TXD086476850
State ID No: 31373 **SIC Code:**

SECTION 2: Billing Information - ☑ **Same as Above**

Company:
Address:
City: **State:** **Zip:**
Contact: **Title:**
Phone Number: **Fax Number:**

SECTION 3: General Description of the Waste

Name of Waste: Mixture of Sodium salt of Oleic Acid and Water
Detailed Description of Process Generating Waste

Offspec Product. Generator certifies no RCRA metals and no petroleum hydrocarbons are present in stream.

Physical State: ☑ **Liquid** ☐ **Sludge** ☐ **Powder**
☑ **Solid** ☐ **Filter Cake** ☑ **Combination**

Color: Yellowish White **Odor:** Burnt Chemical

Specific Gravity (water=1): 0.9 **Density:** <8 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene**AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☐ **Single-phase** ☑ **Multi-phase**

Container Type: ☐ **Drum** ☑ **Tote** ☐ **Truck** ☐ **Other (explain)**

Frequency: ☐ **Weekly** ☐ **Monthly** ☐ **Yearly** ☑ **One-Time**
Quantity: 10 Totes

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☑ D009 ☐ D010 ☐ D011
Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: Class II - Not Required

Proper US DOT Shipping Name: Non-RCRA, Non-DOT Regulated Material
Class: N/A UN/NA: N/A PG: N/A RQ: N/A

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>200		5-9		BRL	mg/l	BRL	mg/l	>50	%
Oil & Grease		**TOC**		**Zinc**		**Copper**		**Nickel**	
>1500	mg/l	>1500	mg/l	N/A	mg/l	N/A	mg/l	N/A	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Sodium Salt of Oleic Acid	50-70	%
Water	40-50	%

SECTION 5: Safety Related Data
If the handling of this waste requires the use of special protective equipment, please explain.
Standard PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. MSDS of the Product

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):
Strong Acids, Oxidizers.

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	Not Regulated
TCLP Volatiles:	Not Regulated
TCLP Semi-Volatiles:	Not Regulated
Reactivity:	Non-Reactive
Corrosivity:	Non-Corrosive
Ignitability:	>200

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Pitaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO
If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory: Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory: Subpart C

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Prashanth **Date:** 03/17/2009

Printed Name/Title: Prashanth Pabbati, Asst. Plant Manager.

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: Prabhakar Thyagarajan
Date: 3-25-09 ☑ Approved ☐ Rejected
Approval Number:

Texas Commission on Environmental Quality (TCEQ)
One-Time Shipment Request for Texas Waste Code
For Shipment of Hazardous and Class 1 Waste

TCEQ

Pursuant to the generator notification requirements of 30 Texas Administrative Code (TAC) Section 335.5, the generator of a solid waste is required to submit to TCEQ detailed written information pertaining to the composition and characteristics of the waste. Please complete all applicable sections. Incomplete forms will delay processing. Assigned waste codes cannot be changed without prior approval from TCEQ.

Generator Contact Person: Prashanth Pabbati

Generator Company Name: Reagens, Inc.

Generator Mailing Address:
9440 Bayport Blvd; Pasadena, TX 77507

Generator Phone No.: (281) 291-8484 x 122 | **Generator Fax No.:** (281) 291-8486

Texas Solid Waste Registration (SWR) No. (Only if Registered): 31373 | **U.S. EPA Identification No.:** TXD084710850

Generating Site Location: (check if same as above) ☑
Must be street address or physical description including zip code)

Designated Treatment, Storage, and/or Disposal Facility name and address:
CES Environmental; 4904 Griggs; Houston, TX 77021

*Only fill out System Type Code if you selected Source Code G25.

Description of Waste (Do Not Use DOT description or Trade name)	Form Code	Class Code	Origin Code	Source Code	System Type Code*	EPA Waste Code
1. Mixture of Sodium Salt of Oleic Acid & Water	519	II	1	G11	HD35	NONE
	Texas Waste Code: (Assigned by TCEQ)					
2.						
	Texas Waste Code: (Assigned by TCEQ)					

Generator/Representative

I certify that the above information is complete and accurate to the best of my knowledge.

Signature: Prashanth | Date: 03/20/2009

Company Name: (If different than generator) CES Environmental,

Company Mailing Address:
4904 Griggs Houston, TX 77021

Company Phone No.: (713) 802-7913 | **Company Fax No.:** (713) 748-8604

Processed Date:	Processed By:	TCEQ Region:

If you have questions on how to fill out this form or about the One-Time Shipment program, please contact us at 512/239-6413.
Individuals are entitled to request and review their personal information that the agency gathers on its forms. They may also have any errors in their information corrected. To review such information, contact us at 512/239-3282.
TCEQ-0757 (Rev. 05/10/2007)

EPAHO104001136

MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION.

Identity: REATINOR RT 6610-3

Chemical Composition: Mixture of Butyl Tin Mercaptides
Chemical Family: Organotin Compounds
Product use: Organotin stabilizers

Reagens USA, Inc.
9640 Bayport Blvd.
Pasadena, TX 77507

Emergency phone: (281) 330-5342
Key contact: Harnish Shah
Date: 11/2003

1. COMPOSITION/INFORMATION ON INGREDIENTS.

Ingredient name	CAS Registry No.	Typical wt%	OSHA
Mixed Butyl Tin Mercaptides	n.a.	100	N

The substances marked with a Y in the OSHA column are identified and classified as hazardous chemicals according to the criteria of the OSHA Communication Standard

2. HAZARD IDENTIFICATION.

HARMFUL IF INHALED, ABSORBED THROUGH SKIN OR SWALLOWED
MAY CAUSE SKIN IRRITATION OVER PROLONGED EXPOSURE
MAY CAUSE EYE IRRITATION

Skin contact is expected to be the primary route of occupational exposure for this material. Inhalation exposure is unlikely because of its very high boiling point.

Inhalation: n.a.

Skin contact: Direct contact over prolonged period may cause irritation. First itching. If not removed, moderate to severe redness and moderate swelling. Exposure to broken or previously irritated skin may lead to more severe damage.

Eye contact: Eye contact will cause irritation much quicker.

Ingestion: Harmful by oral route.

Carcinogenicity: NTP: not listed IARC: not listed OSHA: not listed

3. FIRST AID MEASURES.

Inhalation: n.a.

Skin contact: Wash with soap and water and/or plain water for at least 15 minutes. If necessary seek medical advice.

Eye contact: Flush with large amounts of water, holding eyelids opened for at least 15 minutes. Seek medical advice.

Ingestion: Seek medical advice.

4. FIRE FIGHTING MEASURES.

Autoignition temperature: n.a.
Flash point: >284 °F (PMCC)
Flammable limits: unknown
Lower Explosion Limit: undetermined
Upper Explosion Limit: undetermined
Extinguishing media: dry, chemical, foam
Fire fighting instructions: wear self contained breathing apparatus
Unusual fire and explosion hazard: generates Sulphur Oxides when heated to decomposition

5. ACCIDENTAL RELEASE MEASURES

In case of spill or leak:
Stop the leak, if possible. Mop, scoop or soak up with absorbent compound. Large spill may liberate some vapors. Ventilate to reduce Sn concentration below PEL (see par. 8). Prevent waterway contamination.
Clean up procedures:
Transfer to containers, in preparations for later disposal. Avoid generation of dusts.

6. HANDLING AND STORAGE.

Handling:
Wear protective gloves and safety glasses. Do not eat, drink or smoke during manipulation.
Storage:
Avoid contact or the proximity to open flames or sparks. Keep away from food, drink and animal feeding stuff. Store at room temperature in a well ventilated place.
Type of material used in packaging:
Steel or plastic drums, plastic totes, or bulk tank trucks.
Other precautions:
Do not weld or torch cut an empty drum or tote without local exhaustion or respiratory protection.

7. EXPOSURE CONTROL/PERSONAL PROTECTION

Ventilation:
Local exhaust, necessary if heated.
Respiratory protection:
None normally needed. If heated, use NIOSH approved OV/AG respirators.
Hand protection:
PVC protective gloves required.
Eye protection:
Industrial safety glasses.
Other protective clothing or equipment:
None normally needed.
Work/Hygienic practices:
Always wash hands before touching eyes, smoking or eating. Wash chemical form skin promptly.

Airborne/exposure guidelines for ingredients:
Mixed Butyl Tin Mercaptides

ACGIH STEL:	Organotin compounds, as Tin	0.2 mg/m3	Skin
ACGIH TWA:	Organotin compounds, as Tin	0.1 mg/m3	Skin
OSHA TWA PEL:	Organotin compounds, as Tin	0.1 mg/m3	Skin

8. PHYSICAL AND CHEMICAL PROPERTIES

Appearence/Odor	Clear Amber Liquid with Characteristic Odor
pH	n.a.
Specific gravity	1.04 at 25°C
Vapour pressure	unknown
Vapour density	unknown (air=1)
Melting point	unknown
Freezing point	n.a.
Boiling point	>200 °C
Solubility in water	Insoluble
Solubility in other materials	n.a.
Evaporation rate	unknown (butyl acetate=1)
Particle size	n.a.
Percent volatile	n.a.
Molecular weight	n.a.
n-Octanol/Water Part. Coeff.	n.a.
Oil/Water Part. Coeff.	n.a.
Other physical data	n.a.

9. STABILITY AND REACTIVITY

Stability:
The product is stable under normal storage conditions.
Hazardous polymerization:
Does not occur.
Incompatibility:
Avoid contact with strong acids and oxidizers.
Hazardous decomposition products:
Sulphur oxides.

10. TOXICOLOGICAL INFORMATION

No data available.

11. ECOLOGICAL INFORMATION

No data available.

12. DISPOSAL CONSIDERATIONS

Consult a regulatory specialist to determine appropriate or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal.

13. TRANSPORT INFORMATION

UN classification:	NOT CLASSIFIED
DOT name:	//
DOT technical name:	//
DOT hazard class:	//
UN Number:	//
DOT packing group:	//
Marine Pollutant:	//
DOT special information:	//

14. REGULATORY INFORMATION

NFPA Chemical Hazard Rating and Labeling:

Health:	2	(blue)
Flammability:	0	(red)
Reactivity:	0	(yellow)
Other:	0	(white)

15. OTHER INFORMATION

Revision: 0
Date: November 12th, 2003

Bibliography:

OSHA, Occupational Safety and Health Administration, USA
ACGIH, American Conference of Governmental and Industrial Hygienists, USA
NFPA, National Fire Protection Association, USA
TSCA, Toxic Substances Control Act, USA
NTP, National Toxicology Programme, USA
IARC, International Agency for Research on Cancer, F

The information contained on this SAFETY DATA SHEET is to the best of our current knowledge and experience on the product and is not exhaustive. It applies to the product as such and conforming to specifications. In case of formulations and mixtures, it is necessary to ascertain that a new danger will not appear.

It does not relieve the product user from complying with existing laws and regulations relevant to the product, its use, industrial hygiene and work safety.

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$125 / tote + transportation at $70 / hr (minimum of 4 hours) + FSC

2. Contamination Limit (maximum limit before surchages apply):

3. Surcharge Pricing:

4. Special Testing Requirements:

Check water phase for pH, TOC, phenols

5. Treatment and Handling Protocol:

~~Decant water & send to w/w treatment plant. Oil to be blended.~~

Process water in WWTP if possible. Solids to Class 2 Solids box.

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

3246
NOV monoflo

EPAHQ104001143

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/26/2009**

Dear **Terry Cranford or Clarence Schm**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3246

Expiration Date 3/26/2011

Generator: NOV Monoflo
Address: 16503 Park Row
Houston, TX 77084

Waste Information

Name of Waste: Fluorescent Bulbs
TCEQ Waste Code #: UNIV309H
Container Type: BOXES
Detailed Description of Process Generating Waste:
Spent Flurescent bulbs
Color: white to clear **Odor:** none **pH:** N/A
Physical State:
Incompatibilities: NONE
Safety Related Data/Special Handling:
LEVEL D

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

#3246

GB
JR

UNIVERSAL

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility 4904 Griggs Road, Houston, TX 77021 Phone (713) 676-1460 Fax: (713) 676-1460 U.S. EPA ID Number: TXD008950461 ISWR Number: 30900 TCEQ Industrial Solid Waste Permit Number: 30948	☐ CES Environmental Services - Port Arthur Facility 2420 S. Gulfway Dr., Port Arthur, TX 77641 Phone (713) 676-1460 Fax: (713) 676-1460 U.S. EPA ID Number: TXR000079307 ISWR Number: 88585

SECTION 1: Generator Information

Company: NOV Monoflo
Address: 16503 Park Row
City: Houston **State:** TX **Zip:** 77084
Contact: Terry Cranford **Title:**
Phone Number: 281-599-4718 **Fax Number:**
24/hr Phone Number: 281-599-4733
US EPA ID No: TXD988086831
State ID No: 20375 **SIC Code:**

SECTION 2: Billing Information - ☑ **Same as Above**

Company:
Address:
City: **State:** **Zip:**
Contact: **Title:**
Phone Number: **Fax Number:**

SECTION 3: General Description of the Waste

Name of Waste: Fluorescent Bulbs
Detailed Description of Process Generating Waste:

Spent Florescent bulbs

Physical State: ☐ **Liquid** ☐ **Sludge** ☐ **Powder**
☑ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: White to clear **Odor:** None

Specific Gravity (water=1): N/A **Density:** N/A lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ **Single-phase** ☐ **Multi-phase**

Container Type: ☐ **Drum** ☐ **Tote** ☐ **Truck** ☑ **Other (explain)**

Frequency: ☐ **Weekly** ☑ **Monthly** ☐ **Yearly** ☐ **One-Time**
Quantity: 5 BOXES

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: UNIV309H

Proper US DOT Shipping Name: Environmentally Hazardous Substance, Solid, N.O.S. (fluorescent bulbs)

Class: 9 **UN/NA:** UN3077 **PG :** III **RQ:** NONE

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
N/A		N/A		BRL	mg/l	BRL	mg/l	100	%
Oil & Grease		**TOC**		**Zinc**		**Copper**		**Nickel**	
N/A	mg/l	BRL	mg/l	BRL	mg/l	BRL	mg/l	BRL	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Fluorescent Light Bulbs	~~0-100~~ 100	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Level D

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. None

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

None

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	BRL
TCLP Volatiles:	BRL
TCLP Semi-Volatiles:	BRL
Reactivity:	Non-Reactive
Corrosivity:	Non-Corrosive
Ignitability:	>200 F

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory*: *Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory*: *Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory*: *Subpart C

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** 3-25-09

Printed Name/Title: Larry Black / HSE/Manuf Manager

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: _____
Date: 3-25-09 ☑ Approved ☐ Rejected
Approval Number: _____

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

30 cents/ft fluorescent; $1.25/ft HID bulbs

2. Contamination Limit (maximum limit before surchages apply):

3. Surcharge Pricing:

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

Record the total number received and consolidate with UNIV waste; send to Environmental Lamp Recyclers

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

3247
IDM

EPAHQ1040011151

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/26/2009**

Dear **Zac or Dave**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3247

Expiration Date 3/26/2011

Generator: IDM
Address: 11616 Galayda
Houston, TX 77086

Waste Information

Name of Waste: Unleaded Gasoline- unused
TCEQ Waste Code #: Recycle
Container Type:
Detailed Description of Process Generating Waste:
removed from a vehicle prior to use
Color: yellow **Odor:** gas **pH:** 7
Physical State:
Incompatibilities: none
Safety Related Data/Special Handling:
standard

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

CES Environmental Services, Inc.

4904 Griggs Road Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

SECTION 1: Generator Information

Company : IDM
Address : 11616 Galayda 10707 Honea Egypt Rd.
City, State, Zip : Houston TX 77086
Contact : William **Title :**
Phone No : (713) 409-0949 **Fax :**
24 / HR Phone :
U.S EPA I.D No :
State I.D : **SIC Code**

SECTION 2: Billing Information

Company : CKG Services Conroe
Address : 7420 Honea Egypt Road 7420 Honea Egypt Road
City, State, Zip : Montgomery TX 77316
Contact : Zac or Dave **Title :**
Phone No : (936) 483-3662 **Fax :** (936) 756-1226

SECTION 3: General Description of the Waste

Name of Waste : Unleaded Gasoline- unused

Detailed Description of the Process Generating Waste:

removed from a vehicle prior to use

Physical State : ☑ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color : yellow **Odor :** gas

Specific Gravity (Water=1) : .85 **Density :** 8 lbs / gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834	2835	2836	2841	2842	2843	2844	2851
2861	2865	2869	2873	2874	2876	2879	2891	2892	2893	2896	2899	2911	3312	4953	4959	9511

Layers : ☑ Single-Phas ☐ Multi-Phase

Container Type : ☑ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Container Size : 55

Number Of Units : 3

Is this a USEPA "Hazardous Waste" per 40 CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", is it: ☐ D001 ☐ D002 ☐ D003

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristics for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code No : Recycle

Proper U.S. State Waste Code No : UN1203, Flammable liquid, n.o.s., PGII

Class : 3 **UN/NA :** UN1203 **PG :** II **RQ :** na

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
<140	7	0 mg/l	0 mg/l	1 %
Oil and Grease	**TOC**	**Zinc**	**Copper**	**Nickel**
na mg/l	na mg/l	0 mg/l	0 mg/l	0 mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The material / product consists of the following materials	Concentration Ranges are acceptable	Units or %
unleaded gas	100	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

standard

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.

none

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):

none

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generators knowledge

TCLP Metals : x

TCLP Volatilies : x

TCLP Semi-Volatiles : x

Reactivity : x

Corrosivity : x

Ignitability : x

SECTION 9: Waste Receipt Classification Under 40 CFR 437

Is this material a wastewater or wastewater sludge ? ☐ **YES** ☑ **NO**

If 'YES', complete this section

PLEASE CHECK THE APPROPRIATE BOX: IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE

Matals Subcategory: ***Subpart A***

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosph
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: ***Subpart B***

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation wastes
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory ***Subpart C***

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bering wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesive and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations

☐ Tank clean-out from organic, non-petroleum sources

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

☐ Metals Subcatego

☐ Oils Subcatego

☐ Organics Subcategory

SECTION 10: Additional Instruction

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data. I hereby cerity that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature : _____ **Date :** 3/26/09

Printed Name / Title : Eric W. Fleck

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer : Prabhakar Thangudu

Date : 3-26-09 **Status :** Approved Rejected

Approval Number : _____

Process Facility Information :

$10/dm

EPAHO104001156

3248
IDM

EPAHQ1040011157

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/26/2009**

Dear **Zac or Dave**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3248

Expiration Date 3/26/2011

Generator: IDM
Address: 11616 Galayda
Houston, TX 77086

Waste Information

Name of Waste: Unused Red Diesel and water
TCEQ Waste Code #: recycle
Container Type:
Detailed Description of Process Generating Waste:
unused diesel and water mixture (rain water)
Color: red **Odor:** hydrocarbon **pH:** 5-9
Physical State:
Incompatibilities: oxidizers
Safety Related Data/Special Handling:
standard

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

CES Environmental Services, Inc.

4904 Griggs Road Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

SECTION 1: Generator Information

Company : IDM
Address : 11616 Galayda 10707 Honea Egypt Rd.
City, State, Zip : Houston TX 77086
Contact : William **Title :**
Phone No : (713) 409-0949 **Fax :**
24 / HR Phone :
U.S EPA I.D No :
State I.D : **SIC Code**

SECTION 2: Billing Information

Company : CKG Services Conroe
Address : 7420 Honea Egypt Road 7420 Honea Egypt Road
City, State, Zip : Montgomery TX 77316
Contact : Zac or Dave **Title :**
Phone No : (936) 483-3662 **Fax :** (936) 756-1226

SECTION 3: General Description of the Waste

Name of Waste : Unused Red Diesel and water

Detailed Description of the Process Generating Waste:
unused diesel and water mixture (rain water)

Physical State : ☑ Liquid ☐ Sludge ☐ Powder
☐ Solid ☐ Filter Cake ☐ Combination

Color : red **Odor :** hydrocarbon

Specific Gravity (Water=1) : .8-.9 **Density :** 7-8 lbs / gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834	2835	2836	2841	2842	2843	2844	2851
2861	2865	2869	2873	2874	2876	2879	2891	2892	2893	2896	2899	2911	3312	4953	4959	9511

Layers : ☑ Single-Phas ☐ Multi-Phase

Container Type : ☑ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Container Size : 55

Number Of Units : 6

Is this a USEPA "Hazardous Waste" per 40 CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", is it: ☐ D001 ☐ D002 ☐ D003

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristics for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code No : recycle

Proper U.S. State Waste Code No : Recyclable hydrocarbon and water mixture

Class : na **UN/NA :** na **PG :** na **RQ :** na

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
>150	5-9	na mg/l	na mg/l	0 %
Oil and Grease	**TOC**	**Zinc**	**Copper**	**Nickel**
na mg/l	na mg/l	na mg/l	na mg/l	na mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The material / product consists of the following materials	Concentration Ranges are acceptable	Units or %
red diesel	90-100	%
water	0-10	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.
standard

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.
none

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
oxidizers

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generators knowledge

TCLP Metals : x
TCLP Volatilies : x
TCLP Semi-Volatiles : x
Reactivity : x

Corrosivity : x

Ignitability : x

SECTION 9: Waste Receipt Classification Under 40 CFR 437

Is this material a wastewater or wastewater sludge ? ☐ **YES** ☑ **NO**

If 'YES', complete this section

PLEASE CHECK THE APPROPRIATE BOX: IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE

Matals Subcategory: ***Subpart A***

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosph
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: ***Subpart B***

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation wastes
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory ***Subpart C***

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bering wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesive and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations

☐ Tank clean-out from organic, non-petroleum sources

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

☐ Metals Subcatego

☐ Oils Subcatego

☐ Organics Subcategory

SECTION 10: Additional Instruction

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data. I hereby cerity that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature : _____ **Date :** 3/26/09

Printed Name / Title : Eric W. Flecke

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer : Prabhakar Thangudu

Date : 3-26-09 **Status :** Approved Rejected

Approval Number : _____ _____

Process Facility Information :

3249
BJ Services

EPAHO104001163

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/26/2009**

Dear **Willie Allen**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3249

Expiration Date 3/26/2011

Generator: BJ Services (Aldine Westfield)
Address: 16610 Aldine Westfield, Bldg. E
Houston, TX 77032

Waste Information

Name of Waste: Non Hazardous Waste water (phosphate water)
TCEQ Waste Code #: CESQ1191
Container Type:
Detailed Description of Process Generating Waste:
phosphating waste water from phosphate operations w/carbon steel
Color: varies **Odor:** none **pH:** 2.1-8
Physical State:
Incompatibilities: none known
Safety Related Data/Special Handling:
standard

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

Need approval ASAP

DB/MM

CES Environmental Services, Inc.

IL

☒ CES Environmental Services – Houston Facility
4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

☐ CES Environmental Services – Port Arthur Facility
2420 S. Gulfway Drive, Port Arthur, TX 77641
Phone: (713) 676-1460 Fax: (713) 676-1676
U.S. EPA ID No: TXR000079307 ISWR No: 88585

SECTION 1: Material Producer Information

Company:	BJ Services		
Address:	16610 Aldine Westfield		
City, State, Zip:	Houston, TX		
Contact:	Willie Allen	**Title:**	
Phone No:	281-784-5700	**Fax No:**	281-7846112
24/hr Phone:	281-784-6112		
U.S. EPA I.D. No:	TXCESQG		
State I.D.	CESQG	**SIC Code:**	

SECTION 2: Billing Information – ☒ Same as Above

Company:			
Address:			
City, State, Zip:			
Contact:		**Title:**	
Phone No:		**Fax No:**	

SECTION 3: General Description of the Material / Product

Name of Material / Product: Non Hazardous Waste Water
Detailed Description of Process Generating or Producing the Material / Product: Phosphating waste water from phosphate operations with carbon steel.

Physical State: ☒ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color: varies **Odor:** none

Specific Gravity (water=1): 1 **Density:** 8.4 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Layers: ☐ Single-phase ☒ Multi-phase

Container Type: ☐ Drum ☐ Tote ☒ Truck ☐ Other (explain)
Container Size: 1000

Frequency: ☐ Weekly ☐ Monthly ☒ Quarterly ☐ Yearly
Number of Units (containers): 1 **Other:** CESQ1191

Proper U.S. DOT Shipping Name: N on-RCRA, Non-DOT Regulated Wate Water

Class: Na **UN/NA:** Na **PG:** Na **RQ:** Na

Flash Point	pH	N/A	N/A	Solids
>200	2.1-8			0-5%

Oil&Grease	TOC	Zinc	Copper	Nickel
Namg/l	Namg/l	Namg/l	Namg/l	NAmg/l

SECTION 4: Physical and Chemical Data

The material / product consists of the following materials	Ranges are acceptable	or %
Phosphate Waste Water	95-98	%
Salts	2-5	%

SECTION 5: Safety Related Data

If the handling of this material / product requires the use of special protective equipment, please explain.
Level D PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.
Analysis, CES Lab Results

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
None

SECTION 8: Material Producer's Certification

The information contained herein is based on ☐ generator knowledge and/or ☒ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Willie J. Allen **Date:** 3/26/09

Printed Name/Title: Willie Allen - Production Supervisor

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Technical Manager: [signature]	
Date: 3-25-09 (Approved) Rejected	
Approval Number: 3249	

EPAHO104001166

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. Base Pricing (including freight):

Disposal $250/1000 gallon load, Trans $75/hr

2. Contamination Limits (maximum limit before surcharges apply):

over metals limits
PH <2,

3. Surcharge Pricing:

None unless Solids are >15% (remember we are affectively @ .25/gallon)

4. Special Testing Requirements:

PH and Metals

5. Treatment and Handling Protocol:

Waste Water treatment for metals subcatagory

6. Treated Wastewater Discharge Subcategory:

☒ Subcategory A ☐ Subcategory B ☐ Subcategory C

EPAHO104001167

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

7. Tests for Product Recovered/Recycled (if applicable):

Na

8. Management for Product Recovered/Recycled (if applicable):

Na

3250
Evergreen Solar

EPAHO104001169

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Material / Product Approval Letter

Date **3/30/2009**

Dear **Scott Rainey**

Thank you for choosing CES Environmental Services, Inc. for your material / product recycling needs. The following material has been approved at our facility in Houston, TX. If the material received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # PA-3250

Expiration Date 3/30/2011

Producer: Evergreen Solar
Address: 112 Barnum Road
Devens, MA 01434

Material / Product Information

Name of Material / Product Concentrated acid
Container Type:

Detailed Description of Process Generating or Producing the Material / Product:
Silicone wafers are fed through an etch line to be ethced and prepared for solar panel manufacturing. Concentrated acid is a blend of acids that etch the silicone wafer. When bath is spent then the material becomes spent acid.

Color: dark **Odor:** slight **pH:** <2
Physical State:

Incompatibilities: Bases. Please refer to MSDS.
Safety Related Data/Special Handling:
PPE for concentrated acids.

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

CES Environmental Services, Inc.

☐ **CES Environmental Services – Houston Facility**
4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

☒ **CES Environmental Services – Port Arthur Facility**
2420 S. Gulfway Drive, Port Arthur, TX 77641
Phone: (713) 676-1460 Fax: (713) 676-1676
U.S. EPA ID No: TXR000079307 ISWR No: 88585

SECTION 1: Material Producer Information

Company:	Evergreen Solar		
Address:	112 Barnum Road		
City, State, Zip:	Devens, MA 01434		
Contact:	Wayne Wirtanen	**Title:**	EHS Manager
Phone No:	978-266-2292	**Fax No:**	
24/hr Phone:	978-266-2262		
U.S. EPA I.D. No:	MAC300011012		
State I.D.	N/A	**SIC Code:**	

SECTION 2: Billing Information – ☐ Same as Above

Company:	Hydrocarbon Resource Recovery		
Address:	3306 Poplar Run CT		
City, State, Zip:	Houston, TX. 77059		
Contact:	Scott Rainey	**Title:**	Mgt
Phone No:	713-724-8595	**Fax No:**	281-990-9176

SECTION 3: General Description of the Material / Product

Name of Material / Product: Concentrated acid ~~waste (CAW)~~
Detailed Description of Process Generating or Producing the Material / Product: Silicone wafers are fed through an etch line to be etched and prepared for solar panel manufacturing. CAW is a blend of acids that etch the silicone wafer. When the bath is spent then the material becomes ~~waste~~ spent acid. concentrated acid

Physical State: ☒ **Liquid** ☐ **Sludge** ☐ **Powder** ☐ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: dark **Odor:** slight

1.4 to 1.5 **Density:** 14.5 lbs/gal

Does this material contain any total phenolic compounds? ☐ **Yes** ☒ **No**

Does this material contain any para substituted phenolic compounds? ☐ **Yes** ☒ **No**

Layers: ☒ **Single-phase** ☐ **Multi-phase**

Container Type:	☐ **Drum**	☒ **Tote**	☒ **Truck**	☐ **Other (explain)**
Container Size:		330 gallon	5,000 ga	

Frequency: ☒ **Weekly** ☐ **Monthly** ☐ **Quarterly** ☐ **Yearly**
Number of Units (containers): 50 totes **Other:** 3-4 tankers

Proper U.S. DOT Shipping Name: Product RQ, Corrosive Liquids, Toxic, N.O.S. (Sulfuric Acid, Hydrofluoric Acid),

Class: 8, 6.1 **UN/NA:** UN2922 **PG:** II **RQ:** 100lbs

Flash Point	pH	N/A	N/A	Solids
N/A	<2			<1%

Oil&Grease	TOC	Zinc	Copper	Nickel
BDLmg/l	BDLmg/l	BDLmg/l	BDLmg/l	BDLmg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The material / product consists of the following materials	Concentration Ranges are acceptable	Units or %
Sulfuric Acid	75-85%	%
Nitric Acid	1-5%	%
Hydrofluoric Acid	1-2%	%
Water	1-10%	%

SECTION 5: Safety Related Data

If the handling of this material / product requires the use of special protective equipment, please explain.
Please see MSDS. PPE for concentrated acids.

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
Please see MSDS

SECTION 8: Material Producer's Certification

The information contained herein is based on ☐ generator knowledge and/or ☑ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Wayne Whitaker **Date:** 3/13/09

Printed Name/Title: ENVIRONMENTAL AFFAIRS MANAGER

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Technical Manager: Prabhu Thyagarajan Date: 3-30-2009 (Approved) Rejected Approval Number: 3250	

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pricing (including freight):**

$0.65/gallon + freight + FSC

2. **Contamination Limits (maximum limit before surcharges apply):**

3. **Surcharge Pricing:**

4. **Special Testing Requirements:**

5. **Treatment and Handling Protocol:**

To be used in the Nash process

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

EPAHO104001173

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

7. **Tests for Product Recovered/Recycled (if applicable):**

8. **Management for Product Recovered/Recycled (if applicable);**

3251
GATX

EPAHO104001175

7E
T-35
8-4-09
LAB

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **4/1/2009**

Dear **Ricardo Salias**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3251

Expiration Date 4/1/2011

Generator: GATX (Hearne)
Address: 1401 W. Brown St.
Hearne, TX 77859

Waste Information

Name of Waste: Sulfuric Acid
TCEQ Waste Code #: Product
Container Type:
Detailed Description of Process Generating Waste:
removal of heel prior to cleaning RCRA empty rail cars
Color: clear **Odor:** strong **pH:** 0-1
Physical State:
Incompatibilities: water, organic nitrates, carbides, cyanides, bases, metals, acids
Safety Related Data/Special Handling:
Standard PPE for low pH liquid, gloves, face shield, coveralls, hard hat

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

DC/MM
Product

CES Environmental Services, Inc.

☒ CES Environmental Services – Houston Facility
4904 Griggs Road Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

☐ CES Environmental Services – Port Arthur Facility
2420 S. Gulfway Drive, Port Arthur, TX 77641
Phone: (713) 676-1460 Fax: (713) 676-1676
U.S. EPA ID No: TXR000079307 ISWR No: 88585

SECTION 1: Material Producer Information

Company: GATX Rail (Hearne)
Address: 1401 W. Brown Street PO Box 969
City, State, Zip: Hearne, TX 77859
Contact: Title:
Phone No: 979-279-3481 Fax No: 979-279-5664
24/hr Phone: 979-220-2450
U.S. EPA I.D. No: TXD000835207
State I.D. 32643 SIC Code:

SECTION 2: Billing Information – ☒ Same as Above

Company:
Address:
City, State, Zip:
Contact: Title:
Phone No: Fax No:

SECTION 3: General Description of the Material / Product

Name of Material Product: Sulfuric Acid
Detailed Description of Process Generating or Producing the Material / Product: removal of heel prior to cleaning RCRA empty rail cars

Physical State: ☒ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color: clear/colorless Odor: strong

Specific Gravity (Water=1): 1.84 Density: 15.3 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☐ Drum ☐ Tote ☒ Truck ☐ Other (explain)
Container Size:

Frequency: ☐ Weekly ☐ Monthly ☐ Quarterly ☒ Yearly
Number of Units (Containers): Other:

Proper U.S. DOT Shipping Name: Product Sulfuric Acid
Class: 8 UN/NA: UN 1830 PG: II RQ: 1000

Flash Point	pH	N/A	N/A	Solids
NA	0-1			0%

Oil&Grease	TOC	Zinc	Copper	Nickel
0mg/l	NAmg/l	NAmg/l	NAmg/l	NAmg/l

SECTION 4: Phy ical and Chemical Data

COMPONENTS TABLE	Concentration	Units
The mat ial / product consists of the following materials	Ranges are acceptable	or %
Sulfuric Acid	100	%

SECTION 5: Saf ty Related Data

If the handling of his material / product requires the use of special protective equipment, please explain.
Standard PPE for I ow pH liquid ; Concentrated Acid, gloves, face shield, coveroll, hard hat.

SECTION 6: Att ched Supporting Documents

List all document notes, data, and/or analysis attached to this form as part of the material / product profile.
MSDS

SECTION 7: Inc mpatibilities

Please list all inco ıpatibilities (if any):
water, organic nitr es, carbides, cyanide, bases, metals, acids

SECTION 8: Ma rial Producer's Certification

The information c ıtained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached descriptic . is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of comp sition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are represen tive of all materials described by this document.

Authorized Signa ıre: _____ **Date:** 3/30/9

Printed Name/Tit : Ricardo Salias

CES USE ONLY (DO OT WRITE IN THIS SPACE)	
Technical Manager	
Date: 3-31-09 Approved Rejected	
Approval Number: 3251	

CE S Environmental
Se vices, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pric ng (including freight):**

Recycling Product Management: $0.60/gallon, Freight: $70.00/hour, Washout: $150.00/trailer

2. **Contami ation Limits (maximum limit before surcharges apply):**

NA

3. **Surcharg Pricing:**

NA

4. **Special T sting Requirements:**

metals

5. **Treatmer and Handling Protocol:**

Use in wa ewater treatment. Check with Joe on where to offload.

6. **Treated V astewater Discharge Subcategory:**

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

7. **Tests for Product Recovered/Recycled (if applicable):**

NA

8. **Management for Product Recovered/Recycled (if applicable):**

nA

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

To: Dana Carter, Morgan McCarley
Cc: Matt Bowman, Prabhaker, Joe Camp, Clint Hopkins

Date: 3/19/09

From: Miles Root

Lab Memo: 09-055

Subject: **GATX Hearne Evaluation 0309-42**

A sample of sulfuric acid from GATX, Hearne, has been evaluated for use at CES. This sample is evaluation 0309-40. This is a potential one-time acquisition of approximately 1000 gallons of sulfuric acid. This acid is available by tank trailer. Its acquisition is recommended.

This acid has a density of 1.786 which is an approximate 86% concentration of sulfuric acid. It is pale yellow in appearance with no particulates and no strong odor. Metals on this acid show 14 ppm nickel and no zinc. A sample of waste water was treated with this acid to check its usage at CES. Using even an excess of acid in our standard water treat, the final treated water showed no nickel increase. This is due to the fact that our actual usage of this acid will be small in comparison to the final volume of treated water. We will have no issues using this acid at CES.

Acid like this can also be used at PACES, and any excess acid we may acquire could potentially be used in our NaSH business as well.

The table below summarizes the analytical testing.

GATX Hearne	
Evaluation 0309-42	
Density	1.786
Sulfuric Acid, %	86
Usability at CES	Okay
Appearance	Pale Yellow

MATERIAL SAFETY DATA SHEET

EFFECTIVE DATE:
04/04/95
MSDS NUMBER .....: 3340-GATC
PRODUCT NAME .....: SULFURIC ACID

MSDS ID CODE .....:
MSDS OTHER CODES .:
PART NUMBERS .....: 0166-08

------SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION ------

MSDS NUMBER .....: 3340-GATC
PRODUCT NAME .....: SULFURIC ACID
SYNONYMS .....: SULFURIC ACID
CHEMICAL NAME ....:
CHEMICAL FAMILY ..: INORGANIC ACID
MANUFACTURER .....: FARMLAND INDUSTRIES, INC.
DIVISION .....: FERTILIZER DIVISION
PRODUCT CODES ....:
ADDRESS .....: P.O. BOX 7305, DEPT. 314
CITY .....: KANSAS CITY
STATE .....: MO
ZIP CODE .....: 64116-0005
EMERGENCY PHONE ..: 813-533-1141 (24 HR. NON-TRANSP. FARMLAND)
CHEMTREC PHONE ...: 800-424-9300
OTHER CALLS .....: 800-523-3774 (MSDS INFORMATION)
MSDS PREPARED BY .: JOHN M. BURGESS
EFFECTIVE DATE ...: 04/04/95
PRINT DATE .....:
PRODUCT USE .....:

********** ADDITIONAL INFORMATION **********
APPROVED BY: GENE MEIER
TITLE: ADM. OF ENVIRMNTL & SAFETY SRVS

SUPERSEDES: MARCH 3, 1993

REASON FOR ISSUE: IARC CHANGE

CHEMICAL NAME: SULFURIC ACID, HYDROGEN SULFATE

------SECTION 2 - COMPOSITION INFORMATION ON INGREDIENTS ------

SECTION 313 CHEMICALS

INGREDIENT NAME ..: HYDROGEN SULFURATE ACID
COMMON NAME .....:
CAS NUMBER .....: 7664-93-9

PERCENTAGE .....: 93-98
BY WEIGHT OR VOL. : W

HAZARDOUS .....:
OSHA PEL TWA .....: 1 MG/M
OSHA PEL STEL ....:
OSAH PEL CEIL ....:
ACGIH TLV TWA ....: 1 MG/M
ACGIH TLV STEL ...: 3 PPM
ACGIH TLV CEIL ...:

SECTION 313 SUPPLIER NOTIFICATION

THE CHEMICALS LISTED ABOVE ARE SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF THE EMERGENCY PLANNING AND RIGHT-TO-KNOW ACT OF 1986 AND OF 40 CFR 372.

********** ADDITIONAL INFORMATION **********

(TWA) - TIME WEIGHTED AVERAGE IS THE EMPLOYEE'S AVERAGE AIRBORNE EXPOSURE IN ANY 8-HOUR WORK SHIFT OF A 40-HOUR WORK WEEK WHICH SHALL NOT BE EXCEEDED.
(STEL) - SHORT TERM EXPOSURE LIMIT IS THE EMPLOYEE'S 15-MINUTE TIME WEIGHTED AVERAGE EXPOSURE WHICH SHALL NOT BE EXCEEDED AT ANY TIME DURING A WORK DAY UNLESS ANOTHER TIME LIMIT IS SPECIFIED.

------SECTION 3 - HAZARDS IDENTIFICATION ------

EMERGENCY OVERVIEW:
CLEAR, COLORLESS, OILY LIQUID, WITH STRONG IRRITATING ODOR. MATERIAL DOES NOT READILY IGNITE. POISONOUS IF INHALED OR SWALLOWED. CAUSES SEVERE BURNS TO SKIN AND EYES.

RELEVANT ROUTE(S) OF EXPOSURE:
EYE CONTACT, DERMAL, INHALATION, INGESTION.

SIGNS AND SYMPTOMS OF ACUTE OVEREXPOSURE:

CHRONIC OVEREXPOSURE:
INDIVIDUALS WITH PRE-EXISTING DISEASES OF THE LUNGS MAY HAVE INCREASED SUSCEPTIBILITY TO THE TOXICITY OF EXCESSIVE EXPOSURES.

MEDICAL CONDITIONS GENREALLY AGGRAVATED BY EXPOSURE:
IRRITATION OF UPPER RESPIRATORY TRACT.

POTENTIAL HEALTH EFFECTS:
EYES:
SEVERE IRRITATION, PERMANENT DAMAGE OR BLINDNESS.

SKIN:

IRRITATION, CONTACT WITH LIQUID WILL CAUSE SEVERE SECOND DEGREE BURNS.

INGESTION:
EXTREME DAMAGE TO DIGESTIVE TRACT. NAUSEA, VOMITING, STOMACH PAIN, DIARRHEA AND SHOCK.

INHALATION:

IRRITATION TO UPPER RESPIRATORY TRACTS, RESPIRATORY TISSUE DAMAGE.

CARCINOGENICITY: NTP: N
IARC: Y
OSHA: N
ACGIH:
OTHER:

------SECTION 4 - FIRST AID MEASURES ------

EYES:
IF CHEMICAL COMES IN CONTACT WITH THE EYES, IMMEDIATELY WASH THE EYES WITH LARGE AMOUNTS OF COLD WATER AND CONTINUE FLUSH FOR 15 MINUTES, OCCASIONALLY LIFTING THE LOWER AND UPPER LIDS. GET MEDICAL ATTENTION.

SKIN:
IF CHEMICAL COMES IN CONTACT WITH SKIN, IMMEDIATELY FLUSH THE CONTAMINATED SKIN WITH COLD WATER. IF CHEMICAL PENETRATES THROUGH THE CLOTHING, IMMEDIATELY REMOVE THE CLOTHING, FLUSH THE SKIN WITH COLD WATER. GET MEDICAL ATTENTION PROMPTLY.

INGESTION:
IF CHEMICAL HAS BEEN SWALLOWED, SEEK MEDICAL ATTENTION IMMEDIATELY. DO NOT INDUCE VOMITING. GIVE LARGE QUANTITIES OF WATER. DO NOT GIVE CARBONATES. NEVER GIVE AN UNCONSCIOUS PERSON ANYTHING BY MOUTH.

INHALATION:
IF A PERSON BREATHES IN LARGE AMOUNTS OF THIS CHEMICAL, MOVE THE EXPOSED PERSON TO FRESH AIR AT ONCE. IF BREATHING HAS STOPPED, PERFORM ARTIFICIAL RESPIRATION. WHEN BREATHING IS DIFFICULT, PROPERLY TRAINED PERSONNEL MAY ASSIST THE AFFECTED PERSON BY ADMINISTERING 100% OXYGEN. KEEP THE AFFECTED PERSON WARM, AT REST AND QUIET. GET MEDICAL ATTENTION AS SOON AS POSSIBLE.

ANTIDOTES:

NOTES TO PHYSICIANS AND/OR PROTECTION FOR FIRST-AIDERS:

********** ADDITIONAL INFORMATION **********

------SECTION 5 - FIRE FIGHTING PROCEDURES ------

FLAMMABLE LIMITS IN AIR : UPPER LIMIT: NON-FLAMMABLE
(% BY VOLUME) : LOWER LIMIT: NON-FLAMMABLE

FLASH POINT : VALUE : NON-FLAMMABLE
: DEGREES C/F:
: METHOD USED:

AUTOIGNITION TEMPERATURE : TEMPERATURE: N/A
: DEGREES C/F:

EXTINGUISHING MEDIA:
USE DRY CHEMICAL OR CARBON DIOXIDE.

FIRE FIGHTING INSTRUCTIONS:

DO NOT APPLY WATER IN A SOLID STREAM ON SPILLED MATERIAL OR GET INSIDE CONTAINER. USE SELF CONTAINED BREATHING APPARATUS AND CHEMICAL PROTECTIVE CLOTHING. STRUCTURAL FIRE FIGHTING PROTECTIVE CLOTHING IS NOT EFFECTIVE FOR THIS MATERIAL.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

WATER WILL CAUSE SPATTERING. FUMES ARE EXTREMELY REACTIVE WITH HUMAN TISSUE - PREVENT CONTACT. REACTS WITH MOST METALS, ESPECIALLY WHEN DILUTED, GIVES FLAMMABLE, POTENTIALLY EXPLOSIVE HYDROGEN GAS.

FLAMMABILITY CLASSIFICATION:

PROPAGATION OR BURNING RATE OF SOLID MATERIALS:

KNOWN OR ANTICIPATED HAZARDOUS PRODUCTS OF COMBUSTION:

PROPERTIES OF BOTH FLAMMABLE AND NONFLAMMABLE MATERIALS THAT MAY INITIATE OR UNIQULEY CONTRIBUTE TO THE INTENSITY OF A FIRE:

------SECTION 6 - ACCIDENTAL RELEASE MEASURES ------

ACCIDENTAL RELEASE MEASURES:

CONTAIN RELEASED MATERIAL BY DIKING AND NEUTRALIZING QUICKLY. ACID MIST IS CORROSIVE AND SHOULD BE AVOIDED. NEUTRALIZING AGENTS - SODA ASH, SODIUM BICARBONATE, LIMESTONE. ADEQUATE VENTILATION, DO NOT ALLOW SMOKING IN SPILL AREA, KEEP UNAUTHORIZED PERSONS FROM ENTERING AREA.

------SECTION 7 - HANDLING AND STORAGE ------

HANDLING AND STORAQGE:

HIGHLY CORROSIVE TO MOST METALS. KEEP OUT OF SUN AND AWAY FROM HEAT, SPARKS AND FLAME. KEEP CONTAINER TIGHTLY CLOSED AND (DRUM) CLOSURE UP TO PREVENT LEAKAGE. LOOSEN CLOSURE CAREFULLY. RELIEVE INTERNAL PRESSURE WHEN RECEIVED AND AT LEAST WEEKLY THEREAFTER. DIKING OF STORAGE DRUMS AND TANKS RECOMMENDED.

OTHER PRECAUTIONS:

------SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION ------

ENGINEERING CONTROLS

ENGINEERING CONTROLS:
ADEQUATE VENTILATION SHOULD BE MAINTAINED.

VENTILATION REQUIREMENTS:

PERSONAL PROTECTIVE EQUIPMENT

EYE/FACE PROTECTION:
AS A MINIMUM, WEAR CHEMICAL SPLASH GOGGLES AND FULL FACE SHIELD. FOR

INCREASED PROTECTION USE AIR VENTILATED ACID HOOD.

SKIN PROTECTION:
SEE OTHER PROTECTIVE CLOTHING OR EQUIPMENT HEREIN.

RESPIRATORY PROTECTION:
A NIOSH APPROVED SULFURIC ACID OR MIST RESPIRATOR SHOULD BE USED WHEN EXPOSURE EXCEEDS OSHA PEL'S. A SELF CONTAINED BREATHING APPARATUS SHOULD BE WORN IN HIGH CONCENTRATIONS.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:
PROTECTIVE CLOTHING: AS A MINIMUM, WEAR ACID RESISTANT PROTECTIVE CLOTHING, HAT, BOOTS AND HEADGEAR. OTHER (SAFETY SHOWERS, EYE WASH STATIONS, ETC.): EYE FOUNTAINS AND SAFETY SHOWERS SHOULD BE PROVIDED.

EXPOSURE GUIDELINES:

WORK HYGIENIC PRACTICES:

------SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ------

APPEARANCE:
CLEAR, COLORLESS, OILY LIQUID.

ODOR:
STRONG IRRITATING ODOR.

PHYSICAL STATE :

PH VALUE : .9
PH CONCENTRATION : (1% SOLUTION)
VAPOR PRESSURE VALUE (MMHG): 1 MMHG
TEMPERATURE: 100
DEGREES C/F: F
VAPOR DENSITY (AIR=1) : 3.4
BOILING POINT TEMPERATURE : 554
DEGREES C/F: F
MELTING POINT TEMPERATURE :
DEGREES C/F:
FREEZING POINT TEMPERATURE :
DEGREES C/F:

SOLUBILITY IN WATER:
SOLUBLE

REACTIVITY IN WATER:

SPECIFIC GRAVITY : 1.84
DENSITY (WATER=1)
PARTICLE SIZE :
VOLATILE ORGANIC COMPOUNDS :
(VOC) CONTENT

SOFTENING POINT :
EVAPORATION RATE BASIS (=1): ETHER
RATE: N/A

BULK DENSITY :
HEAT VALUE :
PERCENT VOLATILE :
OCTANOL/WATER PARTITION COEFFICIENT :
SATURATED VAPOR CONCENTRATION :
MOLECULAR WEIGHT :
MOLECULAR/CHEMICAL FORMULA : H_2SO_4
WEIGHT PER GALLON :
VISCOCITY :

------SECTION 10 - STABILITY AND REACTIVITY ------

STABILITY:
STABLE

CONDITIONS TO AVOID (STABILITY):
HIGH TEMPERATURES.

INCOMPATIBILITY WITH OTHER MATERIALS:
WATER, ORGANIC NITRATES, CARBIDES, CYANIDE, BASES, METALS AND ACIDS.

HAZARDOUS DECOMPOSITION PRODUCTS:
SULFUR OXIDES.

HAZARDOUS POLYMERIZATION:
WILL NOT OCCUR.

CONDITIONS TO AVOID (POLYMERIZATION):

------SECTION 11 - TOXICOLOGICAL INFORMATION ------

COMPONENT :
LD50 VALUE:
UNIT:

ANIMAL:
ROUTES:
LC50 VALUE:
UNIT:
ANIMAL:
ROUTES:

TOXICOLOGICAL INFORMATION:
NOTE: FARMLAND INDUSTRIES HAS NOT CONDUCTED SPECIFIC TOXICITY TESTS ON THIS PRODUCT.

------SECTION 12 - ECOLOGICAL INFORMATION ------

ECOLOGICAL INFORMATION:
NOTE: FARMLAND INDUSTRIES HAS NOT CONDUCTED SPECIFIC ECOLOGICAL TESTS ON THIS PRODUCT.

------SECTION 13 - DISPOSAL CONSIDERATIONS ------

DISPOSAL CONSIDERATIONS:
IF UNCONTAMINATED RECOVER AND REUSE PRODUCT. CONSULT WITH FEDERAL AND/OR STATE ENVIRONMENTAL AGENCIES ON ACCEPTABLE DISPOSAL PROCEDURES AND LOCATIONS.

------SECTION 14 - TRANSPORT INFORMATION ------

U.S. DOT

PROPER SHIPPING NAME : SULFURIC ACID
HAZARD CLASS : 8 (CORROSIVE MATERIAL) *
ID NUMBER : UN 1830
PACKING GROUP :
LABELS :

AIR - IACO OR IATA

PROPER SHIPPING NAME :
HAZARD CLASS :
ID NUMBER :
PACKING GROUP :
LABELS :

WATER - IMDG

PROPER SHIPPING NAME :
HAZARD CLASS :
ID NUMBER :
PACKING GROUP :
LABELS :

OTHER

REPORTABLE QUANTITY :
ADDITIONAL INFO :

********** ADDITIONAL INFORMATION **********
DOT EMER. RESPONSE GUIDE NO.: 39

*DOT'S HM-181 CHANGED HOW MATERIALS ARE CLASSIFIED. THE MOST OBVIOUS CHANGE IS FROM A NARRATIVE DESCRIPTION TO A NUMBERING SYSTEM.

------SECTION 15 - REGULATORY INFORMATION ------

U.S. FEDERAL REGULATIONS:

STATE REGULATIONS:

INTERNATIONAL REGULATIONS:

SARA HAZARDS: ACUTE: Y
CHRONIC: Y

REACTIVE: Y
FIRE: N
PRESSURE: N

------SECTION 16 - OTHER INFORMATION ------

NFPA CODES: HEALTH: 3
FLAMMABILITY: 0
REACTIVITY: 1
OTHER:

HMIS CODES: HEALTH:
FLAMMABILITY:
REACTIVITY:
PROTECTION:

LABEL STATEMENTS:

OTHER INFORMATION:
THE INFORMATION CONTAINED HEREIN IS BELIEVED TO BE ACCURATE, BUT FARMLAND DOES NOT WARRANT, EXPRESS OR IMPLY, THE FITNESS OF CONTENTS HEREOF FOR EITHER GENERAL OR PARTICULAR PURPOSES. IN NO EVENT SHALL FARMLAND BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES NOR SHALL ANYONE HAVE A RIGHT OR REMEDY BASED ON OR RELATED TO POSSESSION AND/OR USE OF THIS DATA SHEET.

Other Comments: SAFETY - MUST MONITOR FOR H & H2S GAS. AVOID BURNING BOLTS OFF CAR PRIOR TO CHECKING CAR FOR H & H2S GAS. MONITOR THROUGH FILL HOLE COVER FIRST IF POSSIBLE. NJC

Originally Assigned By: JJG **Date:** 10/07/1998
Last Updated By: JER **Date:** 04/20/1999

Disclaimer: The information contained on this MSDS cannot be guaranteed to be accurate or complete. GATX Rail accepts no liability for the content of this MSDS, or for the consequences of any actions taken which rely on the accuracy of the information.

This document is not current as of 03/29/2009. Please review TAILS to make sure that the document is still valid.

3227

BW Services

EPAHO104001191

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/20/2009**

Dear **Brandon White**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3227

Expiration Date 3/19/2011

Generator: BW Services
Address: 1100 Wayne Drive
Angleton, TX 77515

Waste Information

Name of Waste: Unused Daxad 19W
TCEQ Waste Code #: 00062191
Container Type:
Detailed Description of Process Generating Waste:
unused products cleaned from cars
Color: brown **Odor:** slight **pH:** 10.5
Physical State:
Incompatibilities: oxidizers
Safety Related Data/Special Handling:
Level D PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

DB/MM

DL

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility 4904 Griggs Road, Houston, TX 77021 Phone (713) 676-1460 Fax: (713) 676-1676 U.S. EPA ID Number: TXD008950461 ISWR Number: 30900 TCEQ Industrial Solid Waste Permit Number: 30948	☐ CES Environmental Services - Port Arthur Facility 2420 S. Gulfway Dr., Port Arthur, TX 77641 Phone (713) 676-1460 Fax: (713) 676-1460 U.S. EPA ID Number: TXR000079307 ISWR Number: 88585

SECTION 1: Generator Information

Company: BW Services
Address: 1100 Wayne Drive
City: Angelton **State:** TX **Zip:** 77515
Contact: Brandon Douglas **Title:** Manager
Phone Number: 979-848-8800 **Fax Number:** 979-848-9990
24/hr Phone Number: 281-734-8478
US EPA ID No: TXD086467800
State ID No: 30207 **SIC Code:**

SECTION 2: Billing Information - ☑ **Same as Above**

Company:
Address:
City: **State:** **Zip:**
Contact: **Title:**
Phone Number: **Fax Number:**

SECTION 3: General Description of the Waste

Name of Waste: Unused Daxad 19W
Detailed Description of Process Generating Waste:

Unused product cleaned from railcars

Physical State: ☑ **Liquid** ☐ **Sludge** ☐ **Powder** ☐ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: Brown **Odor:** Slight

Specific Gravity (water=1): 1.25 **Density:** 12.3 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ **Single-phase** ☐ **Multi-phase**

Container Type: ☑ **Drum** ☐ **Tote** ☐ **Truck** ☐ **Other (explain)**

Frequency: ☐ **Weekly** ☑ **Monthly** ☐ **Yearly** ☐ **One-Time**
Quantity: 2-20

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: 00062191

Proper US DOT Shipping Name: Non-DOT, Non-RCRA Waste Liquids (Daxad 19W)

Class: Na **UN/NA:** Na **PG :** Na **RQ:** Na

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
>200	10.5	0 mg/l	0 mg/l	0-10 %
Oil & Grease	**TOC**	**Zinc**	**Copper**	**Nickel**
NA mg/l	NA mg/l	NA mg/l	NA mg/l	NA mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
DAXAD 19W	100	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Level D PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. MSDS Sheets

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

Oxidizers

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	X, None in Product
TCLP Volatiles:	X, None in Product
TCLP Semi-Volatiles:	X, None in Product
Reactivity:	X, None in Product
Corrosivity:	X, None in Product
Ignitability:	X, None in Product

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory: Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory*: *Subpart C

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: [signature] **Date:** 3-14-09

Printed Name/Title: Brandan White Vice President

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: [signature]
Date: 3-19-09 ☑ Approved ☐ Rejected
Approval Number: HOV-3227

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$70/dm

2. Contamination Limit (maximum limit before surchages apply):

None

3. Surcharge Pricing:

None

4. Special Testing Requirements:

Make sure it conforms with profile

5. Treatment and Handling Protocol:

Class 1 liquids to LANDFILL for solidification

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

Na

8. Management for Product Recovered/Recycled (if applicable)

Na

2-DRUMS

OES

$70/drum

GEO
SPECIALTY CHEMICALS

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: DAXAD® 19W
SYNONYMS: Sulfonated Naphthalene Condensate, Sodium and Potassium Salts

SUPPLIER: GEO Specialty Chemicals, Inc.
701 Wissahickon Avenue
Cedartown, GA 30125

NFPA Rating: Health: 1 Flammability: 1 Reactivity: 0
HMIS Classification: Health: 1 Flammability: 1 Reactivity: 0

EMERGENCY TELEPHONE: CHEMTREC: (800) 424-9300
Outside USA - 00 1 (703) 527-3887 collect calls accepted

EMERGENCY OVERVIEW:

Brown liquid with slight mothball odor. May cause mild skin, eye, and respiratory tract irritation.

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient / CAS No.	Weight %	OSHA - PEL's	ACGIH 2002 - TLV's
Naphthalenesulfonic acid, formaldehyde polymer, sodium salt 9084-06-4	16.2 to 22 %	None Established.	None Established.
Naphthalenesulfonic Acid, Formaldehyde Polymer, Potassium Salt 67828-14-2	16.2 to 22.0 %	None Established.	None Established.
Sodium Sulfate 7757-82-6	3.6 to 8.1 %	None Established.	None Established.
Potassium Sulfate 7778-80-5	3.6 to 8.1 %	None Established.	None Established.
Water 7732-18-5	58 to 59.5 %	None Established.	None Established.
Formaldehyde 50-00-0	trace	0.75 ppm TWA PEL; 2 ppm STEL; 0.5 ppm TWA action level; Irritant and potential cancer hazard (29 CFR 1910.1048)	0.3 ppm Ceiling Sensitizer

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3. HAZARDS IDENTIFICATION

Hazard Information:	May cause eye, skin and respiratory tract irritation.
Eye Contact:	May cause transient eye irritation.
Inhalation:	Not considered hazardous under normal conditions of use. Exposure to mist or spray may cause irritation of respiratory passages.
Skin Contact:	Possible mild transient skin irritation on prolonged contact.
Ingestion:	Considered slightly toxic. Swallowing may cause gastrointestinal irritation.
Aggravated Conditions:	None known.

4. FIRST AID MEASURES

Inhalation:	If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get medical attention.
Skin Contact:	Immediately flush skin with plenty of soap and water for at least 15 minutes. Remove contaminated clothing and footwear. Wash contaminated clothing before reuse. Get medical attention if irritation develops.
Eye Contact:	Remove contact lenses. Immediately flush with plenty of water for at least 15 minutes, holding eyelids apart to ensure flushing of the entire surface. Washing within one minute is essential to achieve maximum effectiveness. Seek immediate medical attention.
Ingestion:	Do not induce vomiting. If vomiting should occur spontaneously, keep the airway clear. Get medical attention. Never give anything by mouth to an unconscious person.
Notes To Physician:	Treat symptomatically.

5. FIRE FIGHTING MEASURES

Flash Point (°F/°C)	>212° F (>100° C)
Flash Point Method:	PMCC
Autoignition Temp. (°F):	Not Determined
Flammable Limits in Air - Lower (%):	Not Determined
Flammable Limits in Air - Upper (%):	Not Determined
Extinguishing Media:	Water Spray, Carbon Dioxide, Foam, Dry Chemical.
Fire Fighting Procedures:	Cool exposed containers with water spray after extinguishing fire.
Special Exposure Hazards:	Use water spray to cool fire exposed surfaces.
Special Protective Equipment:	Fire fighters should wear full protective clothing, including self-contained breathing equipment.

6. ACCIDENTAL RELEASE MEASURES

Procedure for Cleaning/Absorption:	Stop leaks. Clean up spill immediately. Clean up large spills with vacuum truck. Soak up small spills with inert absorbent material. Shovel into labeled waste container for proper disposal. Spills of product are extremely slippery so all residue must be removed promptly. Wear adequate personal protective clothing and equipment. Ventilate area of spill or leak. Do not permit run-off to enter sewers or surface waterways.

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7. HANDLING AND STORAGE

PRECAUTIONARY STATEMENTS:	CAUTION! MAY CAUSE MILD SKIN, EYE, AND RESPIRATORY TRACT IRRITATION. Avoid contact with eyes, skin and clothing. Avoid breathing mist or spray. Wear chemical splash goggles, gloves and protective clothing where mist or spray may be generated. Wash thoroughly after handling. Do not take internally. FOR INDUSTRIAL USE ONLY.
Handling:	Keep container tightly closed when not in use.
Storage:	Product may congeal or stratify if cold. Warm to 122° F (50° C) and mix well before using.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:	Local exhaust ventilation as necessary to maintain exposures to within applicable limits. Please refer to the ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details.
Respiratory Protection:	NIOSH/MSHA approved respirator if necessary. Follow manufacturer's recommendations.
Gloves:	Appropriate chemical resistant gloves should be worn.
Skin Protection:	Normal work coveralls.
Eye Protection:	Chemical goggles or a face shield if splashing hazard exists.
Other Personal Protection Data:	Standard work clothing and work shoes. Eyewash fountains and safety showers must be easily accessible.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	LIQUID
Color:	BROWN
Odor:	SLIGHT MOTHBALL ODOR
pH:	9.0 - 10.5 (As Is)
Specific Gravity	1.25 typical
Density @ 20° C:	10.4 lbs/gal. typical
Boiling Point (°F/°C):	Not Determined
Melting Point Range (°F/°C):	Not Applicable
Freezing Point/Range (°F/°C):	Not Determined
Vapor Pressure:	Not Determined
Vapor Density (Air=1):	Not Determined
% Volatile by Volume:	58 to 59.5 % max. (w/w) moisture
Evaporation Rate (BuAc=1):	Not Determined
Solubility in Water Description:	MISCIBLE
VOCs (lbs/gallon):	Not Determined
Viscosity, Dynamic (Centipoise) @ 20° C:	Not Determined
Molecular Weight:	Not Applicable

10. STABILITY AND REACTIVITY

Chemical Stability:	Stable under normal conditions of handling, use and transportation.
Conditions to Avoid:	None
Materials to Avoid:	Contact with oxidizing agents.
Hazardous Decomposition Products:	Carbon Monoxide and Carbon Dioxide. Oxides of sulfur.
Hazardous Polymerization:	Not anticipated under normal or recommended handling and storage conditions.
Additional Guidelines:	None.

EPAHO104001202

11. TOXICOLOGICAL INFORMATION

PRINCIPAL ROUTES OF EXPOSURE: Skin, eyes and respiratory tract.
Ingestion: Considered slightly toxic. Swallowing may cause gastrointestinal irritation.
Skin Contact: Possible mild transient skin irritation on prolonged contact.
Inhalation: Not considered hazardous under normal conditions of use. Exposure to mist or spray may cause irritation of respiratory passages.
Eye Contact: May cause transient eye irritation.

Carcinogenicity Status:
(Chemical Name, Wt. %, CAS No.)

Naphthalenesulfonic acid, formaldehyde polymer, sodium salt 16.2 to 22 % **9084-06-4**
IARC Group 1, Group 2A or Group 2B Carcinogen: Not Listed
National Toxicology Program Known or Suspect Carcinogen: Not Listed
ACGIH Confirmed or Suspected Carcinogen: Not Listed
OSHA Select or Possible Select Carcinogen: Not Listed

Naphthalenesulfonic Acid, Formaldehyde Polymer, Potassium Salt 16.2 to 22.0 % **67828-14-2**
IARC Group 1, Group 2A or Group 2B Carcinogen: Not Listed
National Toxicology Program Known or Suspect Carcinogen: Not Listed
ACGIH Confirmed or Suspected Carcinogen: Not Listed
OSHA Select or Possible Select Carcinogen: Not Listed

Sodium Sulfate 3.6 to 8.1 % **7757-82-6**
IARC Group 1, Group 2A or Group 2B Carcinogen: Not Listed
National Toxicology Program Known or Suspect Carcinogen: Not Listed
ACGIH Confirmed or Suspected Carcinogen: Not Listed
OSHA Select or Possible Select Carcinogen: Not Listed

Potassium Sulfate 3.6 to 8.1 % **7778-80-5**
IARC Group 1, Group 2A or Group 2B Carcinogen: Not Listed
National Toxicology Program Known or Suspect Carcinogen: Not Listed
ACGIH Confirmed or Suspected Carcinogen: Not Listed
OSHA Select or Possible Select Carcinogen: Not Listed

Water 58 to 59.5 % **7732-18-5**
IARC Group 1, Group 2A or Group 2B Carcinogen: Not Listed
National Toxicology Program Known or Suspect Carcinogen: Not Listed
ACGIH Confirmed or Suspected Carcinogen: Not Listed
OSHA Select or Possible Select Carcinogen: Not Listed

Formaldehyde trace **50-00-0**
IARC Group 1, Group 2A or Group 2B Carcinogen: Listed
National Toxicology Program Known or Suspect Carcinogen: Listed
ACGIH Confirmed or Suspected Carcinogen: Listed
OSHA Select or Possible Select Carcinogen: Listed

Acute Oral LD50 (mg/kg): 3250 to 4300 mg/kg (rats)
Acute Dermal LD50 (mg/kg): > 16,000 mg/kg (rabbits)
Acute Inhalation LC50 (mg/l): Not Determined
Mutagenicity/Genotoxicity: No mutagenicity or genotoxicity studies have been carried out with this product.
Other Information: This product may contain trace amounts of formaldehyde. Formaldehyde causes nasopharyngeal cancer in humans. Exposure to formaldehyde can cause severe irritation to the skin, eyes, throat and respiratory tract. Formaldehyde is a sensitizer that can cause allergic reaction in people previously exposed.

12. ECOLOGICAL INFORMATION

Mobility: Not Determined

Persistence: Biodegradation under aerobic static laboratory conditions is low (BOD20 or BOD28/ThOD between 2.5 and 10%). 28-Day biochemical oxygen demand (BOD28) is 9.7% of ThOD. Mean biodegradation reached in the Modified SCAS Test (OECD Test No. 302 A): 3.91%.

Bioaccumulative: Not Determined

Ecotoxicological Information:

Ecotoxicity: This product is slightly toxic to aquatic organisms on an acute basis (LC50/EC50 between 10 and 100 mg/L in most sensitive species). Acute immobilization EC50 in water flea Daphnia magna is 71 mg/L. Acute LC50 in fathead minnow (Pimephales promelas) is 100 mg/L.

Other Information: None

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method:
Dispose of product in an approved chemical waste landfill or incinerate in accordance with applicable Federal, state and local regulations. Avoid landfilling liquids. Since the emptied container retains product residue, all labeled hazard precautions must be observed.

RCRA

Is the unused product a RCRA hazardous waste if discarded? (Yes/No)	**No**
If yes, the EPA Hazardous Waste Code is:	**N/A**

14. TRANSPORTATION INFORMATION

DOT:

DOT Status:	NOT HAZARDOUS. NOT REGULATED.
Harmonized Tariff Number:	3911.90.9010

ICAO/IATA:

Status:	NOT REGULATED.

IMDG:

Status:	NOT REGULATED.
Flash Point (°F/°C)	>212° F (>100° C)

15. REGULATORY INFORMATION

International Inventories:

USA TSCA Inventory Status:	All of the components of this product are listed on the US EPA TSCA Inventory, or exempt from listing.
Canadian DSL:	All of the components of this product are listed on the Canadian Domestic Substances List.
European - EINECS:	All of the components of this product are listed on EINECS, or exempt from listing.
Japanese Chemical Inventory:	All of the components of this product are not listed on the JPENCS Inventory.
Philippines Chemical Inventory:	All of the components of this product are not found on the Philippines Inventory.
Australian Chemical Inventory:	All of the components of this product are listed on the Australian Chemical Inventory.
Korean Chemical Inventory:	All of the components of this product are not found on the Korean Existing Chemical Substances List.

EPAHO104001204

State and Federal Regulations:
(Chemical Name, Wt. %, CAS No.)

Sodium Sulfate 3.6 to 8.1 % **7757-82-6**

Pennsylvania Right to Know List:	Listed
Massachusetts Right to Know Law:	Listed

Formaldehyde trace **50-00-0**

CERCLA/SARA Hazardous Substance RQ:	final RQ = 100 pounds (45.4 kg)final RQ = 10 pounds (4.54 kg)
CERCLA/SARA - 302 Ext. Haz. Substances:	Listed
SARA Section 313 Emissions Reporting:	Listed
CAA - Hazardous Air Pollutants:	Listed
New Jersey Right-to-Know List:	Listed
Florida Substance List:	Listed
Pennsylvania Right to Know List:	Listed
Massachusetts Right to Know Law:	Listed
Minnesota Hazardous Substance List	Listed
Rhode Island Hazardous Substance List	Listed
California Proposition 65:	Listed

SARA Section 311/ 312 Hazard Class: This product is classified as a SARA ACUTE HEALTH HAZARD.

Other Information: This product does not contain any ingredients subject to the reporting requirements of SARA Title III, Section 313 (40 CFR Part 372).

CALIFORNIA PROP 65: WARNING! This product may contain traces of a substance known to the State of California to cause cancer.

16. OTHER INFORMATION

Prepared / Edited By: Peter R. Dluzneski - Manager of Technology

Telephone Number: (267) 960-7926 (USA)

Reference Number: DAXAD19W PRD

Revision Date: 10/21/2005

Additional Information: None.

Important Note: The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

*****END OF MSDS*****

EPAHO104001205

3228
BWI Services

EPAHQ104001206

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/20/2009**

Dear **Brandon White**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3228

Expiration Date 3/19/2011

Generator: BW Services
Address: 1100 Wayne Drive
Angleton, TX 77515

Waste Information

Name of Waste: Unused Phosphoric Acid
TCEQ Waste Code #: Product
Container Type:
Detailed Description of Process Generating Waste:
heel from a railcar holding virgin product
Color: pale yellow **Odor:** acrid **pH:** <2
Physical State:
Incompatibilities: alkalis and metals
Safety Related Data/Special Handling:
level C PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

DB/MM

Product

CES Environmental Services, Inc.

☒ **CES Environmental Services – Houston Facility**
4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

☐ **CES Environmental Services – Port Arthur Facility**
2420 S. Gulfway Drive, Port Arthur, TX 77641
Phone: (713) 676-1460 Fax: (713) 676-1676
U.S. EPA ID No: TXR000079307 ISWR No: 88585

SECTION 1: Material Producer Information

Company: BW Services
Address: 1100 Wayne Drive
City, State, Zip: Angelton, TX 77515
Contact: Brandon Douglas **Title:**
Phone No: 979-848-8800 **Fax No:** 979-848-9990
24/hr Phone: 281-734-8478
U.S. EPA I.D. No: TXD086467800
State I.D. 30207 **SIC Code:**

SECTION 2: Billing Information – ☒ Same as Above

Company:
Address:
City, State, Zip:
Contact: **Title:**
Phone No: **Fax No:**

SECTION 3: General Description of the Material / Product

Name of Material / Product: Unused Phosphoric Acid
Detailed Description of Process Generating or Producing the Material / Product: Unused Phosphoric acid in drums from cleaning a rail car that contained virgin material.

Physical State: ☒ **Liquid** ☐ **Sludge** ☐ **Powder** ☐ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: Pale Yellow **Odor:** Acrid

Specific Gravity (water=1): 1.6-1.7 **Density:** 14 lbs/gal

Does this material contain any total phenolic compounds? ☐ **Yes** ☒ **No**

Does this material contain any para substituted phenolic compounds? ☐ **Yes** ☒ **No**

Layers: ☒ **Single-phase** ☐ **Multi-phase**

Container Type: ☒ **Drum** ☐ **Tote** ☐ **Truck** ☐ **Other (explain)**
Container Size: 55

Frequency: ☐ **Weekly** ☐ **Monthly** ☐ **Quarterly** ☐ **Yearly**
Number of Units (containers): 2 **Other:**

Proper U.S. DOT Shipping Name: Product Phosphoric Acid 75%

Class: 8 **UN/NA:** UN1805 **PG:** III **RQ:** 5000

Flash Point	pH	N/A	N/A	Solids
>200	<2			0%

Oil&Grease	TOC	Zinc	Copper	Nickel
0mg/l	Namg/l	Namg/l	Namg/l	Namg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	Concentration	Units
The material / product consists of the following materials	Ranges are acceptable	or %
Phosphoric Acid 75%	75	%
Water	25	%

SECTION 5: Safety Related Data

If the handling of this material / product requires the use of special protective equipment, please explain.
Level C PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.
MSDS Sheets

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
Alkalis and metals

SECTION 8: Material Producer's Certification

The information contained herein is based on ☐ generator knowledge and/or ☒ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: [signature] **Date:** 03/10/09

Printed Name/Title: BRANDAN White Vice President

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Technical Manager: [signature]	
Date: 3-19-09 Approved Rejected	
Approval Number: #OV3228	

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pricing (including freight):**

$255/dm

2. **Contamination Limits (maximum limit before surcharges apply):**

Off-Spec, Has solids or contaminants

NEEDS TO BE IN A POLY DRUM IF NOT ALREADY

3. **Surcharge Pricing:**

None

4. **Special Testing Requirements:**

Check Purity- SHould be clear to Yellow with very low PH

5. **Treatment and Handling Protocol:**

Use in waste water treatment or on Irvin's cleaning jobs offsite

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

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CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

7. **Tests for Product Recovered/Recycled (if applicable):**

Na

8. **Management for Product Recovered/Recycled (if applicable);**

Use as product in waste water or chemical cleaning

1 Drum

$255 lbs

Material Safety Data Sheet
J. R. Simplot Company
AgriBusiness

Trade Name: Purified Phosphoric Acid as H_3PO_4 **M12005**
Registration No: None

SECTION 1 CHEMICAL PRODUCT AND COMPANY INFORMATION

Manufacturer or Formulator: J.R. Simplot Company
P.O. Box 70013
Boise, ID 83707
Emergency Phone - Chemtrec: 1-800-424-9300

Product Name: Purified Phosphoric Acid as H_3PO_4
Common Name: Phosphoric Acid
Chemical Type: Phosphoric Acid

SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name and Synonyms	C.A.S. No.	Chemical Formula	WT%	TLV	PEL
			Hazardous		
Phosphoric Acid AS	7664-38-2	H_3PO_4	75%	1 mg/m^3 3 mg/m^3 STEL	1 mg/m^3
			Non-Hazardous		
None listed			25%		

SECTION 3 HAZARDS IDENTIFICATION

Ingestion: Ingestion may result in irritation and burning of mucous membranes and/or gastrointestinal tract.
Inhalation: Inhalation of acid mist may produce mild to severe irritation of respiratory tract. Follow proper unloading procedures on this sheet under section 7 to eliminate possible exposure.
Eye Contact: Will produce severe irritation. Prolonged contact may result in burn to eye causing permanent damage.
Skin Absorption: May produce mild to severe irritations. Prolonged contact may result in chemical burns.
Skin Contact: May produce mild to severe irritations. Prolonged contact may result in chemical burns.
Effects of Overdose: Severe conjunctivitis which may result in permanent damage. Can result in nausea and vomiting with severe abdominal pain. Prolonged contact with acid mist can result in severe respiratory irritation.

SECTION 4 FIRST AID MEASURES

Ingestion: Dilute with 2-3 glasses of milk or water. Do not induce vomiting. Consult a physician immediately.
Inhalation: Remove person to fresh air. If person is not breathing, perform artificial respiration if properly trained. Seek medical attention immediately.
Eyes: Promptly flush eyes with clean, cool water for at least 15 minutes. Contact a physician immediately.
Skin: Promptly remove contaminated clothing and rinse area with clear water for 15 minutes.

SECTION 5 FIRE FIGHTING MEASURES

Extinguishing Media: Non-flammable. Use media suitable to extinguish source of fire.
Special Fire Fighting Procedures: When phosphoric acid mists from hot fires may be encountered, self-contained breathing apparatus (SCBA) should be worn.
Unusual Fire and Explosion Hazards: Not listed

SECTION 6 ACCIDENTAL RELEASE MEASURES

Environmental Precautions: Low toxicity to aquatic life. Do not contaminate any watercourse or other body of water by direct application, disposal, or cleaning of equipment.
Steps to be taken in case material is released or spilled:
Dike around spill for containment and recover for re-processing. Small spills can be safely neutralized with limestone or soda ash. Caustic soda should be avoided because of excessive reactivity.

SECTION 7 HANDLING AND STORAGE

Precautions to be taken in handling and storing:
Always wear proper protective equipment. Avoid storage and/or transfer in tanks, lines and other equipment constructed or materials not specifically designed and approved for phosphoric acid service. Avoid freezing weather below 1°F. Have adequate first aid water available.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation Protection: General area ventilation.
Respiratory Protection: Approved respirators suitable for protection against acid mists and vapors. Not required for normal work procedures, but if misting occurs and always during unloading, use a high efficiency particulate respirator or self-contained breathing apparatus, with a full face shield when exposed above the TLV. Check with respirator manufacturer to determine the appropriate type of equipment for a given application.
Protective Clothing: Rubber clothing, chemical gloves, footwear and chemical hat or hood suitable for protection against acids.
Eye Protection: Tight sealing splash proof goggles.
Other: Eyewash and safety shower in work areas.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point:	Approx. 270°F @ 1 atmosphere	**Solubility in Water:**	Complete
Specific Gravity:	1.6 - 1.7	**% Volatiles (by volume):**	<1.0
Flashpoint:	Not applicable	**Vapor Pressure, mm Hg:**	2-8 @ 77°F
pH:	Strongly acidic; <2.0	**Reaction with Water:**	Exothermal, produces heat.
Appearance:	Clear to pale yellow; odorless when cold; pungent when hot.		
Extinguishing Media:	Non-flammable. Use media suitable to extinguish source of fire.		

SECTION 10 STABILITY AND REACTIVITY

Stability (Normal Conditions): Stable
Conditions to Avoid: Avoid contact with strong alkalies or metals other than certain stainless steels.
Incompatibility (Material to Avoid): Reacts violently with strong alkalies producing heat. Contact with many metals may result in severe corrosion attack of the metal and liberation of hydrogen gas.
Hazardous Decomposition Products: High temperatures will liberate phosphorus oxides.
Hazardous Polymerization: Will not occur

SECTION 11 TOXICOLOGY INFORMATION

Acute Oral Toxicity: LD_{50} (rat) is greater than 1,530 mg/kg; not acutely toxic by oral exposure. (TFI Product Testing Results, OECD Guideline 425)
Acute Dermal Toxicity: LD_{50} (rat) is greater than 3,160 mg/kg (ppm); not acutely toxic by dermal exposure. (TFI Product Testing Results, OECD Guideline 402).
Acute Inhalation Toxicity: LC_{50} (guinea pig, mouse, rat, rabbit) is 61-1,689 mg/m^3; highly toxic by inhalation. (TFI Product Testing Results)
Acute Fish Toxicity: 96-hour LC_{50} is 3.0-3.5 mg/L (ppm); moderate toxicity to aquatic organisms. (TFI Product Testing Results, OECD Guideline 203)

SECTION 12 ECOLOGICAL INFORMATION

None listed.

SECTION 13 DISPOSAL CONSIDERATIONS

Waste Disposal Procedures: Collect and reprocess where possible. Following neutralization with limestone or soda ash, consult local, state and federal regulations before final disposal.

SECTION 14 TRANSPORT INFORMATION

Shipping name:	RQ Phosphoric Acid, 8, UN1805, P.G. III		
Hazard Class:	8	**C.A.S. Number:**	7664-38-2
Reportable Quantity (RQ):	5000 lbs.	**D.O.T. Number:**	UN1805
Labels Required:	Corrosive	**Haz Waste No:**	D002
Placard:	Corrosive	**EPA Regist No:**	None
Packaging Group:	III		

Refer to 49 CFR 172.101 Hazardous Material Table for further provisions, packaging authorizations and quantity limitations.

SECTION 15 REGULATORY INFORMATION

Carcinogenicity: by IARC?: Yes ( ) No (X) by NTP?: Yes ( ) No (X)

Not on the 302 list of SARA reportable quantities

SECTION 16 OTHER INFORMATION

Flash Point (Test Method):	Non-flammable	**Flammable Limits**	**LOWER**	**UPPER**
Autoignition Temperature:	Not applicable	(% BY VOLUME)	N/A	N/A

Hazard Rating (N.F.P.A.): **Health:** 2 **Fire:** 0 **Reactivity:** 0 **Specific:** Not applicable
This N.F.P.A. rating is a recommendation by the manufacturer using the guidelines or published evaluations prepared by the National Fire Protection Association (N.F.P.A.).

MSDS Version Number: 8 (Revision to section 15)

Disclaimer: This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief, accurate and reliable as of the date compiled. However, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. **NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE CONCERNING THE INFORMATION HEREIN PROVIDED.** It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use. We do not accept liability for any loss or damage that may occur from the use of this information nor do we offer warranty against patent infringement.

Reviewed by: Environmental, Health, & Safety
November 2007 (208) 389-7394

3229
Hexion

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/19/2009**

Dear **Shane Felts**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3229

Expiration Date 3/19/2011

Generator: Hexion Specialty Chemicals (Diboll)
Address: 100 W. Borden
Diboll, TX 75941

Waste Information

Name of Waste: Distillation Water containing Formaldeyde and excess process
TCEQ Waste Code #: 70011022
Container Type:
Detailed Description of Process Generating Waste:
excess off spec water from distillation 50% formaldehyde / water mixture to create a 70% mixture. Distillation contains 5-10% Formaldehyde and excess process waste water.
Color: clear **Odor:** slight formaldehyde **pH:** 7-12
Physical State:
Incompatibilities: Oxidizers
Safety Related Data/Special Handling:
Level D

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

3229

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GB/JR

CES Environmental Services, Inc.

4904 Griggs Road Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

SECTION 1: Generator Information

Company : Hexion Specialty Chemicals (Diboll)
Address : 100 W. Borden 100 W. Borden
City, State, Zip : Diboll TX 75941
Contact : Shane Felts Title :
Phone No : (936) 829-5566 Fax : (936) 829-2405
24 / HR Phone :
U.S EPA I.D No : TXD0001865609
State I.D : 32608 SIC Code

SECTION 2: Billing Information

Company : Hexion Specialty Chemicals Billing
Address : PO Box 1310 PO Box 1310
City, State, Zip : Columbus OH 43216
Contact : Title :
Phone No : (866) 524-8800 Fax :

SECTION 3: General Description of the Waste

Name of Waste : Distillation Water containing Formaldehyde and excess process waste water - high level

Detailed Description of the Process Generating Waste:
Excess off spec water from distilling 50% Formaldehyde/water mixture to create a 70% mixture
Distillate contains 5-10% Formaldehyde and excess process waste water

Physical State : ☑ Liquid ☐ Sludge ☐ Powder
☐ Solid ☐ Filter Cake ☐ Combination

Color : clear Odor : slight formaldehyde

Specific Gravity (Water=1) : 1-1.1 Density : 8.5 lbs / gal

Does this material contain any total phenolic compounds? ☑ Yes ☐ No

Does this material contain any para substituted phenolic compounds? ☑ Yes ☐ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834	2835	2836	2841	2842	2843	2844	2851
2861	2865	2869	2873	2874	2876	2879	2891	2892	2893	2896	2899	2911	3312	4953	4959	9511

Layers : ☑ Single-Phas ☐ Multi-Phase

Container Type : ☐ Drum ☐ Tote ☑ Truck ☐ Other (explain)

Container Size : 5000

Number Of Units : 4

Is this a USEPA "Hazardous Waste" per 40 CFR 261.3? Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", is it: ☐ D001 ☐ D002 ☐ D003

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007
☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristics for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code No : 70011022 *

Proper U.S. State Waste Code No : Environmentally Hazardous substances, liquid, n.o.s. (formaldehyde)

Class : 9 UN/NA : UN3082 PG : III RQ : 100

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
>150	7-12	0 mg/l	0 mg/l	<5 %
Oil and Grease	**TOC**	**Zinc**	**Copper**	**Nickel**
<1500 mg/l	<1500 mg/l	0 mg/l	0 mg/l	0 mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The material / product consists of the following materials	Concentration Ranges are acceptable	Units or %
formaldehyde	5-10	%
phenol	0-5	%
resin solids	1-5	%
water	85-90	%
methanol	~~*~~ 1-3	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.
level d

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.
~~none~~ analytical

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
oxidizers

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generators knowledge

TCLP Metals : x
TCLP Volatiles : x
TCLP Semi-Volatiles : x

Reactivity : x
Corrosivity : x
Ignitability : x

SECTION 9: Waste Receipt Classification Under 40 CFR 437

Is this material a wastewater or wastewater sludge ? ☐ YES ☑ NO

If 'YES', complete this section

PLEASE CHECK THE APPROPRIATE BOX: IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE

Matals Subcategory: ***Subpart A***

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosph
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: ***Subpart B***

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation wastes
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory ***Subpart C***

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bering wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesive and/or epoxies formulation

☑ Wastewater from organic chemical product operations
☐ Tank clean-out from organic, non-petroleum sources

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

☐ Metals Subcatego

☐ Oils Subcatego

☑ Organics Subcategory

SECTION 10: Additional Instruction

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data. I hereby cerity that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature : Elizabeth Emery **Date :** 3/19/2009

Printed Name / Title : Elizabeth Emery

CES USE ONLY (DO NOT WRITE IN THIS SPACE) **Process Facility Information :**

Compliance Officer : Prabhakar Thangudu

Date : 3-19-08 **Status :** Approved Rejected

Approval Number : 3229

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$.35/gallon

2. Contamination Limit (maximum limit before surchages apply):

3. Surcharge Pricing:

Cu

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

System 1

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

HEXION
Specialty Chemicals

Material Safety Data Sheet

Formaldehyde 50%

1. Product and company identification

Product name	Formaldehyde 50%
MSDS Number	000000100006
Product Type	Formaldehyde Solution
Product use	Industrial use.
Manufacturer, Importer, Supplier	Hexion Specialty Chemicals, Inc. 155 West A Street, Bldg. A-1 Springfield OR 97477 29hazcom@hexion.com
Print date	18-MAR-2009
Telephone	**For Emergency Medical Assistance** Call Health & Safety Information Services, 1-866-303-6949 **For Emergency Transportation Information** CHEMTREC US Domestic (800) 424-9300 CHEMTREC International (703) 527-3887 CANUTEC CA Domestic (613) 996-6666 For additional health and safety or regulatory information, call (614)225-4778.

2. Hazards identification

Form	Liquid
Odor	Pungent
OSHA/HCS status	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Emergency overview	DANGER ! COMBUSTIBLE LIQUID AND VAPOR. CAUSES DIGESTIVE TRACT AND EYE BURNS. INHALATION CAUSES HEADACHES, DIZZINESS, DROWSINESS AND NAUSEA AND MAY LEAD TO UNCONSCIOUSNESS. CAUSES SKIN IRRITATION. MAY CAUSE ALLERGIC RESPIRATORY AND SKIN REACTION. MAY CAUSE RESPIRATORY TRACT IRRITATION. CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE. CANCER HAZARD - CONTAINS MATERIAL WHICH CAN CAUSE CANCER. POSSIBLE DEVELOPMENTAL HAZARD - CONTAINS MATERIAL WHICH MAY CAUSE ADVERSE DEVELOPMENTAL EFFECTS, BASED ON ANIMAL DATA. POSSIBLE REPRODUCTIVE HAZARD - CONTAINS MATERIAL WHICH MAY CAUSE ADVERSE REPRODUCTIVE EFFECTS IN FEMALES, BASED ON ANIMAL DATA. HARMFUL IN CONTACT WITH SKIN. TOXIC IF INHALED OR SWALLOWED. MAY BE FATAL OR CAUSE BLINDNESS IF SWALLOWED. Keep container tightly closed and sealed until ready for use. Use only with adequate ventilation. Combustible liquid. Corrosive to the eyes

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and digestive tract. Causes burns. Harmful in contact with skin. Irritating to skin. Slightly irritating to the respiratory system. May cause sensitization by inhalation and skin contact. Keep away from heat, sparks and flame. Avoid exposure - obtain special instructions before use. Do not ingest. Do not get in eyes or on skin or clothing. Contains material that can cause target organ damage. Contains material which can cause cancer. Risk of cancer depends on duration and level of exposure. Contains material which may cause developmental abnormalities, based on animal data. Avoid exposure during pregnancy. Contains material which may impair female fertility, based on animal data. Wash thoroughly after handling. Toxic if inhaled and if swallowed. May be fatal or cause blindness if swallowed. Can cause central nervous system (CNS) depression. Do not breathe dust, vapor, mist or gas. Contains material which causes damage to the following organs: kidneys, lungs, liver, central nervous system (CNS),

Potential acute health effects

Inhalation	Can cause central nervous system (CNS) depression. Slightly irritating to the respiratory system. May cause sensitization by inhalation. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Toxic if inhaled.
Ingestion	Toxic if swallowed. Can cause central nervous system (CNS) depression. Corrosive to the digestive tract. Causes burns. May be fatal or cause blindness if swallowed.
Skin	Harmful in contact with skin. Irritating to skin. May cause sensitization by skin contact.
Eyes	Corrosive to eyes. Causes burns.

Potential chronic health effects

Chronic effects	Contains material that can cause target organ damage. Some reports suggest that formaldehyde may cause respiratory sensitization, such as asthma, and that preexisting respiratory and skin disorders may be aggravated by exposure. May be fatal or cause blindness if swallowed.
Carcinogenicity	Contains material which can cause cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity	No known significant effects or critical hazards.
Teratogenicity	No known significant effects or critical hazards.
Developmental effects	Contains material which may cause developmental abnormalities, based on animal data.
Fertility effects	Contains material which may impair female fertility, based on animal data.
Target organs	Contains material which causes damage to the following organs: kidneys, lungs, liver, central nervous system (CNS), Review Section 2 and 11 for any additional assessments.

Over-exposure signs/symptoms

Inhalation	Adverse symptoms may include the following: nausea or vomiting, respiratory tract irritation, coughing, headache, drowsiness/fatigue, dizziness/vertigo, wheezing and breathing difficulties, unconsciousness, asthma,

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Ingestion	Adverse symptoms may include the following: stomach pains, nausea or vomiting, dizziness/vertigo, drowsiness/fatigue, headache, unconsciousness, convulsion,
Skin	Adverse symptoms may include the following: irritation, redness,
Eyes	Adverse symptoms may include the following: pain, watering, redness,
Medical conditions aggravated by over-exposure	Pre-existing respiratory, skin and digestive disorders and disorders involving any other target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

See section 11 for more detailed information on health effects and symptoms.

3. Composition and information on ingredients

Ingredient name	CAS number	%
Formaldehyde	50-00-0	**50.0 - 70.0**
Methanol	67-56-1	**1.0 - 5.0**

*** Any applicable Canadian trade secret numbers will be listed in Section 15.2.*

4. First aid measures

Eye contact	Get medical attention immediately. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Chemical burns must be treated promptly by a physician.
Skin contact	Get medical attention immediately. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing or wear gloves. Continue to rinse for at least 10 minutes. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Inhalation	Get medical attention immediately. Move exposed person to fresh air. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In the event of any complaints or symptoms, avoid further exposure.
Ingestion	Get medical attention immediately. Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

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Protection of first-aiders No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing or wear gloves. If it is suspected that dust, vapor, mist or gas are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus.

Notes to physician No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

See section 11 for more detailed information on health effects and symptoms.

5. Fire-fighting measures

Flammability of the product Combustible liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.

Extinguishing media

Suitable Use dry chemical, CO2, water spray (fog) or foam.

Special exposure hazards Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Hazardous combustion products Decomposition products may include the following materials:carbon oxides,

Special protective equipment for fire-fighters Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

Personal precautions No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8). Do not breathe dust, vapor, mist or gas.

Environmental precautions Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Large spill Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.

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Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

Small spill

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.

7. Handling and storage

Handling

Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Persons with a history of skin sensitisation problems or asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Avoid exposure during pregnancy. Do not get in eyes or on skin or clothing. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container. Do not breathe dust, vapor, mist or gas.

Storage

Storage temperature should be controlled to avoid precipitation or vaporization. See technical bulletin for recommended storage temperatures. Remove plug slowly to relieve pressure. Formaldehyde solutions will start to precipitate paraformaldehyde if stored below their recommended storage temperatures making the freezing point difficult to determine.

8. Exposure controls/personal protection

Ingredient name	Occupational exposure limits
Formaldehyde	**ACGIH TLV Ceiling** 0.37 mg/m3 0.3 ppm **OSHA PEL 1989 8-hr TWA** 0.75 ppm **OSHA PEL 1989 STEL (15 mins)** 2 ppm **OSHA PEL 8-hr TWA** 0.75 ppm **OSHA PEL STEL (15 mins)** 2 ppm
Methanol	

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ACGIH TLV 8-hr TWA
262 mg/m3 200 ppm

ACGIH TLV STEL (15 mins)
328 mg/m3 250 ppm

OSHA PEL 1989 8-hr TWA
260 mg/m3 200 ppm

OSHA PEL 1989 STEL (15 mins)
325 mg/m3 250 ppm

OSHA PEL 8-hr TWA
260 mg/m3 200 ppm

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.
Engineering measures	Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Respiratory	Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Hands	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Eyes	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.
Skin	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

EPAHO104001228

9. Physical and chemical properties

Form	Liquid
Flash point	82 °C Tag Closed Cup ASTM D 56
Auto-ignition temperature	420 °C
Flammable limits	
Lower:	Approx. 7 %(V)
Upper:	Approx. 70 %(V)
Color	Clear, colorless/colourless
Odor	Pungent
pH	2.8 - 4.5
Boiling point	Approx. 100 °C
Freezing Point	See storage section
Relative density	1.1527 - 1.1583
Vapor pressure	Approx. 40 mm Hg @39 °C
Odor threshold	Not available
Viscosity	Dynamic - Not available
Solubility	Infinite
Partition coefficient: n-octanol/water	Not available
Corrosion of metals	Corrosive to metal
Evaporation rate	Less than1 (n-Butyl Acetate=1)
Vapor density	Approx. 1.0

10. Stability and reactivity

Stability	The product is stable. Under normal conditions of storage and use, hazardous polymerization will not occur.
Conditions to avoid	Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy.
Materials to avoid	Reactive or incompatible with the following materials: oxidizing materials, strong acids, strong alkalis, phenol, hydrochloric acid
Other hazards	May further react at high temperatures to form methanol, formic acid or methylals. At low temperatures will self-polymerize to form paraformaldehyde.
Hazardous decomposition products	Decomposition products may include the following materials: carbon monoxide, carbon dioxide,

11. Toxicological information

Acute toxicity

Ingredient name

Formaldehyde

LD50	Oral	Rat	100 mg/kg	
LD50	Oral	Mouse	42 mg/kg	
LD50	Oral	Guinea pig	260 mg/kg	
LC50	Inhalation	Mouse	0.454 mg/l	/4 h
LC50	Inhalation	Mouse	0.505 mg/l	/2 h
LC50	Inhalation	Rat	0.578 mg/l	/2 h
LD50	Dermal	Rabbit	270 mg/kg	

Methanol

EPAHO104001229

LD50	Oral	Rat	5,600 mg/kg
LC50	Inhalation	Rat	64000 ppm /4 h
LD50	Dermal	Rabbit	15,800 mg/kg

Carcinogenicity

Conclusion/Summary

OSHA regulates formaldehyde as a potential human carcinogen. See the OSHA Formaldehyde Workplace Standard at 29CFR 1910.1048. Rats chronically exposed to 14 ppm formaldehyde contracted nasal cancer. The National Toxicology Program (NTP) has listed formaldehyde as a probable human carcinogen. The International Agency for Research on Cancer (IARC) has concluded formaldehyde is carcinogenic to humans. Safe handling and use instructions are provided in this MSDS and in the OSHA Formaldehyde Workplace Standard at 29CFR1910.1048. OSHA has identified 0.5 ppm as the "Action Level". Please review and understand the guidance contained in this MSDS and refer to the OSHA Formaldehyde Standard for regulatory requirements that may be applicable to your operation and use. For further information and a review of various studies, go to www.osha.gov/SLTC/formaldehyde, www.iarc.fr and other authoritative websites.

Classification

Ingredient name

Formaldehyde

ACGIH	Suspected human carcinogen.
IARC	The agent (mixture) is carcinogenic to humans. (Group 1)
NTP	Reasonably anticipated to be human carcinogens.

12. Ecological information

Environmental effects

No known significant effects or critical hazards.

Aquatic ecotoxicity

Ingredient name

Formaldehyde

Fresh water	Acute LC50 24.1 mg/l/96 h	Fathead minnow
Fresh water	Acute LC50 40 mg/l/96 h	Bluegill
Fresh water	Acute LC50 40 mg/l/96 h	Rainbow trout,donaldson trout

Methanol

Fresh water	Acute LC50 28,200 mg/l/96 h	Fathead minnow
Fresh water	Acute LC50 20,100 mg/l/96 h	Rainbow trout,donaldson trout
Fresh water	Acute EC50 13,000 mg/l/96 h	Rainbow trout,donaldson trout
Fresh water	Acute LC50 15,400 mg/l/96 h	Bluegill
Fresh water	Acute EC50 12,700 mg/l/96 h	Bluegill
Fresh water	Acute EC50 28,900 mg/l/96 h	Fathead minnow

Other adverse effects

EPAHO104001230

No known significant effects or critical hazards.

13. Disposal considerations

Waste disposal The generation of waste should be avoided or minimized wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14. Transportation

The data provided in this section is for information only and may not be specific to your package size or mode of transport. You will need to apply the appropriate regulations to properly classify your shipment for transportation.

International transport regulations

Regulatory information	UN number	Proper shipping name	Classes/PG*	Reportable Quantity (RQ)
CFR	2209	FORMALDEHYDE SOLUTION	Class 8 III	Formaldehyde
TDG	2209	FORMALDEHYDE SOLUTION	Class 8 III	
ADR/RID	2209	FORMALDEHYDE SOLUTION	Class 8 III C9 80	
IMO/IMDG	2209	FORMALDEHYDE SOLUTION	Class 8 III	
IATA (Commercial)	2209	FORMALDEHYDE SOLUTION	Class 8 III	

PG* : Packing group

15. Regulatory information

US regulations

HCS Classification Combustible liquid, Toxic material, Corrosive material, Sensitizing material, Carcinogen, Target organ effects

U.S. Federal regulations **SARA 311/312 Classification** Immediate (acute) health hazard, Delayed (chronic) health hazard, Fire hazard

SARA 313 - Supplier Notification
This product contains the following toxic chemical(s) subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986, and Subpart C-Supplier Notification Requirement of 40 CFR Part 372.
Formaldehyde - 50-00-0 (50.30%), Methanol - 67-56-1 (1.50%),

State regulations **Massachusetts Substances** The following components are listed: Formaldehyde, Methanol,

New Jersey Hazardous Substances The following components are listed: Formaldehyde, Methanol,

Pennsylvania RTK Hazardous Substances The following components are listed: Formaldehyde, Methanol,

California Prop. 65: WARNING: This product contains a chemical known to the State

EPAHO104001231

of California to cause cancer. Formaldehyde - 50-00-0,

Canada

WHMIS (Canada) Class B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F).
Class D-1A: Material causing immediate and serious toxic effects (Very toxic).
Class D-2A: Material causing other toxic effects (Very toxic).
Class D-2B: Material causing other toxic effects (Toxic).
Class E: Corrosive material

Canadian lists **Canadian NPRI:** The following components are listed: Formaldehyde, Methanol,

International regulations

Chemical inventories EU EINECS inventory All components are listed or exempted.
Australia inventory (AICS) All components are listed or exempted.
China inventory (IECSC) All components are listed or exempted.
Korea inventory (KECI) All components are listed or exempted.
Philippines inventory (PICCS) All components are listed or exempted.
Japan inventory (ENCS) All components are listed or exempted.
Canada inventory All components are listed or exempted.
United States inventory (TSCA 8b) All components are listed or exempted.

16. Other information

Hazardous Material Information System (U.S.A.)
Health : 3
Flammability: 2
Physical hazards : 1

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.
The customer is responsible for determining the PPE code for this material.

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EPAHO104001232

Laboratory Analysis Report

Total Number of Pages: 10

Job ID : 09030291

10100 East Freeway, Suite 100, Houston, TX 77029 tel: 713-453-6060, fax: 713-453-6091, http://www.ablabs.com

Client Project Name :
0309-29 / Hexion-Dibol Formaldehyde contaminated wash water

Report To :	Client Name:	CES Environmental	P.O.#.: 0309-29
	Attn:	Gary Brauckman	Sample Collected By:
	Client Address:	4904 Griggs Rd	Date Collected: 03/13/09
	City, State, Zip:	Houston, Texas, 77021	

A&B Labs has analyzed the following samples...

Client Sample ID	Matrix	A&B Sample ID
Formaldehyde contaminated wash water	Water	09030291.01

Shantall Carpenter

Released By: Shantall Carpenter
Title: Project Manager
Date: 3/17/2009

This Laboratory is NELAP (T104704213-08B-TX) accredited. Effective: 07/01/2008; Expires: 06/03/2009
Scope: Non-Potable Water, Drinking Water, Air, Solid, Hazardous Waste

I am the laboratory manager, or his/her designee, and I am responsible for the release of this data package. This laboratory data package has been reviewed and is complete and technically compliant with the requirements of the methods used, except where noted in the attached exception reports. I affirm, to the best of my knowledge that all problems/anomalies observed by this laboratory (and if applicable, any and all laboratories subcontracted through this laboratory) that might affect the quality of the data, have been identified in the Laboratory Review Checklist, and that no information or data have been knowingly withheld that would affect the quality of the data.

This report cannot be reproduced, except in full, without prior written permission of A&B Labs. Results shown relate only to the items tested. Samples are assumed to be in acceptable condition unless otherwise noted. Blank correction is not made unless otherwise noted. Air concentrations reported are based on field sampling information provided by client.

Date Received : 03/13/2009 12:30

EPAHO104001233

LABORATORY TERM AND QUALIFIER DEFINITION REPORT

Job ID : 09030291

Date: 3/17/2009

General Term Definition

Back-Wt	Back Weight	Post-Wt	Post Weight
BRL	Below Reporting Limit	ppm	parts per million
cfu	colony-forming units	Pre-Wt	Previous Weight
Conc.	Concentration	Q	Qualifier
D.F.	Dilution Factor	RegLimit	Regulatory Limit
Front-Wt	Front Weight	RPD	Relative Percent Difference
LCS	Laboratory Check Standard	RptLimit	Reporting Limit
LCSD	Laboratory Check Standard Duplicate	surr	Surrogate
MS	Matrix Spike	T	Time
MSD	Matrix Spike Duplicate	TNTC	Too numerous to count
MW	Molecular Weight		

Qualifier Definition

M1	Matrix Spike/Matrix Spike Duplicate recovery is above laboratory control limits due to matrix interference.

LABORATORY TEST RESULTS

Job ID : 09030291

Date 3/17/2009

Client Name: CES Environmental

Attn: Gary Brauckman

Project Name: 0309-29 / Hexion-Dibol Formaldehyde contaminated wash water

Client Sample ID: Formaldehyde contaminated wash water

Job Sample ID: 09030291.01

Date Collected: 03/13/09

Sample Matrix Water

Time Collected: 09:30

Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 1010	Ignitability (Flash Point)								
	Ignitability	>150	°F	1				03/17/09 08:05	SG
SW-846 6010C	TCLP Metals								
	Antimony	BRL	mg/L	1	0.1	1		03/16/09 14:04	TK
	Arsenic	BRL	mg/L	1	0.04	1.8		03/16/09 14:04	TK
	Barium	BRL	mg/L	1	0.04	100.0		03/16/09 14:04	TK
	Beryllium	BRL	mg/L	1	0.04	0.08		03/16/09 14:04	TK
	Cadmium	BRL	mg/L	1	0.04	0.5		03/16/09 14:04	TK
	Chromium	BRL	mg/L	1	0.04	5.0		03/16/09 14:04	TK
	Lead	BRL	mg/L	1	0.04	1.5		03/16/09 14:04	TK
	Nickel	BRL	mg/L	1	0.04	70		03/16/09 14:04	TK
	Selenium	BRL	mg/L	1	0.1	1.0		03/16/09 14:04	TK
	Silver	BRL	mg/L	1	0.04	5.0		03/16/09 14:04	TK
	Vanadium	BRL	mg/L	1	0.04	30		03/16/09 14:04	TK
SW-846 7470A	TCLP Metals, Mercury								
	Mercury	BRL	mg/L	1	0.0005	0.2		03/17/09 12:03	SM
TX 1005	Total Petroleum Hydrocarbons								
	C6-C12	BRL	mg/L	1	1.25			03/13/09 14:44	WS
	>C12-C28	BRL	mg/L	1	1.72			03/13/09 14:44	WS
	>C28-C35	BRL	mg/L	1	1.83			03/13/09 14:44	WS
	Total C6-C35	BRL	mg/L	1				03/13/09 14:44	WS
	1-Chlorooctane(surr)	117	%	1	62-121			03/13/09 14:44	WS
	Chlorooctadecane(surr)	115	%	1	62-121			03/13/09 14:44	WS

EPAHO104001235

QUALITY CONTROL CERTIFICATE

Job ID : 09030291 **Date :** 3/17/2009

Analysis : **TCLP Metals** **Method :** **SW-846 6010C** **Reporting Units :** **mg/L**

QC Batch ID : Qb09031611 **Created Date :** 03/16/09 **Created By :** Tkhuc

Samples in This QC Batch : 09030291.01

Digestion :	PB09031614	**Prep Method :**	SW-846 3010A	**Prep Date :**	03/16/09 10:00	**Prep By :**	Tkhuc
TCLP Prep :	PB09031601	**Prep Method :**	SW-846 1311	**Prep Date :**	03/16/09 08:00	**Prep By :**	Ksudha

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Antimony	7440-36-0	BRL	mg/L	1	0.1		
Arsenic	7440-38-2	BRL	mg/L	1	0.04		
Barium	7440-39-3	BRL	mg/L	1	0.04		
Beryllium	7440-41-7	BRL	mg/L	1	0.04		
Cadmium	7440-43-9	BRL	mg/L	1	0.04		
Chromium	7440-47-3	BRL	mg/L	1	0.04		
Lead	7439-92-1	BRL	mg/L	1	0.04		
Nickel	7440-02-0	BRL	mg/L	1	0.04		
Selenium	7782-49-2	BRL	mg/L	1	0.1		
Silver	7440-22-4	BRL	mg/L	1	0.04		
Vanadium	7440-62-2	BRL	mg/L	1	0.04		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Antimony	2	2.06	103	2	2.06	103	0	20	80-120	
Arsenic	2	2.07	104	2	2.06	103	0.5	20	80-120	
Barium	2	1.97	98.5	2	1.97	98.5	0	20	80-120	
Beryllium	2	2.08	104	2	2.09	105	0.5	20	80-120	
Cadmium	2	1.96	98	2	1.95	97.5	0.5	20	80-120	
Chromium	2	1.93	96.5	2	1.92	96	0.5	20	80-120	
Lead	2	1.97	98.5	2	1.97	98.5	0	20	80-120	
Nickel	2	1.91	95.5	2	1.91	95.5	0	20	80-120	
Selenium	2	2.22	111	2	2.20	110	0.9	20	80-120	
Silver	2	2.01	101	2	1.99	99.5	1	20	80-120	
Vanadium	2	1.95	97.5	2	1.94	97	0.5	20	80-120	

QC Type: MS and MSD
QC Sample ID: 09030291.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Antimony	BRL	2	2.11	101						70-130	
Arsenic	BRL	2	2.27	114						45-138	
Barium	BRL	2	2.11	105						39-135	
Beryllium	BRL	2	2.32	116						70-130	
Cadmium	BRL	2	1.96	97.8						56-125	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 09030291 **Date :** 3/17/2009

Analysis : TCLP Metals **Method : SW-846 6010C** **Reporting Units : mg/L**

QC Batch ID : Qb09031611 **Created Date :** 03/16/09 **Created By :** Tkhuc

Samples in This QC Batch : 09030291.01

QC Type: MS and MSD
QC Sample ID: 09030291.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Chromium	BRL	2	2.03	101						52-125	
Lead	BRL	2	1.94	96.8						55-125	
Nickel	BRL	2	1.97	97.4						70-130	
Selenium	BRL	2	2.83	142						70-130	M1
Silver	BRL	2	1.96	98						26-148	
Vanadium	BRL	2	2.02	101						70-125	

Refer to the Definition page for terms.

EPAHO104001237

QUALITY CONTROL CERTIFICATE

Job ID : 09030291 **Date :** 3/17/2009

Analysis : **Total Petroleum Hydrocarbons** **Method :** **TX 1005** **Reporting Units :** **mg/L**

QC Batch ID : Qb09031628 **Created Date :** 03/16/09 **Created By :** Dshen

Samples in This QC Batch : 09030291.01

Sample Preparation : PB09031627 **Prep Method :** TX 1005 **Prep Date :** 03/13/09 13:00 **Prep By :** Dshen

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
C6-C12		BRL	mg/L	1	1.25		
>C12-C28		BRL	mg/L	1	1.72		
>C28-C35		BRL	mg/L	1	1.83		
Total C6-C35		BRL	mg/L	1			

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
C6-C12	43	50.6	118	43	50.3	117	0.6	20	75-125	
>C12-C28	43	53.3	124	43	51.6	120	3.2	20	75-125	
>C28-C35	43	42.9	99.8	43	42	97.7	2.1	20	75-125	

QC Type: MS and MSD
QC Sample ID: 09030291.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
C6-C12	BRL	43	40.7	93.4						75-125	
>C12-C28	BRL	43	40.1	90.3						75-125	
>C28-C35	BRL	43	37	86						75-125	

Refer to the Definition page for terms.

EPAHO104001238

QUALITY CONTROL CERTIFICATE

Job ID : 09030291 **Date :** 3/17/2009

Analysis : **Ignitability (Flash Point)** **Method :** **SW-846 1010** **Reporting Units :** **°F**

QC Batch ID : Qb09031714 **Created Date :** 03/17/09 **Created By :** Sgarcia

Samples in This QC Batch : 09030291.01

QC Type: Duplicate

QC Sample ID: 09030291.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit		Qual
Ignitability	>150	>150	°F		20		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Ignitability	83	86	104	83	85	102	1.2	20	75-125	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 09030291 **Date :** 3/17/2009

Analysis : **TCLP Metals, Mercury** **Method :** **SW-846 7470A** **Reporting Units :** **mg/L**

QC Batch ID : Qb09031716 **Created Date :** 03/17/09 **Created By :** Sathish

Samples in This QC Batch : 09030291.01

Digestion :	PB09031706	**Prep Method :**	SW-846 7470A	**Prep Date :**	03/17/09 09:00	**Prep By :**	Sathish
TCLP Prep :	PB09031601	**Prep Method :**	SW-846 1311	**Prep Date :**	03/16/09 08:00	**Prep By :**	Ksudha

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Mercury	7439-97-6	BRL	mg/L	1	0.0005		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Mercury	0.005	0.0046	91.8	0.005	0.0044	88.8	3.3	35	71-143	

QC Type: MS and MSD
QC Sample ID: 09030291.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Mercury	BRL	0.005	0.0044	88.6	0.005	0.0048	95	7	35	61-175	

Refer to the Definition page for terms.

A & B Labs — *Chain of Custody*

The Chain of Custody is a Legal Document

Page 1 of 1

10100 East Fwy (I-10) Ste. 100
Houston, TX 77029
713-453-6060
1-877-478-6060 Toll Free
713-453-6091 Fax
ablabs.com

A&B JOB ID # 09030291

5. Project # 0309-29

1. REPORT TO:
Company: CES Environmental
Address: 4904 Griggs Rd Houston, TX 77021
Contact: Gary Brauchman
Phone: Cell 713-417-5773
Fax: ☐ 713 676-1676
E-mail: ☐

2. INVOICE TO:
Company:
Address:
Contact:
Phone:
Fax: ☐
E-mail: ☐

3. PO # 0309-29

4. Turnaround Time (Business Days)
☐ 1 Day* ☐ Other
☑ 2 Days*
☐ 3 Days* *Surcharge applies
☐ 7 Days - Standard

6. Project Name/Location: Hexion-Dibol Formaldehyde contaminated wash water

7. Reporting Requirement:
☐ TRRP Limits only ☐ TRRP Rpt. Package ☐ See Attached ☐ Standard Level II

8. Sampler's Name & Company (PLEASE PRINT): Gary Brauchman
Sampler's Signature & Date: 3-13-09

13. No. of Containers
14. Containers*
15. Preservatives**
16. PH-Lab Only
17. Analyses/Methods: TCLP(11) metals; TPH; DI flash PT

LAB USE ONLY	9. Sample ID and Description	10. Sampling Date	Time	11. Comp.	Grab	12. Matrix: Water	Soil	Sludge	Oil	Air	Other	No. of Containers	TCLP(11) metals	TPH	DI flash PT	18. REMARKS
01A	Formaldehyde contaminated wash water.	3-13-09	12:30		✓	✓										

Page 9 of 10

19. RELINQUISHED BY	DATE	TIME	20. RECEIVED BY	DATE	TIME
1	3-13-09	12:30			
2					
3			21. RECEIVED BY LABORATORY	3/13/09	12:30

22. KNOWN HAZARDS/COMMENTS: Formaldehyde

Temperature: 14.3 °C

Intact: Y or N Initials: DW

*Containers: VOA - 40 ml vial; A/G - Amber/Glass 1 Liter; 4 oz/8 oz - glass wide mouth; P/O - Plastic/other

**Preservatives: C - Cool; H - HCl; N - HNO_3; S - H_2SO_4; OH - NaOH; T - $Na_2S_2O_3$; X - Other

METHOD OF SHIPMENT

BILL OF LADING/TRACKING #

LAB USE ONLY SAMPLING ____ RENTAL ____ P/U ____

A&B cannot accept verbal changes
Please FAX written changes to 713-453-6091

Samples will be disposed of after 30 days
A&B reserves the right to return samples

EPAHO104001241

Sample Condition Checklist

Date : **03/17/09**

A&B JobID : **09030291**	Date Received : **03/13/2009**	Time Received : **12:30PM**
Client Name : **CES Environmental**		
Temperature : **14.3°C**	Sample pH : **N/A**	

	Check Points	Yes	No
1.	**Cooler seal present and signed.**	N/A	
2.	**Sample(s) in a cooler.**	X	
3.	**If yes, ice in cooler.**	X	
4.	**Sample(s) received with chain-of-custody.**	X	
5.	**C-O-C signed and dated.**	X	
6.	**Sample(s) received with signed sample custody seal.**	N/A	
7.	**Sample containers arrived intact. (If no comment).**	X	
8.	**Matrix :** Water ☑ Soil ☐ Liquid ☐ Sludge ☐ Solid ☐ Cassette ☐ Tube ☐ Bulk ☐ Badge ☐ Food ☐ Other ☐		
9.	**Sample(s) were received in appropriate container(s).**		X
10.	**Sample(s) were received with proper preservative**		
11.	**All samples were logged or labeled.**	X	
12.	**Sample ID labels match C-O-C ID's**	X	
13.	**Bottle count on C-O-C matches bottles found.**	X	
14.	**Sample volume is sufficient for analyses requested.**	X	
15.	**Samples were received within the hold time.**	X	
16.	**VOA vials completely filled.**	N/A	
17.	**Sample accepted.**	X	

Comments : Include actions taken to resolve discrepancies/problem:

Sample cooling initiated in the field. Sample received in improper container for TPH sample should be collected in 40ml vial with no headspace. Client will be notified.

Received by : Dwright

Check in by/date : Dwright / 03/13/2009

3230
BW Services

EPAHO104001243

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/20/2009**

Dear **Brandon White**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3230

Expiration Date 3/19/2011

Generator: BW Services
Address: 1100 Wayne Drive
Angleton, TX 77515

Waste Information

Name of Waste: Unused Waste Solid Organics
TCEQ Waste Code #: 00114091
Container Type:
Detailed Description of Process Generating Waste:
unused product cleaned from railcars
Color: brown **Odor:** amine **pH:** 4-10
Physical State:
Incompatibilities: oxidizers, inorganic acids, halogens, Aldehydes, Ketones
Safety Related Data/Special Handling:
Level C PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

DB/MM

OS

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility 4904 Griggs Road, Houston, TX 77021 Phone (713) 676-1460 Fax: (713) 676-1676 U.S. EPA ID Number: TXD008950461 ISWR Number: 30900 TCEQ Industrial Solid Waste Permit Number: 30948	☐ CES Environmental Services - Port Arthur Facility 2420 S. Gulfway Dr., Port Arthur, TX 77641 Phone (713) 676-1460 Fax: (713) 676-1460 U.S. EPA ID Number: TXR000079307 ISWR Number: 88585

SECTION 1: Generator Information

Company: BW Services
Address: 1100 Wayne Drive
City: Angelton **State:** TX **Zip:** 77515
Contact: Brandon Douglas **Title:** Manager
Phone Number: 979-848-8800 **Fax Number:** 979-848-9990
24/hr Phone Number: 281-734-8478
US EPA ID No: TXD086467800
State ID No: 30207 **SIC Code:**

SECTION 2: Billing Information - ☑ **Same as Above**

Company:
Address:
City: **State:** **Zip:**
Contact: **Title:**
Phone Number: **Fax Number:**

SECTION 3: General Description of the Waste

Name of Waste: Unused Waste Solid Organics
Detailed Description of Process Generating Waste:

Unused product cleaned from railcars

Physical State: ☑ **Liquid** ☐ **Sludge** ☐ **Powder**
☑ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: Brown **Odor:** Amine

Specific Gravity (water=1): 1.1 **Density:** 8.5 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ **Single-phase** ☐ **Multi-phase**

Container Type: ☑ **Drum** ☐ **Tote** ☐ **Truck** ☐ **Other (explain)**

Frequency: ☐ **Weekly** ☑ **Monthly** ☐ **Yearly** ☐ **One-Time**
Quantity:

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: 00114091

Proper US DOT Shipping Name: Amines, Solid, Corrosive, NOS

Class: 8 **UN/NA:** 3259 **PG :** II **RQ:** 5000lbs

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
>150	4-10	0 mg/l	0 mg/l	0-10 %

Oil & Grease	TOC	Zinc	Copper	Nickel
NA mg/l	NA mg/l	NA mg/l	NA mg/l	NA mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Piperazine Crude	0-100	%
		%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Level C PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. MSDS Sheets

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

Oxidizers, inorganic Acids, Halogens, Aldehydes, Keytones

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	X, None in Product
TCLP Volatiles:	X, None in Product
TCLP Semi-Volatiles:	X, None in Product
Reactivity:	X, None in Product
Corrosivity:	X, None in Product
Ignitability:	X, None in Product

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory*: *Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory*: *Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory*: *Subpart C

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 8 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: [signature] **Date:** 3-14-09

Printed Name/Title: Beandan White Vice President

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: [signature]
Date: 3-19-08 ☑ Approved ☐ Rejected
Approval Number: #OV3230

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$75/dm

2. Contamination Limit (maximum limit before surchages apply):

None

3. Surcharge Pricing:

None

4. Special Testing Requirements:

Make sure it conforms with profile

5. Treatment and Handling Protocol:

Class 1 liquids to LANDFILL , May have Amine odor-Take caution when sampling and use descression when dumping

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

Na

8. Management for Product Recovered/Recycled (if applicable)

Na

unused waste
Solid organics

4 DRUMS

CES
$75/drum

MATERIAL SAFETY DATA SHEET

HUNTSMAN
Enriching lives through innovation

READ AND UNDERSTAND MATERIAL SAFETY DATA SHEET BEFORE HANDLING OR DISPOSING OF PRODUCT

MSDS CODE AND NAME	:	***PIPCR PIPERAZINE CRUDE***
DATE ISSUED	:	**2/8/2007**
DATE PRINTED	:	**2/8/2007**

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MATERIAL IDENTITY

MSDS CODE AND NAME

PIPCR PIPERAZINE CRUDE

Chemical Name and/or Family or Description:

Chemical intermediate: amine mixture

COMPANY INFORMATION

Huntsman Ethyleneamines LTD.
P.O. Box 4980
The Woodlands, TX 77387-4980

TELEPHONE NUMBERS
Transportation Emergency
Company: (800) 328-8501
CHEMTREC: (800) 424-9300
Medical Emergency: (409) 722-9673 (24 Hour)
General MSDS Assistance: (281) 719-6432
Technical Information: (281) 719-7400

2. COMPOSITION AND INFORMATION ON INGREDIENTS

THE CRITERIA FOR LISTING COMPONENTS IN THE COMPOSITION SECTION ARE AS FOLLOWS: CARCINOGENS ARE LISTED WHEN PRESENT AT 0.1 % OR GREATER; COMPONENTS WHICH ARE OTHERWISE HAZARDOUS ACCORDING TO OSHA ARE LISTED WHEN PRESENT AT 1.0 % OR GREATER; NON-HAZARDOUS COMPONENTS ARE LISTED AT 3.0 % OR GREATER. THIS IS NOT INTENDED TO BE COMPLETE COMPOSITIONAL DISCLOSURE. REFER TO SECTION 14 FOR APPLICABLE STATES' RIGHT TO KNOW AND OTHER REGULATORY INFORMATION.
Product and/or Component(s) Carcinogenic According to:

OSHA____ IARC____ NTP____ OTHER____ NONE__X__

Composition:

Chemical Name	CAS Number	Exposure Limits	Range in %
Piperazine	110-85-0		40 - 50
Diethylenetriamine	111-40-0	1 ppm TWA-ACGIH (SKIN)	5 - 25
Ethanol, 2-amino- (Common name - Ethanolamine)	141-43-5	6 ppm STEL-ACGIH 3 ppm TWA-ACGIH 3 ppm TWA-OSHA	5 - 20
Ethylenediamine	107-15-3	10 ppm TWA-ACGIH (A4) (SKIN) 10 ppm TWA-OSHA	5 - 20
1,4-Diazabicyclo[2.2.2]octane (Common Name - Triethylenediamine)	280-57-9		1 - 6
N-aminoethylpiperazine	140-31-8		0 - 5
Water	7732-18-5		10 - 30

3. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW

Appearance:

Pale amber to brown solid at 25°C (77°F)

Odor:

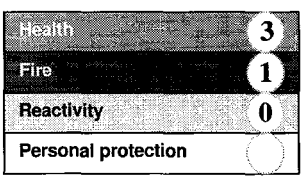
Amine-like

WARNING STATEMENT

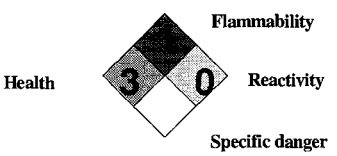
DANGER !

CORROSIVE - CAUSES EYE AND SKIN BURNS
HARMFUL OR FATAL IF SWALLOWED
MAY CAUSE DIZZINESS AND DROWSINESS
CAUSES RESPIRATORY TRACT IRRITATION AND CAN CAUSE DAMAGE
MAY CAUSE ALLERGIC SKIN AND
RESPIRATORY-(ASTHMA-LIKE)-REACTION
MAY CAUSE LIVER, KIDNEY, AND LUNG DAMAGE BASED ON ANIMAL DATA
DO NOT ADD NITRITES -
MAY FORM SUSPECTED CANCER CAUSING NITROSAMINES

Hazardous Material Information System (United States)



National Fire Protection Association NFPA (United States)



POTENTIAL HEALTH EFFECTS

Primary Route of Exposure

Eye_X_ Skin_X_ Inhalation_X_ Ingestion___

Effects of Overexposure

Acute:

Eyes: Causes irritation, experienced as pain, with excess blinking and tear production, and seen as extreme redness and swelling of the eye and chemical burns of the eye. Severe eye damage may cause blindness.

Skin: Causes severe irritation with pain, severe excess redness and swelling with chemical burns, blister formation, and possible tissue destruction. Other than the potential skin irritation effects noted above, acute (short term) adverse effects are not expected from brief skin contact; see other effects, below, and Section 11 for information regarding potential long term effects.

Inhalation: Dust or vapor causes irritation of the nose and throat. Respiratory irritation may be experienced as coughing, difficulty in breathing, and/or nasal discharge. Dust or vapor may cause dizziness, drowsiness, euphoria, loss of coordination, disorientation, headache, nausea, and vomiting. In poorly ventilated areas or confined spaces, unconsciousness and asphyxiation may result.

Ingestion: Causes burning of mouth, throat, and stomach with abdominal and chest pain, nausea, vomiting, diarrhea, thirst, weakness, and collapse. Aspiration may occur during swallowing or vomiting, resulting in lung damage.

Sensitization Properties: This product or a component of this product, is a known skin and respiratory sensitizer. Therefore, inhalation of this product may cause an allergic or asthma-like reaction, experienced as wheezing, coughing, increased mucus production, tightness in the chest, or difficulty breathing in sensitive, exposed persons. Prolonged and repeated contact with this product may cause an allergic skin reaction in sensitive, exposed persons.

Prolonged and repeated overexposure to ethylenediamine has caused lung, liver, and kidney damage in laboratory animals. Individuals sensitized to EDA may be also be sensitive (cross-sensitized) to other ethyleneamines and piperazine.

Chronic:

Repeated skin contact may cause a persistent irritation or dermatitis. Repeated inhalation may cause lung damage. Repeated ingestion may cause liver and kidney damage.

Medical Conditions Aggravated by Exposure:

Skin contact may aggravate an existing dermatitis (skin condition). Overexposure to vapor, dust or mist may aggravate existing respiratory conditions, such as asthma, bronchitis, and inflammatory or fibrotic respiratory disease. Repeated overexposure may aggravate existing liver or kidney disease.

Other Remarks:

This product contains one or more amines which may produce temporary and reversible hazy or blurred vision. Symptoms disappear when exposure is terminated.

4. FIRST AID MEASURES

Eyes:

Immediately flush eyes with large amounts of running water for at least 15 minutes. Hold eyelids apart while flushing to rinse entire surface of eye and lids with water. Do not attempt to neutralize with chemical agents. Obtain medical attention immediately. Continue flushing for an additional 15 minutes if medical attention is not immediately available.

Skin:

Immediately remove contaminated clothing and shoes. Under a safety shower, flush skin thoroughly with large amounts of running water for at least 15 minutes. Do not attempt to neutralize with chemical agents. Get medical attention immediately. Discard or decontaminate clothing and shoes before reuse.

Ingestion:

If person is conscious and can swallow, immediately give two glasses of water (16 oz.), but do not induce vomiting. This material is corrosive. If vomiting occurs, give fluids again. Have a physician determine if condition of patient will permit induction of vomiting or evacuation of stomach. Do not give anything by mouth to an unconscious or convulsing person.

Inhalation:

If inhaled, remove to fresh air. If not breathing, clear person's airway and give artificial respiration. If breathing is difficult, qualified medical personnel may administer oxygen. Get medical attention immediately.

Other Instructions:

Swallowing of this corrosive material may result in severe ulceration, inflammation, and possible perforation of the upper alimentary tract, with hemorrhage and fluid loss. Aspiration of this product during induced emesis can result in severe lung injury. If evacuation of stomach is necessary, use method least likely to cause aspiration, such as gastric lavage after endotracheal intubation. Contact a Poison Control Center for additional treatment information.

5. FIRE-FIGHTING MEASURES

Ignition Temperature - AIT (degrees C):

Not determined.

Flash Point (degrees C):

73 (163°F) (CC) (after water evaporation)

Flammable Limits % (Lower-Upper):

Lower: Not determined.
Upper: Not determined.

Recommended Fire Extinguishing Agents And Special Procedures:

Use water spray, dry chemical, foam or carbon dioxide to extinguish flames. Use water spray to cool fire-exposed containers. Water or foam may cause frothing.

Unusual or Explosive Hazards:

None

Special Protective Equipment for Firefighters:

Wear special chemical protective clothing and positive pressure self-contained breathing apparatus. Approach fire from upwind to avoid hazardous vapors and toxic decomposition products. Decontaminate or discard any clothing that may contain chemical residues.

6. ACCIDENTAL RELEASE MEASURES (Transportation Spills: CHEMTREC (800)424-9300)

Procedures in Case of Accidental Release, Breakage or Leakage:

Ventilate area. Avoid breathing vapor. Pressure demand air supplied respirators should always be worn when the airborne concentration of the contaminant or oxygen is unknown. Otherwise, wear respiratory protection and other personal protective equipment as appropriate for the potential exposure hazard. Contain spill if possible. Shovel up material and place in air-tight container. Avoid contact with skin, eyes, or clothing.

7. HANDLING AND STORAGE

Precautions to be Taken in

Handling:

Eye wash and safety shower should be available nearby when this product is handled or used. Minimum feasible handling temperatures should be maintained. Care should be taken to avoid generating dust.

Storage:

Periods of exposure to high temperatures should be minimized. Water contamination should be avoided.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Protective Equipment (Type)

Eye/Face Protection:

Avoid eye contact. Chemical type goggles with face shield must be worn. Do not wear contact lenses.

Skin Protection:

Protective clothing such as coveralls or lab coats must be worn. Gloves resistant to chemicals and petroleum distillates required. When handling large quantities, impervious suits, gloves, and rubber boots must be worn. Remove and dry-clean or launder clothing soaked or soiled with this material before reuse. Dry cleaning of contaminated clothing may be more effective than normal laundering. Inform individuals responsible for cleaning of potential hazards associated with handling contaminated clothing.

Respiratory Protection:

Airborne concentrations should be kept to lowest levels possible. If vapor, mist or dust is generated and the occupational exposure limit of the product, or any component of the product, is exceeded, use appropriate NIOSH approved air purifying or air supplied respirator after determining the airborne concentration of the contaminant. Air supplied respirators should always be worn when airborne concentration of the contaminant or oxygen content is unknown.

Ventilation:

Adequate to meet component occupational exposure limits (see Section 2).

Exposure Limit for the Total Product:

None established for product; refer to Section 2 for component exposure limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Pale amber to brown solid at 25°C (77°F)

Odor:

Amine-like

Boiling Point (degrees C):

>100 (>212°F)

Melting/Freezing Point (degrees C):

45 (113°F)

Specific Gravity (water=1):

1.1

pH:

>12 [Basic]

Vapor Pressure:

Not determined.

Viscosity:

Not applicable.

VOC Content:

Not determined.

Vapor Density (Air=1):

>1

Solubility in Water (%):

>10 [Soluble]

Other:

None

10. STABILITY AND REACTIVITY

This Material Reacts Violently With:

Air____ Water____ Heat____ Strong Oxidizers____ Others__X__ None of these____

Comments:

This material is incompatible with acids, strong oxidizing agents, acrylates, aldehydes, ketones, halogenated organic compounds, copper and its alloys. Do not add or formulate with nitrites. See Section 16, OTHER INFORMATION.

Products Evolved When Subjected to Heat or Combustion:

Toxic levels of ammonia, combustion products of nitrogen, carbon monoxide, carbon dioxide, irritating aldehydes and ketones may be formed on burning in a limited air supply.

Hazardous Polymerizations:

DO NOT OCCUR

11. TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION (ANIMAL TOXICITY DATA)

Oral:
LD50 Believed to be > 2.00 - 5.00 g/kg (rat) slightly toxic
Inhalation:
Not determined.
Dermal:
LD50 Believed to be > 2.00 g/kg (rat) practically non-toxic

IRRITATION INDEX, ESTIMATION OF IRRITATION (SPECIES)

Skin:
(Draize) Believed to be > 6.50 - 8.00 /8.0 (rabbit) corrosive
Eyes:
(Draize) Believed to be > 80.00 - 110.00 /110 (rabbit) extremely irritating
Sensitization:
Not determined.

Other:

Prolonged and repeated ingestion of **Ethanolamine** has caused kidney and liver damage in laboratory animals. In addition, a developmental toxicity study, using unconventional statistical treatment of the data, demonstrated developmental toxicity in rats. The true significance of the study data is not clear, since a full re-interpretation of this data is not possible at this time. Additional or repeat studies are planned or underway to better define the toxic potential of this product, or to verify the results obtained from previous animal studies.
Ethylenediamine has been shown to be a cross-sensitizer for other ethyleneamines, aminoethylethanolamine and piperazine in guinea pig studies. Prolonged and repeated overexposure to ethylenediamine has caused lung, liver, and kidney damage in laboratory animals.

12. DISPOSAL CONSIDERATIONS:

Waste Disposal Methods:

This product has been evaluated for RCRA characteristics and does not meet the criteria of a hazardous waste if discarded in its purchased form. Under RCRA, it is the responsibility of the user of the product to determine at the time of disposal, whether the product meets RCRA criteria for hazardous waste. This is because product uses, transformations, mixtures, processes, etc. may render the resulting materials hazardous.

Remarks:

None

13. TRANSPORT INFORMATION

Transportation

DOT:

Proper Shipping Name:
Amines, solid, corrosive, n.o.s. (Mixture of ethyleneamines)

Hazard Class:
8

Identification Number:
UN3259

Packing Group:
II

Label Required:
CORROSIVE

Depending on container size, spills of this product may require reporting under SARA 304 and/or CERCLA 102(A) regulations. Please refer to Sections 2 and 14 of MSDS for composition and component RQ information.

IMDG

Proper Shipping Name:
AMINES, SOLID, CORROSIVE, N.O.S. (mixture of ethyleneamines)

Hazard Class
8

Identification Number
UN3259

Packing Group
II

Label Required

Corrosive substances

ICAO

Proper Shipping Name:
Amines, solid, corrosive, n.o.s. (Mixture of ethyleneamines)

Hazard Class
8

Identification Number
UN3259

Packing Group
II

Label Required
Corrosive

TDG

Proper Shipping Name:
AMINES, SOLID, CORROSIVE, N.O.S. (Mixture of ethyleneamines)

Hazard Class:
8

Identification Number:
UN3259

Packing Group:
II

Label Required:
Corrosive

14. REGULATORY INFORMATION

Federal Regulations:

SARA Title III:

Section 302/304 Extremely Hazardous Substances

Chemical Name	CAS Number	Range in %	TPQ	RQ
Ethylenediamine	107-15-3	5 - 20	10000	5000

Section 311 Hazardous Categorization:

Acute_X_ Chronic_X_ Fire___ Pressure___ Reactive___ N/A___

Section 313 Toxic Chemical

Chemical Name	CAS Number	Concentration
None.		

CERCLA 102(a)/DOT Hazardous Substances:

Chemical Name	CAS Number	Range in %	RQ
Ethylenediamine	107-15-3	5 - 20	5000

States Right-to-Know Regulations:

Chemical Name	State Right-to-know

Piperazine	FL, MA, NJ, PA
Diethylenetriamine	CT, FL, MA, NJ, PA, RI
Ethanol, 2-amino- (Common name - Ethanolamine)	CT, FL, IL, MA, NJ, PA, RI
Ethylenediamine	CT, FL, IL, LA, MA, NJ, PA, RI
Triethylenediamine	NJ
N-aminoethylpiperazine	FL, MA, NJ, PA

California Prop. 65:
The following detectable components of this product are substances, or belong to classes of substances, known to the State of California to cause cancer and/or reproductive toxicity.

Chemical Name	CAS Number
None.	

INTERNATIONAL REGULATIONS:

TSCA Inventory Status:

This product, or its components, are listed on or are exempt from the Toxic Substance Control Act (TSCA) Chemical Substance Inventory.

WHMIS Classification:

Class D, Div 1, Subdiv B: Toxic
Class D, Div 2, Subdiv A and B: Skin / respiratory sensitizer
Class E: Corrosive

Canadian Inventory Status:

This product, or its components, are listed on or are exempt from the Canadian Domestic Substance List (DSL).

EINECS Inventory Status:

This product, or its components, are listed on or are exempt from the European Inventory of Existing Chemical Substances (EINECS) or the European List of Notified Chemical Substances (ELINCS).

Australian Inventory Status:

This product, or its components, are listed on or are exempt from the Australian Inventory of Chemical Substances (AICS).

Japan Inventory Status:

This product, or its components, are listed on or are exempt from the Japan Ministry of International Trade and Industry (MITI) inventory.

15. ENVIRONMENTAL INFORMATION

Aquatic Toxicity:

EC50-72hr (Marine algae) = 115.1 mg/liter Practically non-toxic
EC50-48hr (Marine invertebrate) = 7.32 mg/liter Slightly toxic
LC50-96 hr (Marine fish) = 464.4 mg/liter Practically non-toxic

Mobility:

Not determined.

Persistence and Biodegradability:

73.75% @ 25 days - Readily biodegradable

Potential to Bioaccumulate:

Log K_{OW} = 0.0198 - Not expected to bioaccumulate

Remarks:

None

16. OTHER INFORMATION 2/8/2007

Do not add nitrites. This product contains amines which can combine with nitrites or other nitrosating agents to form nitrosamines. Many nitrosamines have been found to cause cancer in laboratory animals.

A component of this product carries "SKIN" notation in Section 2 as part of its exposure limit. "SKIN" notation indicates possible adverse health effects as a result of absorption through the skin, mucous membranes, and eyes, by contact with vapor, mist, spray, or liquid. Appropriate measures should be taken to minimize contact.

Supercedes: 5/15/2006 **The following section has been revised: 1**

Date Issued: 2/8/2007.

THE INFORMATION IN THIS DATA SHEET IS PROVIDED INDEPENDENTLY OF ANY SALE OF THE PRODUCT. IT IS PROVIDED FOR THE PURPOSE OF HAZARD COMMUNICATION AS PART OF HUNTSMAN'S PRODUCT SAFETY PROGRAM. IT IS INTENDED ONLY AS A GUIDE TO THE APPROPRIATE PRECAUTIONARY HANDLING OF THE PRODUCT BY A PROPERLY TRAINED PERSON. YOU ARE ENCOURAGED AND REQUESTED TO ADVISE THOSE WHO MAY COME IN CONTACT WITH SUCH PRODUCTS OF THE INFORMATION CONTAINED HEREIN. THE DATA RELATES ONLY TO THE SPECIFIC PRODUCT DESIGNATED, AND DOES NOT RELATE TO USE OF THE PRODUCT IN COMBINATION WITH ANY OTHER MATERIAL OR USE OF THE PRODUCT IN ANY PROCESS. THE DATA IS NOT INTENDED TO CONSTITUTE PERFORMANCE INFORMATION CONCERNING THE PRODUCT. NO EXPRESS WARRANTY, OR IMPLIED WARRANTY OF MERCHANTABILITY FOR FITNESS FOR A PARTICULAR PURPOSE IS MADE WITH RESPECT TO THE PRODUCT, ITS COMPOSITION, ITS SAFETY OR THE INFORMATION CONTAINED IN THIS DATA SHEET.

TO DETERMINE THE APPLICABILITY OR THE EFFECTS OF ANY LAW OR REGULATION WITH RESPECT TO THE PRODUCT, THE USER SHOULD CONSULT A LEGAL ADVISOR OR THE APPROPRIATE GOVERNMENT AGENCY. HUNTSMAN DOES NOT UNDERTAKE TO FURNISH ADVICE ON SUCH MATTERS.

CURRENT DATA SHEETS ARE AVAILABLE FOR ALL HUNTSMAN PRODUCTS. YOU ARE URGED TO OBTAIN DATA SHEETS FOR ALL HUNTSMAN PRODUCTS YOU BUY, USE OR DISTRIBUTE BY CALLING (281) 719-6432 OR DIRECTING YOUR INQUIRIES TO:

HUNTSMAN
MANAGER, PRODUCT SAFETY
P.O. BOX 4980
THE WOODLANDS, TX 77387-4980

NO PERSON OR ORGANIZATION EXCEPT A DULY AUTHORIZED HUNTSMAN EMPLOYEE IS AUTHORIZED TO PROVIDE OR MAKE AVAILABLE DATA SHEETS FOR HUNTSMAN PRODUCTS. DATA SHEETS FROM UNAUTHORIZED SOURCES MAY CONTAIN INFORMATION THAT IS NO LONGER CURRENT OR ACCURATE. NO PART OF THIS DATA SHEET MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM, OR BY ANY MEANS, WITHOUT PERMISSION IN WRITING FROM HUNTSMAN. ALL REQUESTS FOR PERMISSION TO REPRODUCE MATERIAL FROM THIS DATA SHEET SHOULD BE DIRECTED TO HUNTSMAN, MANAGER, PRODUCT SAFETY AT THE ABOVE ADDRESS.

3231

NuStar Terminals

EPAHQ1040001261

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/20/2009**

Dear **Michael Jaskowiak/Angela Brown**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3231

Expiration Date 3/20/2011

Generator: NuStar Terminals Partner TX L.P.
Address: 201 Main Dock Road
Texas City, TX 77592

Waste Information

Name of Waste: 2-ME Washwater
TCEQ Waste Code #: 0008207H
Container Type:
Detailed Description of Process Generating Waste:
tank cleaning of tank 601
Color: varies **Odor:** mild **pH:** 6-9
Physical State:
Incompatibilities: none known
Safety Related Data/Special Handling:
standard PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

DC/MM
need LDR docs
with signature

CES Environmental Services, Inc.
4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit Number: 30948
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

SECTION 1: Generator Information

Company: NuStar Terminals Partners TX L.P.
Address: Texas City Terminal #1., 201 Main Dock Road
City: Texas City **State:** TX **Zip:** 77592
Contact: Bob Hill **Title:** HSE Specialist
Phone Number: 409-948-8254 **Fax Number:** 409-948-4460
24/hr Phone Number: 281-750-1486
US EPA ID No: TXD096036561
State ID No: 31060 **SIC Code:** 5171

SECTION 2: Billing Information - ☐ **Same as Above**

Company: Rineco
Address: PO Box 729 - Haskell
City: Benton **State:** AR **Zip:** 72118
Contact: Douglas Highsmith **Title:** Non-Fuels Chemist
Phone Number: 800-377-4692 **Fax Number:** 501-778-8505

SECTION 3: General Description of the Waste

Name of Waste: 2-ME Washwater
Detailed Description of Process Generating Waste:

tank cleaning of tank 601

Physical State: ☑ **Liquid** ☐ **Sludge** ☐ **Powder**
☐ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: varies **Odor:** mild

Specific Gravity (water=1): 1 **Density:** 8.34 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ **Single-phase** ☐ **Multi-phase**

Container Type: ☐ **Drum** ☐ **Tote** ☑ **Truck** ☐ **Other (explain)**

Frequency: ☐ **Weekly** ☐ **Monthly** ☑ **Yearly** ☐ **One-Time**
Quantity: 5000 gallons

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☑ Yes ☐ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☑ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: 0008207H

Proper US DOT Shipping Name: Waste Ethylene Glycol Monomethyl Ether

Class: 3 **UN/NA:** UN1188 **PG :** III **RQ:** D001 @ 100lbs

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
74-140	6-9	NA mg/l	NA mg/l	<2 %

Oil & Grease	TOC	Zinc	Copper	Nickel
<1000 mg/l	10,000 mg/l	mg/l	mg/l	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
2-Methoxyethanol	5	%
Water and Soap	85	%
Bleach	10	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Standard PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. MSDS, CES Sample evaluation

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

None known

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals: X
TCLP Volatiles: X
TCLP Semi-Volatiles: X
Reactivity: X
Corrosivity: X
Ignitability: X

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☑ YES ☐ NO
If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory*: *Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory*: *Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory*: *Subpart C

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☑ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☑ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** 3/4/2009

Printed Name/Title: Douglas Highsmith/Non-Fuels Chemist

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: _____
Date: 3-20-09 ☑ Approved ☐ Rejected
Approval Number: 3231

CES Environmental Services, Inc.

LDR Notifications/Certifications

1. Generator Information		2. Receiving Facility Information	
Name:	NuStar Terminals Partners TX L.P.	Name:	CES Environmental Services, Inc.
Address:	201 Main Dock Road	Address:	4904 Griggs Road
	Texas City, TX 77592		Houston, TX 77021
EPA ID No.:	TXD096036561	EPA ID No.:	TXD008950461
Manifest No.:			

3. Waste Description at Point of Generation

Line Item	Waste Description	Hazardous Waste Codes	LDR Subcategory	WW / NWW	Underlying Hazardous Constituents [268.2(i)]
1	2-ME Washwater	D001		ww	
2					
3					
4					
5					

4. Waste Disposition

Line Item	Subtitle C Exclusion Subsequent to Point of Generation (if applicable)	Current Disposition of Waste	268.45, Table 1 Technology used to treat debris (if applicable)	Date Shipped
1				
2				
3				
4				
5				

5. Was the waste hazardous at the point of generation but subsequently became excluded from the definition of hazardous waste or exempt from Subtitle C regulation (including characterstic wastes managed in wastewater treatment systems discharging under the CWA)?
☐ Yes ☑ No (If yes, this constituents the 268.7(a)(7) one-time notification.)

6. Waste the waste characterstic at the point of generation, treated onsite to remove the characterstic, and treatment residues then shipped to a Subtitle D land disposal facility? ☐ Yes ☑ No (If yes, complete Certification 1 or 2.)

7. Was the waste "debris" that was hazardous at the point of generation but subsequently became excluded from the definition of hazardous waste under 261.3(f)(1) by treating it using an extraction or destruction technology in 268.45, Table 1? ☐ Yes ☑ No (If yes, complete Certification 3.)

8. Was the waste "debris" that was hazardous at the point of generation but subsequently became excluded from the definition of hazardous waste under 261.3(f)(2) by receiving a "no-longer-contains" determinatin from EPA or the authorized state?
☐ Yes ☑ No (if yes, this constituents the 268.7(d)(1) one-time notification.)

9. Is the waste residue from treating K061, K062 and/or F006 wastes in high-temperature metals recovery (HTMR) units that 1) meets the generic exclusion levels in 261.3(c)(2)(ii)(C), 2) does not exhibit any characterstics, and 3) is shipped to a Subtitle D land disposal facility?
☐ Yes ☑ No (if yes, complete Certification 4.)

10. ☐	Waste that has been treated to remove a characterstic and meets underlying hazardous constituents standards. I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 to remove the hazardous characterstics and that underlying hazardous constituents, as defined in 268.2(i) have been treated on-site to meet the 268.48 Universal Treatment Standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.	Applies to Items: Reference: 268.7(b)(4)(v) and 268.9(d)
11. ☐	Waste that has been treated to remove a characterstic but does not meet underlying hazardous constituents standards. I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 or 268.49 to remove the hazardous characterstic. This decharacterized waste contains underylling hazardous constituents that require further treatment standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.	Applies to Items: Reference: 268.7(b)(4)(v) and 268.9(d)
12. ☐	Debris that has been treated to meet the alternative treatment standards. I certify under penalty of law that the debris has been treated in accordance with the requirements of 40 CFR 268.45. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.	Applies to Items: Reference: 268.7(b)(4)(v) and 268.9(d)
13. ☐	HTMR residue from treating K061, K062 and/or F006 wastes. I certify under penalty of law that the generic exclusion levels for all constituents have been met without impermissible dilution and that no characterstic of hazardous waste is exhibited. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.	Applies to Items: Reference: 268.7(b)(4)(v) and 268.9(d)

Authorized Signature: _____ **Date:** 3/19/2009

Printed Name / Title: Douglas Highsmith/Non-Fuels Chemist

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$0.55/gallon plus freight

2. Contamination Limit (maximum limit before surchages apply):

Solids - 2%, TOC - 10,000

3. Surcharge Pricing:

Solids - $0.01/gallon/percent greater than 2%; TOC - $0.03/gallon/percent greater than 10,000

4. Special Testing Requirements:

flash, toc, solids, metals, phenol

5. Treatment and Handling Protocol:

ODOROUS stream!!! PLEASE BE CAUTIOUS WHEN PULLING SAMPLE AND HANDLING. For treatement - if flash is below 140F consult director of processing and sales person. If flash is above 140F and metals are high - redirect to system 1. If flash is above 140F, metals are low and sample treats well, process in normal ww treatment.

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☒ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

NA

8. Management for Product Recovered/Recycled (if applicable)

NA

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

To: Dana Carter
Cc: Matt Bowman, Prabhaker, Joe Camp, Clint Hopkins

Date: 3/06/09

From: Miles Root

Lab Memo: 09-039

Subject: **Rineco NuStar Terminals Evaluation 0309-04**

A sample of waste water from Rineco, Nustar Terminals, has been evaluated for potential processing at CES. This sample is evaluation 0309-04. This material represents water from cleaning a tank that last contained 2-methoxyethanol. The frequency of this stream is one 5000 gallon load per year. This particular stream is high in metals and will need equalization for reduction.

This material carries a D001 waste code for flash point. This particular sample does not flash below 140 deg F. The pH is 6. The treated sample has TOC of 7864 ppm and no phenols. The water is high in nickel, zinc and chromium. It will need equalization to lower these values to acceptable levels. This sample also has a very objectionable odor. It is not the odor of 2-methoxy ethanol.

I tried the sulfide treat on this stream with limited success. Either the nickel or zinc could be reduced, but not both simultaneously. Several attempts at varying pH values were tried. The pH plays an important factor in this. This is just an observation and understanding that we may not be able to sulfide treat all high nickel and zinc streams in the future.

My concern with this load is that it will come in with a flash point, even though the evaluation sample does not flash below 140 deg F. If this does happen, then equalization will be a key factor in its processing.

The table below summarizes the analytical testing.

Rineco NuStar Terminals	
Evaluation 0309-04	
Solids, vol%	0
Odor	Objectionable
pH	6
Phenols, ppm	0
TOC, mg/L	7,864
Oil, vol%	0
Treatability	OK
Metals, ppm	
Ni	2.482
Zn	5.400
Cu	0.000
Cd	0.143
Cr	1.100

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

To: Dana Carter
Cc: Matt Bowman, Prabhaker, Joe Camp, Clint Hopkins

Date: 3/12/09

From: Miles Root

Lab Memo: 09-045

Subject: **Rineco NuStar Terminals Evaluation 0309-04B**

A second sample of waste water from Rineco, NuStar Terminals, has been evaluated for handling by CES. This sample is evaluation 0309-04B. It represents a second sample taken to see if it is similar to one reviewed in memo 09-039 on March 6. This material is stated to contain 2-methoxy ethanol. It is a once a year trailer load receipt potential. Overall, this material smells and looks just like the first sample. It will need to be redirected to System 1.

This material will come to us with a D001 code for low flash point. The boiling point of this compound is too high, at 257 deg F, to be removed in our bullet trailer. The profile indicates that this source may contain up to 5% 2-methoxy ethanol. We have no treatment option to deal with this material with low flash and high boiling point. It needs to be received and then redirected to System 1. Dana has indicated that her pricing proposal will cover these costs, so there are no issues here.

GLYCOL ETHER DB

SECTION 1: IDENTIFICATION

Product Name: GLYCOL ETHER DB

Product Number: 000000000000005047

Chemical Family: Glycol Ethers

CAS Number: 112-34-5

Chemical Name: 2-(2-Butoxyethoxy) ethanol

Synonyms: diethylene glycol monobutyl ether; butoxyethoxy ethanol; butyl carbitol

Company
Equistar Chemicals, LP
One Houston Center, Suite 700
1221 McKinney St.
P.O. Box 2583
Houston Texas 77252-2583

Business Contact
Customer Service
888 777-0232
Product Safety
800 700-0946
product.safety@lyondellbasell.com

24 Hour Emergency Contact
CHEMTREC 800 424-9300
EQUISTAR 800-245-4532

SECTION 2: HAZARD IDENTIFICATION

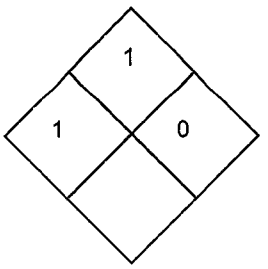
Emergency Overview

This material is HAZARDOUS by OSHA Hazard Communication definition.

Signal Word
WARNING.

Hazards
May cause irritation to skin, eyes, and respiratory tract. May cause liver and/or kidney damage. Inhalation of vapors may cause central nervous system depression. May cause blood abnormalities.

NFPA®



HMIS®

Health	1
Flammability	1
Physical Hazard	0

Physical State
liquid

Color
Clear

Odor
Faint butyl odor

Odor Threshold
No value available.

Potential Health Effects

Routes of Exposure
Eye. Inhalation. Skin. Ingestion.

Signs and Symptoms of Acute Exposure
See component summary.

- *Diethylene glycol monobutyl ether 112-34-5*

Moderate eye irritant. Effects of eye irritation are reversible. Contact may cause mild skin irritation. Not expected to be a sensitizer. Not a skin absorption hazard.

- *2-Butoxyethanol 111-76-2*

May be irritating to the eyes, skin, and respiratory system. Exposure could cause central nervous system depression and liver and kidney damage. Severe over-exposure may cause red blood cell damage.

Skin
May cause slight irritation if left in contact with skin.

Inhalation
Vapors or mists from this material can irritate the nose, throat and lungs, and cause signs and symptoms of central nervous system (CNS) depression, depending on the concentration and duration of exposure.

Eye
Causes noticeable pain, severe irriation and transient corneal injury.

Ingestion
May cause CNS depression, gastrointestinal tract, liver and kidney damage.

Chronic Health Effects
See component summary.

- *Diethylene glycol monobutyl ether 112-34-5*

May cause dermatitis by defatting the skin from prolonged or repeated contact.

- *2-Butoxyethanol 111-76-2*

May cause dermatitis by defatting the skin from prolonged or repeated contact. This substance may have effects on the haematopoietic system, resulting in blood disorders. Animal carcinogen.

Conditions Aggravated by Exposure
Any pre-existing disorders or diseases of the: central nervous system (CNS) skin eyes liver kidney and/or blood

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

Component Name	CAS #	EU Inventory	Concentration Wt.%
Diethylene glycol monobutyl ether	112-34-5	203-961-6	>= 99.0
2-Butoxyethanol	111-76-2	203-905-0	<= 0.5

Compositions given are typical values not specifications.

See section 16 for full text of risk phrases.

SECTION 4: FIRST AID MEASURES

General
Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid. For specific information refer to the Emergency Overview in Section 2 of this MSDS.

Skin
Immediately remove excess chemical and contaminated clothing; thoroughly wash contaminated skin with mild soap and water. If irritation persists after washing, seek medical attention. Thoroughly clean contaminated clothing before reuse; discard contaminated leather goods (gloves, shoes, belts, wallets, etc.).

Inhalation
If symptoms are experienced, move victim to fresh air. Seek medical attention if discomfort persists.

Eye
Thoroughly flush the eyes with large amounts of clean low-pressure water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation persists, seek medical attention.

Ingestion
If product is ingested, do not induce vomiting and contact a physican or Poison Control Center.

SECTION 5: FIRE FIGHTING MEASURES

Flammable Properties

Classification
OSHA/NFPA Class IIIB combustible liquid.

Flash Point
106 °C (222.8 °F) closed cup

Auto-Ignition Temperature
228 °C (442.4 °F)

Lower Flammable Limit
0.85 vol%

Upper Flammable Limit
24.6 vol%

Extinguishing Media

Suitable:
SMALL FIRE: Use dry chemicals, CO_2, water spray or alcohol-resistant foam LARGE FIRE: Use water spray, water fog or alcohol-resistant foam

Protection of Firefighters

Protective Equipment/Clothing:
Wear an approved positive pressure self-contained breathing apparatus and firefighter turnout gear.

Fire Fighting Guidance:

Fire Fighting Guidance:
Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Do not get water inside containers. Cool containers with flooding quantities of water until well after fire is out. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. Always stay away from tanks engulfed in fire.

Hazardous Combustion Products:
Carbon oxides (CO, CO2)

SECTION 6: ACCIDENTAL RELEASE MEASURES

Release Response
Contain spill with dike to prevent entry into sewers or waterways. For large spills, dike and pump into properly labeled containers for reclamation or disposal. For small spills, soak up with absorbent material and place in properly labeled containers for disposal. All recovered material should be packaged, labeled, transported and disposed of or reclaimed in conformance with applicable laws and regulations and in conformance with good engineering practices. Reclaim where possible.

SECTION 7: HANDLING AND STORAGE

Handling
Do not handle near heat, sparks, or flame. Avoid contact with incompatible agents. Use only with adequate ventilation/personal protection. Avoid contact with eyes, skin and clothing. Do not enter storage area unless adequately ventilated. Metal containers involved in the transfer of this material should be grounded and bonded. It is recommended that any liquid product exposed to air not be highly concentrated by evaporation without first assuring that no peroxide is present. Alternately, positive steps should be taken to reduce any accumulated peroxides to a safe level before concentrating the liquid.

Storage
Store containers in a cool, dry, ventilated, fire resistant area away from sources of ignition and incompatible materials. Keep container tightly closed and properly labeled.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls
Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. Emergency shower and eyewash facility should be in close proximity (ANSI Z358.1)

Personal Protection

Inhalation
A respiratory protection program that meets OSHA's 29 CFR 1910.134 or ANSI Z88.2 requirements must be followed whenever workplace conditions warrant respirator use.

Skin
Use chemical resistant gloves appropriate to conditions of use. Appropriate protective clothing should be worn to prevent skin contact.

Eye
Wear safety glasses as minimum eye protection. Conditions may warrant the use of chemical goggles and possibly a face shield. Consult your standard operating procedure or safety professional for advice. Use protective eye and face devices that comply with ANSI Z87.1-1987.

Additional Remarks
Selection of appropriate personal protective equipment should be based on an evaluation of the performance characteristics of the protective equipment relative to the task(s) to be performed, conditions present, duration of use, and

Additional Remarks
the hazards and/or potential hazards that may be encountered during use.

Occupational Exposure Limits

Component Name	Source	Type	Value	Notation
2-Butoxyethanol	US (ACGIH)	TWA	20 ppm	None.
	US (OSHA)	TWA	50 ppm 240 mg/m3	Skin.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: liquid Clear

Odor: Faint butyl odor

Odor Threshold: No value available.

pH: 6 - 7.5

Boiling Point/Boiling Range: 230 °C (446 °F) @ 760 mm Hg

Freezing Point/Melting Point: -68 °C (-90.4 °F)

Flash Point: 106 °C (222.8 °F) closed cup

Auto-ignition: 228 °C (442.4 °F)

Flammability: OSHA/NFPA Class IIIB combustible liquid.

Lower Flammable Limit: 0.85 vol%

Upper Flammable Limit: 24.6 vol%

Explosive Properties: No Data Available.

Oxidizing Properties: No Data Available.

Vapor Pressure: 0.06 mm Hg @ 20 °C (68 °F)

Evaporation Rate: 0.01 (butyl acetate = 1)

Relative Density: 0.95 @ 20 °C (68 °F)

Relative Vapor Density: 5.6 (Air = 1.0)

Viscosity: 6.5 mPa.s

Solubility (Water): Complete

Partition Coefficient (Kow): Log Kow = 0.5 Estimated

Additional Physical and Chemical Properties: No additional information available.

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability
The product is stable.

Conditions to Avoid
Avoid contact with strong oxidizers, excessive heat, sparks or open flame.

Substances to Avoid
Oxidizers, Acids, Alkalis

Decomposition Products
Carbon Monoxide and Carbon dioxide.

Hazardous Polymerization
Will not occur.

Reactions with Air and Water
Does not react with water or common materials. May form peroxides in the presence of air.

SECTION 11: TOXICOLOGICAL INFORMATION

PRODUCT INFORMATION

Product Summary
See component summary.

COMPONENT INFORMATION

- *Diethylene glycol monobutyl ether 112-34-5*

Acute Toxicity - Lethal Doses

LD50 (Oral)	rat	5080 MG/KG
	Mouse	2406 MG/KG
LD50 (Skin)	Rabbit	2764 MG/KG

Irritation
Skin
This substance is a mild skin irritant.

Eye
Moderate eye irritant.

Target Organ Effects
Eye.

Reproductive Effects

Reproductive Effects
In vivo animal studies show no adverse reproductive efects.

Developmental Effects
Results from animal studies demonstrate that this material is not a teratogen or toxic to the developing embyro or fetus.

Genetic Toxicity
Negative for genotoxicity both in vitro and in vivo tests.

Carcinogenicity
Not listed by IARC, NTP, OSHA or EPA.

- *2-Butoxyethanol 111-76-2*

Acute Toxicity - Lethal Doses

LC50 (Inhl)	rat	~ 450 PPM	4 HOURS
LD50 (Oral)	rat	530 - 3000 MG/KG BWT	
	Rabbit.	320 - 370 MG/KG BWT	
LD50 (Skin)	Rabbit.	612 MG/KG BWT	

Acute Toxicity - Effects
Inhalation

Exposure to vapor may cause irritation of the eyes, nose, and respiratory tract. May cause nausea. May cause headaches. Severe over-exposure or prolonged contact may cause red blood cell damage with weakness, confusion, anxiety, decreased blood pressure, and CNS depression with collapse and coma. Causes rapid damage to red blood cells and subsequent anemia. Repeated exposure may cause liver and kidney damage.

Ingestion

Ingestion may cause weakness, confusion, anxiety, decreased blood pressure, and CNS depression with collapse and coma. Causes rapid damage to red blood cells and subsequent anemia. Repeated exposure may cause liver and kidney damage.

Skin Contact

Moderate hazard by skin contact with liquid or vapor. May be absorbed through the skin and produce toxic effects such as CNS depression. High dermal doses (most likely achieved from exposure to undiluted liquid) may cause red blood cell damage with weakness, headache and nausea. Severe over-exposure or prolonged contact may cause red blood cell damage with weakness, confusion, anxiety, decreased blood pressure, and CNS depression with collapse and coma. Causes rapid damage to red blood cells and subsequent anemia. Repeated exposure may cause liver and kidney damage.

Irritation
Skin

Repeated or prolonged contact may cause skin irritation.

Eye

Moderate to severe eye irritant.

Sensitization
Not expected to cause sensitization by skin contact.

Target Organ Effects
Damages blood. Damages the lung. Damages the liver. Damages the kidney. Skin irritant. Eye irritant.

Repeated Dose Toxicity
Repeated exposure to EGBE at 125 ppm by inhalation caused injury to red blood cells with subsequent anemia and changes to the spleen, liver, and kidney. Inhalation exposure to EGBE at or above 32 ppm caused degeneration of the nasal epithelium. Repeated oral administration of EGBE at doses of 222 mg/kg bwt, caused injury to red blood cells with subsequent anemia and changes to the spleen, liver, and kidney. Repeated dermal exposure to EGBE at 180 mg/kg bwt caused injury to red blood cells. Moderate risk to health after prolonged exposure.

Reproductive Effects
No adverse effect on reproductive performance was observed in male and female mice exposed to EGBE in drinking

Reproductive Effects
water at a 700 mg/kg bwt/day over two generations. A slight reduction in pup body weights and decreased maternal water consumption was observed in mice exposed to 700 mg/kg bwt/day EGBE. Dose levels of 1300 mg/kg/day and higher caused significant parental toxicity (including mortality) and a decreased number of litters.

Developmental Effects
EGBE is not teratogenic in rats or rabbits exposed by inhalation during organogenesis at concentrations up to 200 ppm. Maternal toxicity and minimal fetotoxicity occurred at or above 100 ppm. No maternal or developmental toxicity was observed in rabbits that received approximately 2100 mg/kg bwt/day EGBE by the dermal route of exposure during organogenesis.

Genetic Toxicity
No evidence of mutagenic activity in standard bacterial and mammalian test systems in vitro. No increase in micronuclei in rodents after in vivo exposure.

Carcinogenicity
Long-term exposure via inhalation at concentrations up to 125 ppm caused an increase in the incidence of liver tumors in male mice and forestomach tumors in female mice. A slight increase in adrenal tumors was observed in female rats. The NTP has determined that EGBE displays some evidence of carcinogenicity in mice, and equivocal evidence of carcinogenicity in female rats. The International Agency for Research on Cancer (IARC) has evaluated this material as an IARC Group 3 not classifiable as to carcinogenicity in humans, based on limited data in animals and inadequate data in humans.

SECTION 12: ECOLOGICAL INFORMATION

PRODUCT INFORMATION

Ecotoxicity

There is very limited information available on this material. This material, and structurally similar materials, have exhibited low toxicity in aquatic organisms. The odor and flavor of this material may attract some wildlife and cause them to consume spilled material.

Environmental Fate and Pathway

This material should biodegrade after an acclimation period, and it is is not expected to be environmentally persistant. Due care should be taken to avoid accidental releases to aquatic or terrestrial systems.

Persistance and Degradability
Bioaccumulation: This material is highly soluble in water and should not bioaccumulate in aquatic or terrestrial organisms.

COMPONENT INFORMATION

- *Diethylene glycol monobutyl ether 112-34-5*

Ecotoxicity

Acute toxicity to fish
LC50 / 96 HOUR silverside minnow. 2,000 mg/l

LC50 / 96 HOUR bluegill. 1,300 mg/l

Summary: This material is not harmful or toxic to fish.

Acute toxicity to aquatic invertebrates

Summary: No Data Available.

Toxicity to aquatic plants

Summary: No Data Available.

Environmental Fate and Pathway

Expected to have high mobility in soils. It is water soluble and is expected to have low volatility. This material is expected to exist solely as a vapor in the ambient atmosphere. Vapor-phase is degraded in the atmosphere by reaction with photochemically produced hydroxyl radicals. Hydrolysis is not expected to be an important factor in the environmental fate process for this material.

Persistance and Degradability
Stability in Soil: The Koc value suggests that this compound would be highly mobile if released onto soil and would not adsorb to suspended solids or sediments.

Biodegradation: This material is expected to be readily biodegradable.

Bioaccumulation: 2.0 BCF < 5 This material is not expected to bioaccumulate.

- *2-Butoxyethanol 111-76-2*

Ecotoxicity

Acute toxicity to fish
LC50 / 96 HOURS bluegill. 1,490 mg/l

LC50 / 96 HOURS fathead minnow 2,137 mg/l

LC50 / 24 HOURS goldfish 1,650 mg/l

Summary: This material is not harmful or toxic to fish.

Acute toxicity to aquatic invertebrates
LC50 / 48 HOURS Brown shrimp 775 mg/l

LC50 / 48 HOURS waterflea. 835 mg/l

Summary: This material is not harmful or toxic to aquatic invertebrates.

Toxicity to aquatic plants
EC0 / 192 HOURS blue green algae. 35 mg/l

LOEC / 168 HOURS green algae. 900 mg/l

LOEC / 168 HOURS green algae (Selenastrum). 250 mg/l

Summary: This material is harmful to algae or higher aquatic plants.

Toxicity to microorganisms
EC0 / 16 HOURS bacteria. 700 mg/l

Summary: This material is not toxic or harmful to bacteria.

Chronic toxicity to fish
LC50 / 7 d guppy. 983 mg/l

Chronic toxicity to aquatic invertebrates

Summary: No Data Available.

Environmental Fate and Pathway

In air, the estimated photodegradation half-life of EGBE ranges from 16 to 27.5 hours. Does not undergo hydrolysis.

Mobility
Transport between environmental compartments: Highly mobile in soil and likely to volatilize from moist or dry soil surfaces. Expected to volatilize from surface waters and not likely to adsorb to suspended solids and sediment in water.

Persistance and Degradability
Stability in Water: In water, the volatilization half-life of EGBE from a model river and lake is estimated to be 25 days and 185 days, respectively. The estimated half-life in groundwater ranging from 14 days to 8 weeks.

Stability in Soil: In soil, the estimated half-life of EGBE ranges from 7 days to 4 weeks.

Biodegradation: This material is expected to be readily biodegradable.

Bioaccumulation: Low potential for bioaccumulation. BCF = 3.0 (estimated).

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of all waste and contaminated equipment in accordance with all applicable federal, state and local health and environmental regulations. Recovery and reuse, rather than disposal, should be the ultimate goal of handling efforts. The materials resulting from clean-up operations may be hazardous wastes and therefore, subject to specific regulations.

SECTION 14: TRANSPORT INFORMATION

Special Requirements
If you reformulate or further process this material, you should consider re-evaluation of the regulatory status of the components listed in the composition section of this sheet, based on final composition of your product.

Proper Shipping Name GLYCOL ETHERS, NOT ELSEWHERE CLASSIFIED, NOT REGULATED (DIETHYLENE GLYCOL MONOBUTYL ETHER)

SECTION 15: REGULATORY INFORMATION

Regulatory Status

This product and its components are listed, or exempt from listing, on the following:

Country	Inventory
Australia	AICS
Canada	DSL

China	IECS
European Union	EINECS
Japan	ENCS
Korea	ECL
Philippines	PICCS
United States	TSCA
New Zealand	NZIoC

Contact Product.Safety@Lyondell.com for additional global inventory information.

If identified components of this product are listed under the TSCA 12(b) Export Notification rule, they will be listed below.

SARA 302/304

This product contains no known chemicals regulated under SARA 302/304.

SARA 311/312

Based upon available information, this material is classified as the following health and/or physical hazards according to Section 311 & 312:

Immediate (Acute) Health Hazard.
Delayed (Chronic) Health Hazard.

SARA 313

This product contains no known chemicals regulated under SARA 313.

State Reporting

This product contains no known chemicals regulated by California's Proposition 65.

This product contains the following chemicals regulated by New Jersey's Worker and Community Right to Know Act:

2-Butoxyethanol 111-76-2

This product contains the following chemicals regulated by Massachusetts' Right to Know Law:

2-Butoxyethanol 111-76-2

This product contains the following chemicals regulated by Pennsylania's Right to Know Act:

2-Butoxyethanol 111-76-2

SECTION 16: OTHER INFORMATION

Latest Revision(s)
Revised Section(s): 3 15 July 8 2008

DISCLAIMER OF RESPONSIBILITY

The information on this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, expressed or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with handling, storage, use, or disposal of this product. If the product is used as a component in another product, this MSDS information may not be applicable.

Numerical Data Presentation
The presentation of numerical data, such as that used for physical and chemical properties and toxicological values, is expressed using a comma (,) to separate digits into groups of three and a period (.) as the decimal marker. For example, 1,234.56 mg/kg = 1 234,56 mg/kg.

Language Translations
This document may be available in languages other than English.

< end of document >

3232
SoChem

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Material / Product Approval Letter

KIM

Date **3/23/2009**

Dear **Sal Amato**

Thank you for choosing CES Environmental Services, Inc. for your material / product recycling needs. The following material has been approved at our facility in Houston, TX. If the material received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # PA-3232

Expiration Date 3/23/2011

Producer: Sochem
Address:

,

Material / Product Information

Name of Material / Product Sodium hydroxide solution
Container Type:

Detailed Description of Process Generating or Producing the Material / Product:
Barge cleanings

Color: brown to red **Odor:** none **pH:** >12
Physical State:
Incompatibilities: acids, oxidizing agents
Safety Related Data/Special Handling:
Chem suit, rubber gloves, rubber boots, safety goggles, face shield, hard hat

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

CES Environmental Services, Inc.

☐ **CES Environmental Services – Houston Facility**
4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

☒ **CES Environmental Services – Port Arthur Facility**
2420 S. Gulfway Drive, Port Arthur, TX 77641
Phone: (713) 676-1460 Fax: (713) 676-1676
U.S. EPA ID No: TXR000079307 ISWR No: 88585

SECTION 1: Material Producer Information

Company: SoChem
Address: P.O. Box 1912
City, State, Zip: Gonzales, LA
Contact: Sal Amato **Title:**
Phone No: **Fax No:**
24/hr Phone:
U.S. EPA I.D. No: N/A
State I.D. NA **SIC Code:** NA

SECTION 2: Billing Information – ☒ Same as Above

Company:
Address:
City, State, Zip:
Contact: **Title:**
Phone No: **Fax No:**

SECTION 3: General Description of the Material / Product

Name of Material / Product: Sodium hydroxide Solution
Detailed Description of Process Generating or Producing the Material / Product: Barge cleanings

Physical State: ☒ **Liquid** ☐ **Sludge** ☐ **Powder** ☐ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: Brown to Red **Odor:** none

Specific Gravity (water=1): 1.27 **Density:** 10.59 lbs/gal

Does this material contain any total phenolic compounds? ☐ **Yes** ☒ **No**

Does this material contain any para substituted phenolic compounds? ☐ **Yes** ☒ **No**

Layers: ☒ **Single-phase** ☐ **Multi-phase**

Container Type: ☐ **Drum** ☐ **Tote** ☒ **Truck** ☐ **Other (explain)**
Container Size: ____ ____ 4250 gal ____

Frequency: ☐ **Weekly** ☐ **Monthly** ☐ **Quarterly** ☐ **Yearly**
Number of Units (containers): ____ **Other:** ____

Proper U.S. DOT Shipping Name: Product Sodium Hydroxide Solution
Class: 8 **UN/NA:** UN1824 **PG:** PG II **RQ:** 1000

Flash Point	pH	N/A	N/A	Solids
>140	>12			0%

Oil&Grease	TOC	Zinc	Copper	Nickel
NAmg/l	NAmg/l	NAmg/l	NAmg/l	NAmg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	Concentration	Units
The material / product consists of the following materials	**Ranges are acceptable**	**or %**
Sodium Hydroxide	>25	%
Water	26-75	%

SECTION 5: Safety Related Data

If the handling of this material / product requires the use of special protective equipment, please explain.
Chemical Suit, Rubber Gloves, Rubber Boots, Safety Goggles, Face Shield, Hard Hat

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.
MSDS

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
Acids, Oxidizing Agents

SECTION 8: Material Producer's Certification

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** 3/23/09

Printed Name/Title: Sal Amato/VP

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Technical Manager: [signature]	
Date: 3-23-09 Approved Rejected	
Approval Number: 3232	

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pricing (including freight):**

Pricing will be negotiated on a load by load basis. This must be documented in billing comments for each load

2. **Contamination Limits (maximum limit before surcharges apply):**

3. **Surcharge Pricing:**

Call Kim with questions

4. **Special Testing Requirements:**

Must test for percent caustic by titration and specific gravity, must have no free floating oil and no solids. THIS MATERIAL MUST BE GREATER THAN 25% CAUSTIC.

5. **Treatment and Handling Protocol:**

Feedstock for NaSH

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

EPAHO104001288

7. **Tests for Product Recovered/Recycled (if applicable):**

8. **Management for Product Recovered/Recycled (if applicable);**

3233
Channel Chemical

EPAHO104001290

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/24/2009**

Dear **Michael Jaskowiak/Angela Brown**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3233

Expiration Date 3/24/2011

Generator: Channel Chemical
Address: 14373 Seaway Road
Gulfport, MS 39505

Waste Information

Name of Waste: MD-2736 Process water - Low pH
TCEQ Waste Code #: OUTS105H
Container Type:
Detailed Description of Process Generating Waste:
Removal of water layer fronm production process (Plastics production)
Color: varies **Odor:** mild **pH:** 1-3.8
Physical State:
Incompatibilities: high pH materials
Safety Related Data/Special Handling:
std ppe for low pH material

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

DC/MM

CES Environmental Services, Inc.
4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit Number: 30948
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

SECTION 1: Generator Information

Company: Channel Chemical
Address: 14373 SEAWAY ROAD
City: Gulfport **State:** MS **Zip:** 39505
Contact: Larry Rosetti **Title:**
Phone Number: 228-864-6199 **Fax Number:** 228-868-2319
24/hr Phone Number: 228-864-6199
US EPA ID No: MSD122687064
State ID No: **SIC Code:** 2899

SECTION 2: Billing Information - ☐ **Same as Above**

Company: Rineco
Address: PO Box 729 - Haskell
City: Benton **State:** AR **Zip:** 72118
Contact: Douglas Highsmith **Title:** Non-Fuels Chemist
Phone Number: 800-377-4692 **Fax Number:** 501-778-8505

SECTION 3: General Description of the Waste

Name of Waste: MD-2736 Process Water - Low pH
Detailed Description of Process Generating Waste:

removal of water layer from production process (Produce Plastics)

Physical State: ☑ **Liquid** ☐ **Sludge** ☐ **Powder** ☐ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: varies **Odor:** mild

Specific Gravity (water=1): 1 **Density:** 8.34 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ **Single-phase** ☐ **Multi-phase**

Container Type: ☐ **Drum** ☐ **Tote** ☑ **Truck** ☐ **Other (explain)**

Frequency: ☐ **Weekly** ☑ **Monthly** ☐ **Yearly** ☐ **One-Time**
Quantity: 5000 gallons

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☑ Yes ☐ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☑ D001 (Ignitable) ☑ D002 (Corrosive) ☐ D003 (Reactive)

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: OUTS105H

Proper US DOT Shipping Name: Waste Flammable Liquids, Corrosive, N.O.S. (Hydrochoric Acid/Potassium Choride)

Class: 3 **UN/NA:** UN2924 **PG:** II **RQ:** ~~D001/D002 @ 100 lbs~~ ~~5000~~ D001 100

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
<140	1 – 3.8	NA mg/l	NA mg/l	<2 %
Oil & Grease	**TOC**	**Zinc**	**Copper**	**Nickel**
na mg/l	10,000 mg/l	<1 mg/l	<1 mg/l	0-2 mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Water	75-90	%
Hydrochloric Acid (.1% solution)	1-2	%
Potassium Chloride	2-5	%
Formaldehyde	0-2	%
Aromatic Naphtha	0-2	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Standard ppe for low pH

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. CES evaluation

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

High pH

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals: X
TCLP Volatiles: X
TCLP Semi-Volatiles: X
Reactivity: X
Corrosivity: X
Ignitability: X

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☑ YES ☐ NO
If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory*: *Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory*: *Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

***Organics Subcategory*: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☑ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☑ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** 3/13/2009

Printed Name/Title: Douglas Highsmith/Non-Fuels Chemist

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: _____
Date: 3-24-09 ☑ Approved ☐ Rejected
Approval Number: 3233

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$0.50/gallon
$70/hour

2. Contamination Limit (maximum limit before surchages apply):

TOC - 30,000
Solids - 2%

3. Surcharge Pricing:

TOC: $0.03/gallon/5000 TOC > 30,000
Solids: $0.01/gallon/% greater than 2%

4. Special Testing Requirements:

PH, Flash, toc, metals, phenol

5. Treatment and Handling Protocol:

Standard wastewater treat however due to low pH only add ferric chloride, lime, & polymer
If there are excessive organics, then heat prior to treatment to separate organics

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☒ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

NA

8. Management for Product Recovered/Recycled (if applicable)

NA

CES Environmental Services, Inc.

LDR Notifications/Certifications

1. Generator Information		2. Receiving Facility Information	
Name:	Channel Chemical	Name:	CES Environmental Services, Inc.
Address:	14373 SEAWAY ROAD	Address:	4904 Griggs Road
	Gulfport, MS 39505		Houston, TX 77021
EPA ID No.:	MSD122687064	EPA ID No.:	TXD008950461
Manifest No.:			

3. Waste Description at Point of Generation

Line Item	Waste Description	Hazardous Waste Codes	LDR Subcategory	WW / NWW	Underlying Hazardous Constituents [268.2(i)]
1	Process Water	D001 D002		WW	
2					
3					
4					
5					

4. Waste Disposition

Line Item	Subtitle C Exclusion Subsequent to Point of Generation (if applicable)	Current Disposition of Waste	268.45, Table 1 Technology used to treat debris (if applicable)	Date Shipped
1				
2				
3				
4				
5				

5. Was the waste hazardous at the point of generation but subsequently became excluded from the definition of hazardous waste or exempt from Subtitle C regulation (including characterstic wastes managed in wastewater treatment systems discharging under the CWA)?
☐ Yes ☑ No (If yes, this constituents the 268.7(a)(7) one-time notification.)

6. Waste the waste characterstic at the point of generation, treated onsite to remove the characterstic, and treatment residues then shipped to a Subtitle D land disposal facility? ☐ Yes ☑ No (If yes, complete Certification 1 or 2.)

7. Was the waste "debris" that was hazardous at the point of generation but subsequently became excluded from the definition of hazardous waste under 261.3(f)(1) by treating it using an extraction or destruction technology in 268.45, Table 1? ☐ Yes ☑ No (If yes, complete Certification 3.)

8. Was the waste "debris" that was hazardous at the point of generation but subsequently became excluded from the definition of hazardous waste under 261.3(f)(2) by receiving a "no-longer-contains" determinatin from EPA or the authorized state?
☐ Yes ☑ No (If yes, this constituents the 268.7(d)(1) one-time notification.)

9. Is the waste residue from treating K061, K062 and/or F006 wastes in high-temperature metals recovery (HTMR) units that 1) meets the generic exclusion levels in 261.3(c)(2)(ii)(C), 2) does not exhibit any characterstics, and 3) is shipped to a Subtitle D land disposal facility?
☐ Yes ☑ No (If yes, complete Certification 4.)

10. ☐	Waste that has been treated to remove a characterstic and meets underlying hazardous constituents standards. I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 to remove the hazardous characterstics and that underlying hazardous constituents, as defined in 268.2(i) have been treated on-site to meet the 268.48 Universal Treatment Standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.	Applies to items: Reference: 268.7(b)(4)(v) and 268.9(d)
11. ☐	Waste that has been treated to remove a characterstic but does not meet underlying hazardous constituents standards. I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 or 268.49 to remove the hazardous characterstic. This decharacterized waste contains underyling hazardous constituents that require further treatment standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.	Applies to items: Reference: 268.7(b)(4)(v) and 268.9(d)
12. ☐	Debris that has been treated to meet the alternative treatment standards. I certify under penalty of law that the debris has been treated in accordance with the requirements of 40 CFR 268.45. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.	Applies to items: Reference: 268.7(b)(4)(v) and 268.9(d)
13. ☐	HTMR residue from treating K061, K062 and/or F006 wastes. I certify under penalty of law that the generic exclusion levels for all constituents have been met without impermissible dilution and that no characterstic of hazardous waste is exhibited. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.	Applies to items: Reference: 268.7(b)(4)(v) and 268.9(d)

Authorized Signature: _____ **Date:** 3/24/2009

Printed Name / Title: Douglas Highsmith/Non-Fuels Chemist

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

To: Dana Carter
Cc: Matt Bowman, Prabhaker, Joe Camp, Clint Hopkins

Date: 3/23/09

From: Miles Root

Lab Memo: 09-057

Subject: **Rineco - Channel Chemical Evaluation 0309-50**

A sample of waste water from Rineco, via Channel Chemical, Gulfport, MS, has been evaluated for potential processing at CES. This sample is evaluation 0309-50. This water is generated from some type of chemical process and may contain naphtha, hydrochloric acid, potassium chloride and formaldehyde. This material carries both D001 and D002 waste codes. Potential volume for this stream is 5000 gallons/month. Overall, this water may be treated at CES.

This water is slightly murky with an amber appearance. It has a somewhat objectionable odor. This water has a pH of 1.1. This particular sample does not have a flash point below 140 deg F. The water will not treat to a clear appearance with our standard water treat. The treated water has a murky yellow appearance and retains its somewhat objectionable odor. The metals are all at acceptable levels. The phenols are only 2 ppm.

The TOC on the treated water is 7844 ppm, which indicates that this water is not loaded up with the potentially higher concentration of organics. In other words, this is probably a "good" sample and our actual receipts may not be quite so nice. It is impossible to say for sure.

An attempt to drive off any other "organics" by heating to see if I could produce a clear water after treat were not successful. Our game plan to treat this water will depend upon what it looks like upon receipt. If the material does come in with a flash point, then a simple treat may eliminate it. Excessive organics will need heat treatment to eliminate low flash on the water if standard water treatment is not successful. Since the organics are to consist of naphtha and formaldehyde, we should be able to do this. The low pH is not an issue and our water treat will only require on the use of ferric chloride followed by lime and polymer.

The table below summarizes the analytical testing.

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

Rineco - Channel Chemical	
Evaluation 0309-44	
Solids, vol%	0
Odor	Somewhat Objectionable
pH	1.1
Phenols, ppm	2
TOC, mg/L	7,844
Oil, vol%	0
Treatability	Okay, but murky water
Metals, ppm	
Ni	1.430
Zn	0.612
Cu	0.290
Cd	0.374
Cr	0.000

3234
JC Express

EPAHO104001301

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/20/2009**

Dear **Nelson Fetgatter**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3234

Expiration Date 3/20/2011

Generator: JC Express Corporation
Address: Pasadena BLVD & Thomas
Pasadena, TX

Waste Information

Name of Waste: Water, Lime & Vinigar
TCEQ Waste Code #: CESQ1192
Container Type:
Detailed Description of Process Generating Waste:
From rinsing the road due to a spill
Color: White **Odor:** Mild **pH:** 5-7
Physical State:
Incompatibilities:
Safety Related Data/Special Handling:
LEVEL D

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

#3234

AL/504

To: AL
From: Steve

CESQ

1L

CES Environmental Services, Inc.
4904 Griggs Road Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

SECTION 1: Generator Information

Company:	JC Express Corporation		
Address:	Corner of Pasadena Blvd & Thomas		
City, State, Zip:	Pasadena, Tx.		
Contact:	STEVE SAMS	Title:	AUTH. BROKER FOR GENERATOR
Phone No:	281-838-3400	Fax No:	281-424-7748
24/hr Phone:	281-838-3400		
U.S. EPA I.D. No:	N/A		
State I.D.	N/A	SIC Code:	N/A

SECTION 2: Billing Information – ☐ Same as Above

Company:	PHOENIX POLLUTION CONTROL & ENVIRONMENTAL SERVICES, INC.		
Address:	4808 FAIRMONT PARKWAY BOX #274		
City, State, Zip:	PASADENA, TEXAS 77505		
Contact:	NELSON FETGATTER	Title:	PRESIDENT
Phone No:	281-838-3400	Fax No:	281-424-7748

SECTION 3: General Description of the Waste

Name of Waste: WATER, LIME & VINIGAR
Detailed Description of Process Generating Waste: FROM RINSING THE ROAD DUE TO A SPILL.

Physical State: ☒ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color: White Odor: Mild

Specific Gravity (water=1): N/A Density: N/A lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☐ Drum ☐ Tote ☒ Truck ☐ Other (explain)
Container Size: ____ ____ 70 BBL. ____

Frequency: ☐ Weekly ☐ Monthly ☐ Quarterly ☐ Yearly
Number of Units (containers): 500 GALLONS / ONE TIME Other: ____
Texas State Waste Code No: ~~N/A~~ CESQ 1191
Proper U.S. DOT Shipping Name: Non-Haz. Non-Regulated Wash Down Water
Class: na UN/NA: na PG: na RQ: na

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
N/A >140	Neutral	N/Amg/l	N/Amg/l	N/A%

Oil&Grease	TOC	Zinc	Copper	Nickel
N/A mg/l	N/A mg/l	0 N/Amg/l	0 N/Amg/l	0 N/Amg/l

<1500 <1500 per STUC Sams 3/20/09

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The waste consists of the following materials	Concentration Ranges are acceptable	Units or %
WATER	90	%
LIME	8	%
VINIGAR	2	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.
PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.
MSDS

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generator knowledge:

TCLP Metals: X
TCLP Volatiles: X
TCLP Semi-Volatiles: X
Reactivity: X
Corrosivity: X
Ignitability: X

SECTION 9: Generator's Certification

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** 3/20/09

Printed Name/Title: Steve Sams / Auth. Broker for Gen.

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Compliance Officer: [signature]	
Date: 3-20-09 (Approved) Rejected	
Approval Number: 3234	

SECTION 10: Waste Receipt Classification Under 40 CFR 437

per Steve Sams 3-20-9

Is this material a wastewater or wastewater sludge? ☑ YES ☐ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory: Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory: Subpart C

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☑ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 11: Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pricing (including freight):**

$.10/gallon + ~~surch~~ standard archarges

2. **Contamination Limits (maximum limit before surcharges apply):**

3. **Surcharge Pricing:**

4. **Special Testing Requirements:**

TOC, pH, metals

5. **Treatment and Handling Protocol:**

Treat + Discharge to WWTP

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

7. **Tests for Product Recovered/Recycled (if applicable):**

8. **Management for Product Recovered/Recycled (if applicable):**

Material Safety Data Sheet US Department of Labor	
May be used to comply with: Occupational Safety and Health Administration	
OSHA's Hazard Communication Standard,	(Non-Mandatory Form)
29 CFR 1910.1200. Standard must be	Form Approved
consulted for specific requirements.	OMB No. 1218-0072
IDENTITY Hydrated Lime Slurry, (Calcium hydroxide slurry) Ca(OH)2	Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.
Section I	
Manufacturer's Name: Lime Supply Corp	Emergency Telephone Number Chemtrec 800-424-9300
Address 1071 Trammel Fresno Rd, Fresno, Texas 77545	Telephone Number for Information 281-431-8928, Fax 281-431-7057
	Date Prepared 10/14/07

Section II - Hazard Ingredients/Identity Information

			Other Limits Recommended	%(optional)
Calcium hydroxide	5 mg/m3	5 mg/m3	7340 mg/kg	20-55%
Calcium carbonate	5 mg/m3	10 mg/m3		<7%
Silicon dioxide	0.1 mg/m3	0.1 mg/m3	4 mg/m3	<3%
Carbon	7440-44-0	Coal ash		

Section III - Physical/Chemical Characteristics

Boiling Point 100?C		Specific Gravity 1.2 - 1.5 g/cc	
Vapor Pressure (mm Hg.) N.A		Melting Point dec. 580?C	

Solubility in Water
Material is a stable suspension of calcium hydroxide in water. Ph=12.4@25?C

Appearance and OdorWhite low viscosity liquid, odorless.

10/16/2007

Section IV - Fire and Explosion Hazard Data.			
Flash Point N.A.	Flammable Limits N.A.	LEL N.A.	UEL N.A.

Extinguishing Media
Not Combustible - Use extinguishing agent for surrounding fire

Special Fire Fighting Procedures
Avoid skin contact or inhalation of dust if material becomes dry.

Section V - Reactivity Data			
Stability Stable	Unstable	LEL N.A.	Conditions to Avoid Material is stable

Incompatibility (Materials to Avoid)
Acids: Reacts vigorously and produces heat. Maleic Anhydride: May react explosively. Nitro Organic Compounds: May react to form explosive salts. Phosphorous: May form flammable products
when heated Aluminum: May react to form hydrogen gas.

Hazardous Decomposition or Byproducts
Will not occur (none)

Section VI - Health Hazard Data			
Route (s) of Entry:	Inhalation? Yes	Skin? No	Ingestion? Yes

Health Hazards (Acute and Chronic)
Avoid skin and eye contact as irritation will occur. Inhalation of mist or dried dust can cause coughing,
sneezing, or breathing problems.

Carcinogenicity:	NTP?	IARC Monographs?	OSHA Regulated?

Respirable crystalline silica from occupational sources is classified by IARC as a Group I
Carcinogen California Proposition 65: Silica is on the Governor's Proposition 65 list. Components used
in this product may contain trace amounts of inherent naturally occurring elements (such as, but not
limited to arsenic, cadmium) that are on the Governor's Proposition 65 list.

Signs and Symptoms of Exposure Skin or eye irritation; coughing or breathing problems.

Medical Conditions Generally Aggravated by Exposure Respiratory problems, asthma, dermatitis or
skin or eye sensitivity

Emergency and First Aid Procedures Flush contaminated area with excess water. If eye contact, rinse
eye with eye wash solution or excess water and seek medical attention immediately.

Section VII - Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled Protect skin and eyes from contact and
avoid inhalation of mist. Collect by mop or other suitable method. Place in steel container.

Waste Disposal Method Add water to dilute and flush to sewer. Consult local, state, or federal

regulations.			
Precautions to Be taken in Handling and Storing Store in tightly closed containers and keep away from acids or other incompatible substances. Do not store or ship in aluminum containers.			
Other Precautions Avoid eye contact and breathing dust if material becomes dry.			
NFPA Rating:	HEALTH: 1	FLAMMABILITY: 0	REACTIVITY: 0
HMIS Rating:	HEALTH: 1	FLAMMABILITY: 0	REACTIVITY: 0
WHMIS Rating:	D2A, E		
Section VIII - Control Measures			
Respiratory Protection (Specify Type) Dust masks meeting the NIOSH N95 rating are sufficient for casual exposure to mist or dust. (42 CFR)			
Ventilation	Local ExhaustN.A.	Special Do not dispose of dust with combustible materials.	
	Mechanical (General)N.A.	Other	
Protective Gloves Clean dry rubber gloves		Eye Protection Safety glasses or face shield	
Other Protective Clothing or Equipment Full clothing to cover arms and legs			
Work/Hygienic Practices Eye wash and shower station should be readily available			

References: Sax,N.I. & R.J. Lewis Sr. (1989) "Dangerous Properties of Industrial Materials",New York: Van Nostrand Reinhold Co. Ltd. Lewis, R.J. (1997) " Hazardous Chemicals Desk Reference", New York: Van Nostrand Reinhold Co. Ltd. KSA

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3235
Praxair (Texas City)

EPAHO104001312

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/25/2009**

Dear **Rocky McWhorter**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3235

Expiration Date 3/25/2011

Generator: Praxair (Texas City-Sterling Chemical Plant)
Address: 703 6th St. South
Texas City, TX 77590

Waste Information

Name of Waste: Propylene Glycol
TCEQ Waste Code #: 00602191
Container Type:
Detailed Description of Process Generating Waste:
removal of glycol from equipment prior to demolition
Color: water white **Odor:** glycol **pH:** 3-11
Physical State:
Incompatibilities: none known
Safety Related Data/Special Handling:
level C

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

DC/MM

OL

CES Environmental Services, Inc.
4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit Number: 30948
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

SECTION 1: Generator Information

Company: Praxair (Texas City- Sterling Chemical Plant)
Address: 703 6th South
City: Texas City **State:** TX **Zip:** 77590
Contact: Rocky McWhorter **Title:**
Phone Number: 409-943-9296 **Fax Number:**
24/hr Phone Number:
US EPA ID No: na
State ID No: na **SIC Code:** na

SECTION 2: Billing Information - ☑ **Same as Above**

Company:
Address:
City: **State:** **Zip:**
Contact: **Title:**
Phone Number: **Fax Number:**

SECTION 3: General Description of the Waste

Name of Waste: Propylene Glycol
Detailed Description of Process Generating Waste: removal of glycol from equipment prior to demolition

Physical State: ☑ **Liquid** ☐ **Sludge** ☐ **Powder** ☐ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: water white **Odor:** glycol

Specific Gravity (water=1): 1 **Density:** 8.34 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ **Single-phase** ☐ **Multi-phase**

Container Type: ☐ **Drum** ☑ **Tote** ☐ **Truck** ☐ **Other (explain)**

Frequency: ☐ **Weekly** ☐ **Monthly** ☐ **Yearly** ☑ **One-Time**
Quantity: 1000 gal

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No
If "Yes", then please fill out the UHC Form

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011
Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: 00602191

Proper US DOT Shipping Name: Non-RCRA/Non-DOT Regulated Propylene Glycol
Class: na **UN/NA:** na **PG :** na **RQ:** na

Flash Point	pH	Reactive Sulfides		Reactive Cyanides		Solids	
>200	3-11	na	mg/l	na	mg/l	0	%
Oil & Grease	**TOC**	**Zinc**		**Copper**		**Nickel**	
na mg/l	na mg/l	na	mg/l	na	mg/l	na	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
propylene Glycol	95-100	%
water	0-5	%

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. MSDS

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

None Known

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	x
TCLP Volatiles:	x
TCLP Semi-Volatiles:	x
Reactivity:	x
Corrosivity:	x
Ignitability:	x

SECTION 9: Generator's Certification

The information contained herein is based on ☐ generator knowledge and/or ☑ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: [signature] **Date:** 3-23-09

Printed Name/Title: BRUCE L WEEB · PRAXAIR, INC SAFETY SPECIALIST 3-23-09

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: [signature]
Date: 3-24-09 ☑ Approved ☐ Rejected
Approval Number: HOW-3235

SECTION 10: Waste Receipt Classification Under 40 CFR 437

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO
If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

SECTION 10: Waste Receipt Classification Under 40 CFR 437

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory*: *Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory*: *Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory*: *Subpart C

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

☐ Metals Subcategory

☐ Oils Subcategory

☐ Organics Subcategory

SECTION 11: Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$160/tote + $70/hr trans

2. Contamination Limit (maximum limit before surchages apply):

3. Surcharge Pricing:

none

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

class I liquids

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

March 16, 2009

Praxair Inc
Attn: Bruce Webb
703 6th Street South
Texas City, TX 77590

RE: Pricing for transportation and disposal of propylene glycol

Dear Mr. Webb,

CES Environmental Services, Inc. appreciates the opportunity to present to you our proposal for the transportation and disposal of propylene glycol from your operations. Please find below our proposed scope of service and associated pricing for your consideration.

Scope of Service

- CES will assist the generator in creating a profile for the glycol.
- Upon profile approval, CES will schedule a driver and trailer to pick up the totes of glycol.
- The glycol will be disposed of at CES under permit.
- CES will provide all proper shipping documents.

Estimated Costs

▪ Transportation Services:	$ 70.00/hour
▪ Disposal of Class 1 Non hazardous Propylene Glycol:	$ 160.00/tote

Conditions/Assumptions:

1. A profile must be approved prior to scheduling any disposal. Profile must be given at least 72 hours for approval.
2. There is a 4 hour minimum on all transportation services.
3. Cancelations must be given 24 hours in advance. If 24 hours notice is not given, a fee will be charged.
4. Transportation rate does not include any applicable fuel surcharges as per the U.S. Department of Energy National Diesel Average. Fuel surcharges are evaluated on a monthly basis. The current rate for March 2009 is 9%

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

5. Energy surcharge will be charged according to the national average utility pricing index on all disposal services. At the time of this quote, the energy surcharge is 0%. Rate is subject to change on a monthly basis.
6. A 1% Compliance surcharge will be charged in order to stay compliant with federal and state government requirements. This surcharge is applied against the entire invoice (including other surcharges and direct fees).

Thank you again for the opportunity and your interest in CES Environmental Services, Inc. If you have any questions or need additional assistance, feel free to contact me at (713) 748-9804.

Sincerely,
Dana R. Carter
Account Manager

MATERIAL SAFETY DATA SHEET

This Material Safety Data Sheet conforms to the requirements of ANSI Z400.1, using the International Chemical Safety Cards of the Global Harmonizing System.
THIS MSDS COMPLIES WITH 29 CFR 1910.1200 (HAZARD COMMUNICATION STANDARD)
IMPORTANT: Read this MSDS before handling & disposing of this product.
Pass this information on to employees, customers, & users of this product.

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

PRODUCT IDENTITY: PROPYLENE GLYCOL
COMPANY IDENTITY: SOLVCHEM INC.
COMPANY ADDRESS: 4704 SHANK ROAD
COMPANY CITY: PEARLAND, TX 77588-0490
COMPANY PHONE: 1-281-485-5377
CHEMTREC PHONE: 1-800-424-9300

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

CONTAINS: 95-100% PROPYLENE GLYCOL (57-55-6)
Number in parentheses is CAS #, number in brackets is European EC #.

PRGL01

SECTION 3. HAZARDS IDENTIFICATION

EXPOSURE PREVENTION: STRICT HYGIENE!

RISK STATEMENTS:
Not Applicable.

SAFETY STATEMENTS:
S2 Keep out of the reach of children.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

SECTION 4. FIRST AID MEASURES

EYE CONTACT:
For eyes, flush with plenty of water for 15 minutes & get medical attention.

SKIN CONTACT:
In case of contact with skin immediately remove contaminated clothing.
Wash thoroughly with soap & water. Wash contaminated clothing before reuse.

INHALATION:
After high vapor exposure, remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, trained personnel should immediately begin artificial respiration. If the heart has stopped, trained personnel should immediately begin cardiopulmonary resuscitation (CPR).

SWALLOWING:
Rinse mouth. GET MEDICAL ATTENTION IMMEDIATELY.Do NOT give liquids to an unconscious or convulsing person.

PRGL01

SECTION 5. FIRE FIGHTING MEASURES

FIRE & EXPLOSION PREVENTIVE MEASURES
NO open flames. Above flash point, use a closed system, ventilation,

EXTINGUISHING MEDIA
Use dry powder, alcohol-resistant foam, water spray, carbon dioxide.

SPECIAL FIRE FIGHTING PROCEDURES
Water spray may be ineffective on fire but can protect fire-fighters & cool closed containers. Use fog nozzles if water is used.
Do not enter confined fire-space without full bunker gear.
(Helmet with face shield,bunker coats, gloves & rubber boots).
Use NIOSH approved positive-pressure self-contained breathing apparatus.

UNUSUAL EXPLOSION AND FIRE PROCEDURES
SLIGHTLY COMBUSTIBLE!
Keep container tightly closed.
Isolate from oxidizers, heat, & open flame.
Closed containers may explode if exposed to extreme heat.
Applying to hot surfaces requires special precautions.
Continue all label precautions!

SECTION 6. ACCIDENTAL RELEASE MEASURES

PERSONAL PROTECTIVE MEASURES:
Keep unprotected personnel away.
Wear appropriate personal protective equipment given in Section 8.

CONTAINMENT AND CLEAN-UP MEASURES:
Stop spill at source. Dike and contain.
Wash away remainder with plenty of water.

SECTION 7. HANDLING AND STORAGE

HANDLING

Isolate from oxidizers, heat, & open flame.
Use only with adequate ventilation.
Avoid prolonged or repeated contact with skin.
Wear OSHA Standard goggles or face shield. Consult Safety Equipment Supplier.
Wear gloves, apron & footwear impervious to this material. Wash clothing before reuse.
Avoid free fall of liquid. Ground containers when transferring. Do not flame cut, braze, or weld. Continue all label precautions!

STORAGE

Keep separated from strong oxidants. Keep dry.
Use ventilation along the floor.
Keep container tightly closed
& upright when not in use to prevent leakage.

PRGL01

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION:

RESPIRATORY EXPOSURE CONTROLS

A respiratory protection program that meets OSHA 29 CFR 1910.134 and ANSI Z86.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

VENTILATION

LOCAL EXHAUST	: Necessary
MECHANICAL (GENERAL)	: Acceptable
SPECIAL	: None
OTHER	: None

Please refer to ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details.

PERSONAL PROTECTIONS:

Wear OSHA Standard goggles or face shield. Consult Safety Equipment Supplier.
Wear gloves, apron & footwear impervious to this material. Wash clothing before reuse.

WORK & HYGIENIC PRACTICES:

Provide readily accessible eye wash stations & safety showers.
Wash at end of each workshift & before eating, smoking or using the toilet.
Promptly remove clothing that becomes contaminated. Destroy contaminated leather articles. Launder or discard contaminated clothing.

SECTION 9. PHYSICAL DATA

APPEARANCE :			Liquid, Water-White
ODOR :			Very Mild
BOILING RANGE :			185 186 187 C / 365 368 369 F
AUTO IGNITION TEMPERATURE :			421 C / 790 F (Lowest Component)
LOWER FLAMMABLE LIMIT IN AIR (% by vol):			2.6
FLASH POINT (TEST METHOD):			107 C / 225 F (TCC)
FLAMMABILITY CLASSIFICATION:			Class IIIB
GRAVITY @ 68/68 F / 20/20 C :			
API :			4.6
SPECIFIC GRAVITY (Water=1) :			1.040
POUNDS/GALLON :			8.663
VOC'S (>0.44 Lbs/Sq In) :	0.0 Vol. % /	0.0 g/L /	0.000 Lbs/Gal
TOTAL VOC'S (TVOC) :	0.0 Vol. % /	0.0 g/L /	0.000 Lbs/Gal
NONEXEMPT VOC'S (CVOC) :	0.0 Vol. % /	0.0 g/L /	0.000 Lbs/Gal
HAZARDOUS AIR POLLUTANTS (HAPS) :	0.0 Wt. % /	0.0 g/L /	0.000 Lbs/Gal
VAPOR PRESSURE (mm of Hg)@20 C			0.1
NONEXEMPT VOC PARTIAL PRESSURE (mm of Hg @ 20 C)			0.0
VAPOR DENSITY (air=1) :			Not Applicable
WATER ABSORPTION :			Complete
REFRACTIVE INDEX :			1.433

SECTION 10. STABILITY & REACTIVITY

STABILITY
Stable under normal conditions.

CONDITIONS TO AVOID
Isolate from oxidizers, heat, & open flame.

MATERIALS TO AVOID
Reacts with strong oxidants,causing fire & explosion hazard.

HAZARDOUS DECOMPOSITION PRODUCTS
Carbon Monoxide, Carbon Dioxide from burning.

HAZARDOUS POLYMERIZATION
Will not occur.

PRGL01

SECTION 11. TOXICOLOGICAL INFORMATION

MATERIAL	CAS #	TWA (OSHA)	TLV (ACGIH)	HAP
Propylene Glycol	57-55-6	None Known	1000 ppm	No

This product contains no EPA Hazardous Air Pollutants (HAP) in amounts > 0.1%.

PRGL01 SECTION 11. TOXICOLOGICAL INFORMATION (CONTINUED)

MATERIAL	CAS #	CEILING	STEL(OSHA/ACGIH)
		None Known	None Known

ACUTE HAZARDS

EYE & SKIN CONTACT:
Primary irritation to skin, defatting, dermatitis.
Primary irritation to eyes, redness, tearing, blurred vision.
Liquid can cause eye irritation. Wash thoroughly after handling.

INHALATION:
Anesthetic. Irritates respiratory tract. Acute overexposure can cause serious nervous system depression. Vapor harmful.

SWALLOWING:
Swallowing can cause abdominal irritation, nausea, vomiting & diarrhea.

SUBCHRONIC HAZARDS/CONDITIONS AGGRAVATED

CONDITIONS AGGRAVATED
CONDITIONS AGGREVATED:None Known.

CHRONIC HAZARDS

CANCER, REPRODUCTIVE & OTHER CHRONIC HAZARDS:
This product has no carcinogens listed by IARC,NTP,NIOSH, OSHA or ACGIH, as of this date, greater or equal to 0.1%.

SECTION 12. ECOLOGICAL INFORMATION

MAMMALIAN INFORMATION:

MATERIAL	CAS #	LOWEST KNOWN LETHAL DOSE DATA LOWEST KNOWN LD50 (ORAL)
Propylene Glycol	57-55-6	18300.0 mg/kg(Guinea Pigs)

AQUATIC ANIMAL INFORMATION:
No aquatic environmental information is available on this product.

MOBILITY
This material is a mobile liquid.

DEGRADABILITY
This product is completely biodegradable.

ACCUMULATION
This product does not accumulate or biomagnify in the environment.

SECTION 13. DISPOSAL CONSIDERATIONS

Processing, use or contamination may change the waste management options. Recycle / dispose of observing national, regional, state, provincial and local health, safety & pollution laws. If in doubt, contact appropriate agencies.

SECTION 14. TRANSPORT INFORMATION

DOT SHIPPING NAME: None.
IATA / ICAO: None.
IMO / IMDG: None.
EMERGENCY RESPONSE GUIDEBOOK NUMBER: None

PRGL01

SECTION 15. REGULATORY INFORMATION

EPA REGULATION:
SARA SECTION 311/312 HAZARDS: None Known

All components of this product are on the TSCA list.
This material contains no known products restricted under SARA Title III, Section 313 in amounts greater or equal to 1%.

PRGL01 SECTION 15. REGULATORY INFORMATION (CONTINUED)

STATE REGULATIONS:

THIS PRODUCT MEETS REQUIREMENTS OF SOUTHERN CALIFORNIA AQMD RULE 443.1 & SIMILAR REGULATIONS

CALIFORNIA PROPOSITION 65: This product contains no chemicals known to the State of California to cause cancer & reproductive toxicity.

INTERNATIONAL REGULATIONS

The components of this product are listed on the chemical inventories of the following countries:
Australia, Canada, China, Europe (EINECS), Japan, Korea, United Kingdom.

SECTION 16. OTHER INFORMATION

HAZARD RATINGS:

HEALTH (NFPA): 0, HEALTH (HMIS): 0, FLAMMABILITY: 1, REACTIVITY: 0
(Personal Protection Rating to be supplied by user based on use conditions.)
This information is intended solely for the use of individuals trained in the NFPA & HMIS hazard rating systems.

EMPLOYEE TRAINING

See Section 3 for Risk & Safety Statements. Employees should be made aware of all hazards of this material (as stated in this MSDS) before handling it.

NOTICE

The supplier disclaims all expressed or implied warranties of merchantability or fitness for a specific use, with respect to the product or the information provided herein, except for conformation to contracted specifications.
All information appearing herein is based upon data obtained from manufacturers and/or recognized technical sources. While the information is believed to be accurate, we make no representations as to its accuracy or sufficiency.
Conditions of use are beyond our control, and therefore users are responsible for verifying the data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product. Users also assume all risks in regards to the publication or use of, or reliance upon, information contained herein.
This information relates only to the product designated herein, and does not relate to its use in combination with any other material or process.
Unless updated, this Material Safety Data Sheet is valid until 10/22/2011.

3236
Canadian Chem

EPAHO104001330

79
T-35
LAB.
8-4-09

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/25/2009**

Dear **George Raven**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3236

Expiration Date 3/25/2011

Generator: Canadian Chemical Reclaiming (Ambrose St.)
Address: 14042 Ambrose St.
Houston, TX 77045

Waste Information

Name of Waste: Chemical cleaning waste water
TCEQ Waste Code #: CESQ1191
Container Type:
Detailed Description of Process Generating Waste:
waste water from the chemical cleaning of anf exchanger with calcium deposits of the cooling water side
Color: varies **Odor:** slight **pH:** 7-8
Physical State:
Incompatibilities: none known
Safety Related Data/Special Handling:
standard

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

DC/MM

1L

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility 4904 Griggs Road, Houston, TX 77021 Phone (713) 676-1460 Fax: (713) 676-1460 U.S. EPA ID Number: TXD008950461 ISWR Number: 30900 TCEQ Industrial Solid Waste Permit Number: 30948	☐ CES Environmental Services - Port Arthur Facility 2420 S. Gulfway Dr., Port Arthur, TX 77641 Phone (713) 676-1460 Fax: (713) 676-1460 U.S. EPA ID Number: TXR000079307 ISWR Number: 88585

SECTION 1: Generator Information

Company: Canadian Chemical Reclaiming
Address: 14042 Ambrose Street
City: Houston **State:** TX **Zip:** 77045
Contact: George Raven **Title:**
Phone Number: 281-988-5800 **Fax Number:** 281-988-5858
24/hr Phone Number: 713-882-1143
US EPA ID No: TXCESQG
State ID No: CESQG **SIC Code:** NA

SECTION 2: Billing Information - ☐ **Same as Above**

Company: Canadian Chemcial Reclaiming
Address: 1500 Citywest Blvd Suite 550
City: Houston **State:** TX **Zip:** 77042
Contact: George Raven **Title:**
Phone Number: 713-882-1143 **Fax Number:**

SECTION 3: General Description of the Waste

Name of Waste: Chemical cleaning wastewater
Detailed Description of Process Generating Waste:

wastewater from the chemical cleaning of an exchanger with calcium deposits on the cooling water side

Physical State: ☑ **Liquid** ☐ **Sludge** ☐ **Powder** ☐ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: varies **Odor:** slight

Specific Gravity (water=1): 1 **Density:** 8.34 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ **Single-phase** ☐ **Multi-phase**

Container Type: ☐ **Drum** ☑ **Tote** ☐ **Truck** ☐ **Other (explain)**

Frequency: ☐ **Weekly** ☐ **Monthly** ☑ **Yearly** ☐ **One-Time**
Quantity:

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No
If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011
Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: CESQ1191

Proper US DOT Shipping Name: Non RCRA Non Regulated Wastewater
Class: NA **UN/NA:** NA **PG :** NA **RQ:** NA

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>150		7-8		BRL	mg/l	BRL	mg/l	1-2	%
Oil & Grease		**TOC**		**Zinc**		**Copper**		**Nickel**	
>1000	mg/l	>1000	mg/l	NA	mg/l	NA	mg/l	NA	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Water	90-95	%
Sulfamic Acid	1-5	%
Soda Ash	1-5	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Standard

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. Analytical 09020282.01, msds

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

none known

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	
TCLP Volatiles:	X
TCLP Semi-Volatiles:	X
Reactivity:	
Corrosivity:	
Ignitability:	

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☑ YES ☐ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory : Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☑ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory : Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory *: Subport C*

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☐ generator knowledge and/or ☐ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Uvana V. Ray **Date:** 3-23-09

Printed Name/Title: LOGISTICAL COORDINATOR / UVANA V. RAY

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: [illegible]
Date: 3-24-09 ☑ Approved ☐ Rejected
Approval Number: 3236

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$145.00/tote plus freight

2. Contamination Limit (maximum limit before surchages apply):

NA

3. Surcharge Pricing:

NA

4. Special Testing Requirements:

Flash, pH, . Check with Miles, Joe, Clint for treatability at WWTP.

5. Treatment and Handling Protocol:

Put in class 1 liquids box

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

NA

8. Management for Product Recovered/Recycled (if applicable)

NA

Laboratory Analysis Report

Total Number of Pages: 11

Job ID : 09020282

10100 East Freeway, Suite 100, Houston, TX 77029 tel: 713-453-6060, fax: 713-453-6091, http://www.ablabs.com

Client Project Name :
0209-23 CCR Chemical Cleaning Wastewater

Report To :	Client Name:	CES Environmental	P.O.#.: 0209-23
	Attn:	Dana Carter	Sample Collected By: Dana Carter
	Client Address:	4904 Griggs Rd	Date Collected: 02/10/09
	City, State, Zip:	Houston, Texas, 77021	

A&B Labs has analyzed the following samples...

Client Sample ID	Matrix	A&B Sample ID
Chemical Cleaning Wastewater	Water	09020282.01

Released By: Sonia West

Title: Senior Project Manager

Date: 2/26/2009

This Laboratory is NELAP (T104704213-08B-TX) accredited. Effective: 07/01/2008; Expires: 06/03/2009

Scope: Non-Potable Water, Drinking Water, Air, Solid, Hazardous Waste

I am the laboratory manager, or his/her designee, and I am responsible for the release of this data package. This laboratory data package has been reviewed and is complete and technically compliant with the requirements of the methods used, except where noted in the attached exception reports. I affirm, to the best of my knowledge that all problems/anomalies observed by this laboratory (and if applicable, any and all laboratories subcontracted through this laboratory) that might affect the quality of the data, have been identified in the Laboratory Review Checklist, and that no information or data have been knowingly withheld that would affect the quality of the data.

This report cannot be reproduced, except in full, without prior written permission of A&B Labs. Results shown relate only to the items tested. Samples are assumed to be in acceptable condition unless otherwise noted. Blank correction is not made unless otherwise noted. Air concentrations reported are based on field sampling information provided by client.

Date Received : 02/11/2009 12:50

EPAHO104001339

LABORATORY TERM AND QUALIFIER DEFINITION REPORT

Job ID : 09020282

Date: 2/26/2009

General Term Definition

Back-Wt	Back Weight	Post-Wt	Post Weight
BRL	Below Reporting Limit	ppm	parts per million
cfu	colony-forming units	Pre-Wt	Previous Weight
Conc.	Concentration	Q	Qualifier
D.F.	Dilution Factor	RegLimit	Regulatory Limit
Front-Wt	Front Weight	RPD	Relative Percent Difference
LCS	Laboratory Check Standard	RptLimit	Reporting Limit
LCSD	Laboratory Check Standard Duplicate	surr	Surrogate
MS	Matrix Spike	T	Time
MSD	Matrix Spike Duplicate	TNTC	Too numerous to count
MW	Molecular Weight		

Qualifier Definition

M2	Matrix Spike/Matrix Spike Duplicate recovery is below laboratory control limits due to matrix interference.

LABORATORY TEST RESULTS

Job ID : 09020282

Date 2/26/2009

Client Name: CES Environmental

Attn: Dana Carter

Project Name: 0209-23 CCR Chemical Cleaning Wastewater

Client Sample ID: Chemical Cleaning Wastewater

Date Collected: 02/10/09

Time Collected: 14:15

Other Information:

Job Sample ID: 09020282.01

Sample Matrix Water

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 1010	Ignitability (Flash Point)								
	Ignitability	>150	°F	1				02/17/09 08:05	SG
SW-846 6010C	TCLP Metals								
	Arsenic	BRL	mg/L	1	0.04	5.0		02/12/09 17:08	TK
	Barium	0.745	mg/L	1	0.04	100.0		02/12/09 17:08	TK
	Cadmium	BRL	mg/L	1	0.04	1.0		02/12/09 17:08	TK
	Chromium	0.041	mg/L	1	0.04	5.0		02/12/09 17:08	TK
	Lead	BRL	mg/L	1	0.04	5.0		02/12/09 17:08	TK
	Selenium	BRL	mg/L	1	0.1	1.0		02/12/09 17:08	TK
	Silver	BRL	mg/L	1	0.04	5.0		02/12/09 17:08	TK
SW-846 7.3	Reactive Cyanide								
	Reactive Cyanide	BRL	mg/L	1	25			02/12/09 10:00	KS
SW-846 7.3	Reactive Sulfide								
	Reactive Sulfide	BRL	mg/L	1	25			02/11/09 14:05	KS
SW-846 7470A	TCLP Metals, Mercury								
	Mercury	BRL	mg/L	1	0.0005	0.2		02/13/09 15:14	TK
SW-846 9040C	Corrosivity, pH								
	pH	7.38	s.u.					02/11/09 14:00	RK

EPAHO104001341

QUALITY CONTROL CERTIFICATE

Job ID : 09020282 **Date :** 2/26/2009

Analysis : **Corrosivity, pH** **Method :** **SW-846 9040C** **Reporting Units :** **s.u.**

QC Batch ID : Qb09021136 **Created Date :** 02/11/09 **Created By :** Rkurup

Samples in This QC Batch : 09020282.01

QC Type: Duplicate

QC Sample ID: 09020282.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit		Qual
pH	7.32	7.38	s.u.	0.8	5		

QC Type: LCS and LCSD

Parameter	LCS Assigned	LCS Result		LCSD Assigned	LCSD Result		RPD	RPD CtrlLimit	Tolerance	Qual
pH	4.00	3.98							3.95-4.05	

Refer to the Definition page for terms.

EPAHO104001342

QUALITY CONTROL CERTIFICATE

Job ID : 09020282 **Date :** 2/26/2009

Analysis : **Reactive Sulfide** **Method :** **SW-846 7.3** **Reporting Units :** **mg/L**

QC Batch ID : Qb09021214 **Created Date :** 02/11/09 **Created By :** Ksudha

Samples in This QC Batch : 09020282.01

Sample Preparation : PB09021217 **Prep Method :** SW-846 7.3 **Prep Date :** 02/11/09 14:00 **Prep By :** Ksudha

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Reactive Sulfide		BRL	mg/L	1	25		

QC Type: Duplicate

QC Sample ID: 09020257.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit		Qual
Reactive Sulfide	340	360	mg/L	5.7	20		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Reactive Sulfide	680	600	88.2	680	560	82.4	6.9	20	40-110	

QC Type: MS and MSD

QC Sample ID: 09020257.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Reactive Sulfide	360	170	400	23.5						40-110	M2

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 09020282 **Date :** 2/26/2009

Analysis : **Reactive Cyanide** **Method :** **SW-846 7.3** **Reporting Units :** **mg/L**

QC Batch ID : Qb09021217 **Created Date :** 02/12/09 **Created By :** Ksudha

Samples in This QC Batch : 09020282.01

Sample Preparation : PB09021221 **Prep Method :** SW-846 7.3 **Prep Date :** 02/11/09 14:00 **Prep By :** Ksudha

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Reactive Cyanide		BRL	mg/L	1	25		

QC Type: Duplicate

QC Sample ID: 09020282.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit		Qual
Reactive Cyanide	BRL	BRL	mg/L		20		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Reactive Cyanide	5.0	2.22	44.4	5.0	2.31	46.2	4	20	40-110	

Refer to the Definition page for terms.

EPAHO104001344

QUALITY CONTROL CERTIFICATE

Job ID : 09020282 **Date :** 2/26/2009

Analysis : **TCLP Metals** **Method :** **SW-846 6010C** **Reporting Units :** **mg/L**

QC Batch ID : Qb09021235 **Created Date :** 02/12/09 **Created By :** Tkhuc

Samples in This QC Batch : 09020282.01

Digestion :	PB09021235	**Prep Method :**	SW-846 3010A	**Prep Date :**	02/12/09 12:00	**Prep By :**	Tkhuc
TCLP Prep :	PB09021215	**Prep Method :**	SW-846 1311	**Prep Date :**	02/11/09 16:35	**Prep By :**	Sgarcia

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Arsenic	7440-38-2	BRL	mg/L	1	0.04		
Barium	7440-39-3	BRL	mg/L	1	0.04		
Cadmium	7440-43-9	BRL	mg/L	1	0.04		
Chromium	7440-47-3	BRL	mg/L	1	0.04		
Lead	7439-92-1	BRL	mg/L	1	0.04		
Selenium	7782-49-2	BRL	mg/L	1	0.1		
Silver	7440-22-4	BRL	mg/L	1	0.04		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Arsenic	2	2.03	102	2	2.00	100	1.5	20	80-120	
Barium	2	1.89	94.5	2	1.87	93.5	1.1	20	80-120	
Cadmium	2	1.81	90.5	2	1.79	89.5	1.1	20	80-120	
Chromium	2	1.89	94.5	2	1.87	93.5	1.1	20	80-120	
Lead	2	1.85	92.5	2	1.83	91.5	1.1	20	80-120	
Selenium	2	2.01	101	2	1.97	98.5	2	20	80-120	
Silver	2	1.97	98.5	2	1.94	97	1.5	20	80-120	

QC Type: MS and MSD
QC Sample ID: 09020226.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Arsenic	BRL	2	2.02	101						45-138	
Barium	0.722	2	2.47	87.4						39-135	
Cadmium	BRL	2	1.75	87.3						56-125	
Chromium	BRL	2	1.84	91.8						52-125	
Lead	BRL	2	1.74	87						55-125	
Selenium	BRL	2	2.01	100						70-130	
Silver	BRL	2	1.97	98.5						26-148	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 09020282 **Date :** 2/26/2009

Analysis : **TCLP Metals, Mercury** **Method :** **SW-846 7470A** **Reporting Units :** **mg/L**

QC Batch ID : Qb09021338 **Created Date :** 02/13/09 **Created By :** Tkhuc

Samples in This QC Batch : 09020282.01

Digestion :	PB09021340	**Prep Method :**	SW-846 7470A	**Prep Date :**	02/13/09 10:30	**Prep By :**	Tkhuc
TCLP Prep :	PB09021215	**Prep Method :**	SW-846 1311	**Prep Date :**	02/11/09 16:35	**Prep By :**	Sgarcia

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Mercury	7439-97-6	BRL	mg/L	1	0.0005		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Mercury	0.005	0.0046	92.6	0.005	0.0048	95.4	3	35	71-143	

QC Type: MS and MSD
QC Sample ID: 09020274.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Mercury	BRL	0.005	0.0050	99.2	0.005	0.0049	97.8	1.4	35	61-175	

Refer to the Definition page for terms.

EPAHO104001346

QUALITY CONTROL CERTIFICATE

Job ID : 09020282 **Date :** 2/26/2009

Analysis : **Ignitability (Flash Point)** **Method :** **SW-846 1010** **Reporting Units :** **°F**

QC Batch ID : Qb09021734 **Created Date :** 02/17/09 **Created By :** Sgarcia

Samples in This QC Batch : 09020282.01

QC Type: Duplicate

QC Sample ID: 09020282.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit		Qual
Ignitability	>150	>150	°F		20		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Ignitability	83	85	102	83	85	102	0	20	75-125	

Refer to the Definition page for terms.

EPAHO104001347

A & B Labs — *Chain of Custody*

The Chain of Custody is a Legal Document

10100 East Fwy (I-10) Ste. 100
Houston, TX 77029
713-453-6060
1-877-478-6060 Toll Free
713-453-6091 Fax
ablabs.com

A&B JOB ID # 09020282

5. Project #

1. REPORT TO:
Company: CES Environmental
Address: 4904 Griggs Rd Houston TX 77021
Contact: Dana Carter
Phone: 713.748.9804
Fax: ☐ 713.~~[illegible]~~ 748.8164
E-mail: ☑ dcarter@cesenvironmental.com

2. INVOICE TO:
Company: CES
Address:
Contact: Juanita Thomas
Phone: 713.676.1460
Fax: ☐ 713.748-8164
E-mail: ☐

3. PO # 0209-253

4. Turnaround Time (Business Days)
☐ 1 Day* ☐ Other
☐ 2 Days*
☐ 3 Days* *Surcharge applies
☒ 7 Days - Standard

6. Project Name/Location: CCR Chemical Cleaning Wastewater

7. Reporting Requirement:
☐ TRRP Limits only ☐ TRRP Rpt. Package ☐ See Attached ☐ Standard Level II

8. Sampler's Name & Company (PLEASE PRINT): Dana Carter CES Environmental
Sampler's Signature & Date: Dana Carter

13. No. of Containers
14. Containers*
15. Preservatives**
16. PH-Lab Only
17. Analyses/Methods: TCLP 8 metals; RCI

LAB USE ONLY	9. Sample ID and Description	10. Sampling Date	Time	11. Comp.	Grab	12. Matrix: Water	Soil	Sludge	Oil	Air	Other	18. REMARKS
01A	Chemical Cleaning Wastewater	2/10	2:50	✓		✓						

19. RELINQUISHED BY	DATE	TIME	20. RECEIVED BY	DATE	TIME
1 Dana Carter	2/11/09	1250			
2					
3			21. RECEIVED BY LABORATORY	2/11/09	12:50

*Containers: VOA - 40 ml vial; A/G - Amber/Glass 1 Liter; 4 oz/8 oz - glass wide mouth; P/O - Plastic/other

Preservatives: C - Cool; H - HCl; N - HNO_3; S - H_2SO_4; OH - NaOH; T - $Na_2S_2O_3$; X - Other

METHOD OF SHIPMENT

BILL OF LADING/TRACKING #

LAB USE ONLY SAMPLING ____ RENTAL ____ P/U ____

22. KNOWN HAZARDS/COMMENTS

Temperature: 21 °C

Intact: Y or N Initials

A&B cannot accept verbal changes
Please FAX written changes to 713-453-6091

Samples will be disposed of after 30 days
A&B reserves the right to return samples

EPAHO104001348

Sample Condition Checklist

Date : **02/26/09**

A&B JobID :	**09020282**	Date Received :	**02/11/2009**	Time Received :	**12:50PM**
Client Name :	**CES Environmental**				
Temperature :	**21.0°C**	Sample pH :	**N/A**		

	Check Points	Yes	No
1.	**Cooler seal present and signed.**	N/A	
2.	**Sample(s) in a cooler.**		X
3.	**If yes, ice in cooler.**		X
4.	**Sample(s) received with chain-of-custody.**	X	
5.	**C-O-C signed and dated.**	X	
6.	**Sample(s) received with signed sample custody seal.**	N/A	
7.	**Sample containers arrived intact. (If no comment).**	X	
8.	**Matrix :** Water ☐ Soil ☐ Liquid ☑ Sludge ☐ Solid ☐ Cassette ☐ Tube ☐ Bulk ☐ Badge ☐ Food ☐ Other ☐		
9.	**Sample(s) were received in appropriate container(s).**	X	
10.	**Sample(s) were received with proper preservative**		
11.	**All samples were logged or labeled.**	X	
12.	**Sample ID labels match C-O-C ID's**	X	
13.	**Bottle count on C-O-C matches bottles found.**	X	
14.	**Sample volume is sufficient for analyses requested.**	X	
15.	**Samples were received within the hold time.**	X	
16.	**VOA vials completely filled.**	N/A	
17.	**Sample accepted.**	X	

Comments : Include actions taken to resolve discrepancies/problem:

Temperature requirements not met. Dana, with CES, confirmed to run analysis. Ruwadia 2/11/09

Received by : Ruwadia

Check in by/date : Ruwadia / 02/11/2009

MATERIAL SAFETY DATA SHEET

DATE PREPARED: 03/05/1997
MSDS No: U043
Sulfamic Acid

HydroChem®
INDUSTRIAL SERVICES, INC.

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: Sulfamic Acid
Product Code: U043
Product Name: Sulfamic Acid
Chemical Family: Mineral Acid
Molecular Formula: NH_2SO_3H

MANUFACTURER:
HydroChem Industrial Services, Inc.
900 Georgia Ave.
Deer Park, TX 77536
Customer Service: (800) 934-9376

24 HR. EMERGENCY TELEPHONE NUMBERS:

Emergency Contact:	HydroChem ER
Emergency Phone	(800) 569-4889

2. COMPOSITION/INFORMATION ON INGREDIENTS

	wt.%	CAS Registry #
Sulfamic Acid	100	5329-14-6

COMMENTS:
Exposure limits for this product are not established. A TLV of 1 mg/m3 is recommended.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW
IMMEDIATE CONCERNS:
Acid.
Corrosive.
Do not get in eyes, on skin or clothing.
Do not breath dust.

4. FIRST AID MEASURES

EYES:
Immediately flush eyes with water for 30 minutes while holding eyelids open. Seek medical attention.

SKIN:
Immediately wash with soap and water. Rinse thoroughly. Seek medical attention if effects occur. Launder contaminated shoes and clothing before reuse.

INGESTION:
DO NOT induce vomiting. Drink large quantities of milk (preferred) or water and give milk of magnesia. Take to hospital at once.

INHALATION:
Remove to fresh air. See a doctor at once. If breathing has stopped, begin artificial respiration.

5. FIRE FIGHTING MEASURES

Flashpoint and Method: Not Applicable
Flammable Limits: Not Applicable
Autoignition Temperature: Not Determined

GENERAL HAZARD:
Not Flammable, but reacts with most metals to form flammable hydrogen gas.

HAZARDOUS COMBUSTION PRODUCTS:
Ammonia, sulfur oxides and nitrogen oxides

FIRE FIGHTING PROCEDURES:
Use water fog to cool hot containers.

FIRE FIGHTING EQUIPMENT:
As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective clothing to prevent contact with skin and eyes.

6. ACCIDENTAL RELEASE MEASURES

GENERAL PROCEDURES:
Evacuate area
Sweep up and place in bag.
Avoid raising dust.
Ventilate area and wash spill site after material pickup is complete.

7. HANDLING AND STORAGE

GENERAL PROCEDURES:
Refer to Section 8.

STORAGE:
Keep container tightly closed.
Store in corrosion proof area.
Isolate from incompatible materials.
Do not store near oxidizing materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:
Ventilation - General and local ventilation are required.

PERSONAL PROTECTION
EYES AND FACE:
Chemical goggles required and an eye wash in work area.

RESPIRATORY:
Use NIOSH approved respirator with dust and mist protection.

PROTECTIVE CLOTHING:
Face shield, boots, protective suit and impervious (neoprene) gloves.

OTHER USE PRECAUTIONS:
Safety shower and eye wash in the work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Crystal
Color: White
pH: 1.2
Percent Volatile: 0
Melting Point: 215 to 225°C
Solubility in Water: 40 at 70°C
Specific Gravity: 2.03 (water=1)

COMMENTS:
pH: pH listed above is for a 2% solution
Water Solubility: Solubility listed above is grams per 100 grams of water.

10. STABILITY AND REACTIVITY

STABLE: Yes

HAZARDOUS POLYMERIZATION: No

HAZARDOUS DECOMPOSITION:
Ammonia, Sulfur Oxides, Nitrogen Oxides,

INCOMPATIBLE MATERIALS:
Bases, metals and oxidizers

11. TOXICOLOGICAL INFORMATION

ACUTE
Eyes: Corrosive. Rapidly causes pain, burns, corneal injury. May cause permanent damage and blindness.
Skin: Corrosive. Rapidly causes pain, burns, redness, swelling and damage to tissue. Not likely to be absorbed in toxic amounts.
Ingestion: Corrosive. Harmful if swallowed. Causes pain and severe burns to mouth, throat and stomach. Large amounts may cause illness or death.
Inhalation: Irritant. May cause pain and coughing

GENERAL COMMENTS:
Carcinogens: Not listed by IARC, USA NTP, or USA OSHA.

COMMENTS:
Only selected Registry of Toxic Effects of Chemical Substances (RTECS) data is presented in this document. See the actual entry in RTECS for complete information.

RTECS Number: WO5950000

LD50 (rats) = 1600 mg/kg

12. ECOLOGICAL INFORMATION

GENERAL COMMENTS:
Degradability: Not biodegradable.
Fish Toxicity: No information

13. DISPOSAL CONSIDERATIONS

PRODUCT DISPOSAL:
Ship via permitted waste hauler to permitted hazardous waste disposal facility for incineration (preferred) or landfilling.

EMPTY CONTAINER:
Ship to permitted hazardous waste disposal facility for incineration (preferred) or for landfilling.

RCRA/USEPA WASTE INFORMATION:
RCRA Hazardous Waste Number: D002 (corrosive)

COMMENTS:
Always follow ALL applicable federal, state and local regulations.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)
Proper Shipping Name: Sulfamic Acid
Hazard Class: 8
NA/UN Number: UN2967
Packing Group: III
Reportable Quantity (RQ) Under CERCLA: None
Placards: Corrosive
Label: Corrosive - 8

15. REGULATORY INFORMATION

DOT Label Symbol and Statement of Hazard

DOT Corrosive

UNITED STATES
SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

Fire: No Pressure Generating: No Reactivity: No Acute: Yes Chronic: No

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)
Reportable Spill Quantity: Not established

TSCA (TOXIC SUBSTANCE CONTROL ACT)
TSCA Status: All components of this material are on the TSCA inventory.

STATE REGULATIONS
PROPOSITION 65 STATEMENT:
This product does not contain any substance(s) which are defined by the state of California to cause cancer, birth defects, or other reproductive effects.

16. OTHER INFORMATION

Approved by: Charles M. Maddin, PhD, FAIC
Approval date: 11/16/1998

REVISION SUMMARY
Revision #: 2

This MSDS replaces the November 17, 1997 MSDS. Any changes in information are as follows:
In Section 1
Approved by [ ] Print CHEMTREC Phone Number

In Section 4
Firstaid - Skin

In Section 9
(Group Field) for Water Solubility Water Solubility (from) (%) Water Solubility Temperature °C Water Solubility Comments

In Section 14
DOT U.S. Surface Freight Class

NFPA CODES
Fire: 1 Health: 2 Reactivity: 0

HMIS CODES
Fire: 1 Health: 2 Reactivity: 0

MANUFACTURER DISCLAIMER:
[™] Indicates a trade or service mark of HydroChem Industrial Services, Inc.

The information herein is believed to be accurate and is presented in good faith; however, no warranties or representations are made by HydroChem Industrial Services, Inc. regarding the accuracy or completeness of the information.

HydroChem Industrial Services, Inc. shall not be held liable for any damage resulting from the handling, or from contact with the above product.

MATERIAL SAFETY DATA SHEET

DATE PREPARED: 12/22/2000
MSDS No: M003
Soda Ash, light

HydroChem® INDUSTRIAL SERVICES, INC.

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: Soda Ash, light
Product Code: M003
Product Name: Sodium Carbonate
Chemical Family: Alkaline
Molecular Formula: Na_2CO_3
Generic Name: Soda Ash

MANUFACTURER:
HydroChem Industrial Services, Inc.
900 Georgia Ave.
Deer Park, TX 77536
Customer Service: (800) 934-9376

24 HR. EMERGENCY TELEPHONE NUMBERS:

Emergency Contact:	HydroChem ER
Emergency Phone	(800) 569-4889

2. COMPOSITION/INFORMATION ON INGREDIENTS

	wt.%	CAS Registry #
Sodium carbonate	100	497-19-8

COMMENTS:
Exposure limits for this product are not established. A TLV of 10 mg/m3 is recommended for dust.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW
PHYSICAL APPEARANCE:
White powder

IMMEDIATE CONCERNS:
No hazard in normal industrial use.
Dust may be irritating to eyes and respiratory tracts.

MEDICAL CONDITIONS AGGRAVATED:
Persons with pre-existing skin disorders, eye problems or impaired pulmonary function may be at increased risk from exposure.

ROUTES OF ENTRY:
Inhalation

TARGET ORGANS:
No Data

4. FIRST AID MEASURES

EYES:
Immediately flush eyes with water for 30 minutes while holding eyelids open. Seek medical attention.

SKIN:
Immediately wash with soap and water. Rinse thoroughly. Seek medical attention if effects occur. Launder contaminated shoes and clothing before reuse.

INGESTION:
If swallowed, give 2 glasses of milk (preferred) or water and consult physician.

INHALATION:
Remove to fresh air. See a doctor if effects occur.

5. FIRE FIGHTING MEASURES

Flashpoint and Method: Not Applicable
Flammable Limits: Not Applicable
Autoignition Temperature: Not Determined

EXTINGUISHING MEDIA:
Use alcohol foam, carbon dioxide, dry chemical or water spray when fighting fires involving this material.

HAZARDOUS COMBUSTION PRODUCTS:
Sodium oxide, oxides of carbon

FIRE FIGHTING EQUIPMENT:
As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective clothing to prevent contact with skin and eyes.

6. ACCIDENTAL RELEASE MEASURES

GENERAL PROCEDURES:
Scoop into appropritate containers.
Flush residual with plenty of water.

7. HANDLING AND STORAGE

GENERAL PROCEDURES:
Refer to Section 8.

STORAGE:
No special precautions required.
Avoid wetting.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:
Ventilation - General and local ventilation are required.

PERSONAL PROTECTION
EYES AND FACE:
Chemical goggles required and an eye wash in work area.

RESPIRATORY:
None normally needed. For protection from dust, use NIOSH approved respirator with dust protection.

PROTECTIVE CLOTHING:
Clean body covering and chemical resistant gloves.

OTHER USE PRECAUTIONS:
Safety shower and eye wash in the work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Powder
Color: White
pH: 10.3
Percent Volatile: None
Vapor Pressure: Not Determined
Boiling Point: Decomposes
Solubility in Water: 17 at 68°F
Specific Gravity: 2.509 (water=1)

COMMENTS:
pH: for a 1% solution
Water Solubility: Solubility listed above is grams per 100 grams of water.

10. STABILITY AND REACTIVITY

STABLE: Yes

HAZARDOUS POLYMERIZATION: No

HAZARDOUS DECOMPOSITION:
Sodium oxide

INCOMPATIBLE MATERIALS:
Strong acids

11. TOXICOLOGICAL INFORMATION

ACUTE
Eyes: Irritant. May cause pain, redness, discomfort.
Skin: No effect expected. Prolonged or repeated contact may cause mild irritation.
Ingestion: No effect expected. Swallowing large amounts may cause illness.
Inhalation: No effect expected. Prolonged or repeated exposure may cause mild irritation. Dust is irritating.

GENERAL COMMENTS:
Carcinogens: Not listed by IARC, USA NTP, or USA OSHA.

COMMENTS:
Only selected Registry of Toxic Effects of Chemical Substances (RTECS) data is presented in this document. See the actual entry in RTECS for complete information.

RTECS Number: VZ4050000 – sodium carbonate

LD50 (rats) = 4090 mg/kg (sodium carbonate)

12. ECOLOGICAL INFORMATION

GENERAL COMMENTS:
Degradability: Not biodegradable.
Fish Toxicity: Low toxicity to fish.

COMMENTS:
LC50 (P. promelas) = 400 mg/L

13. DISPOSAL CONSIDERATIONS

PRODUCT DISPOSAL:
Dispose of in accordance with ALL applicable federal, state and local regulations.

EMPTY CONTAINER:
Send empty bags to sanitary landfill. Render other types of containers unuseable by puncturing or crushing and sending to a sanitary landfill unless prohibited by local regulations.

RCRA/USEPA WASTE INFORMATION:
This material is not a RCRA regulated material.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)
Proper Shipping Name: Sodium Carbonate – Not Regulated
Reportable Quantity (RQ) Under CERCLA: None
Placards: None
Label: None

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

Fire: No Pressure Generating: No Reactivity: No Acute: Yes Chronic: No

Title III Notes: This product contains no substances which are defined as toxic chemicals under the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (40 CFR Part 372).

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)
Reportable Spill Quantity: Not established

TSCA (TOXIC SUBSTANCE CONTROL ACT)
TSCA Status: All components of this material are on the TSCA inventory.

STATE REGULATIONS

PROPOSITION 65 STATEMENT:
This product does not contain any substance(s) which are defined by the state of California to cause cancer, birth defects, or other reproductive effects.

16. OTHER INFORMATION

REASON FOR ISSUE:
Biannual review

Approved by: Charles M. Maddin, PhD, FAIC
Approval date: 10/19/2000

REVISION SUMMARY
Revision #: 3

This MSDS replaces the November 09, 1998 MSDS. Any changes in information are as follows:
In Section 1
Reason for Issue Date Prepared

In Section 3
Physical Appearance Medical Conditions Aggravated Routes of Entry Target Organs

In Section 9
(pH) (from) (Group Field) for Water Solubility Water Solubility (from) (%) Water Solubility Temperature °F Water Solubility Comments

In Section 15
SARA Title III Notes

NFPA CODES
Fire: 0 Health: 1 Reactivity: 0

HMIS CODES
Fire: 0 Health: 1 Reactivity: 0

MANUFACTURER DISCLAIMER:
[™] Indicates a trade or service mark of HydroChem Industrial Services, Inc.

The information herein is believed to be accurate and is presented in good faith; however, no warranties or representations are made by HydroChem Industrial Services, Inc. regarding the accuracy or completeness of the information.

HydroChem Industrial Services, Inc. shall not be held liable for any damage resulting from the handling, or from contact with the above product.

3213

Texmatrk chemicals

EPAHO104001362

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/13/2009**

Dear **Linda Salinas**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3213

Expiration Date 3/13/2011

Generator: Texmark Chemicals, Inc.
Address: 900 Clinton Drive
Galena Park, TX 77547

Waste Information

Name of Waste: Butanol Lights
TCEQ Waste Code #: PRODUCT
Container Type:
Detailed Description of Process Generating Waste:
Production of butanol and butanol lights through distillation
Color: Colorless **Odor:** Harsh fuel oil **pH:** 5-9
Physical State:
Incompatibilities: Strong Oxidizers
Safety Related Data/Special Handling:
Flammable PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

#3213

GB
JR

Product

CES Environmental Services, Inc.

4904 Griggs Road Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

SECTION 1: Material Producer Information

Company:	Texmark Chemicals		
Address:	900 Clinton Drive		
City, State, Zip:	Galena Park, TX 77547		
Contact:	Linda Salinas	**Title:**	Environmental Manager
Phone No:	713-455-1206	**Fax No:**	lsalinas@texmark.com
24/hr Phone:	713-495-1226		
U.S. EPA I.D. No:	NA		
State I.D.	NA	**SIC Code:**	2869

SECTION 2: Billing Information – ☒ Same as Above

Company:			
Address:			
City, State, Zip:			
Contact:		**Title:**	
Phone No:		**Fax No:**	

SECTION 3: General Description of the Material / Product

Name of Material / Product: Butanol Lights
Detailed Description of Process Generating or Producing the Material / Product: Production of butanol and butanol lights through distillation

Physical State: ☒ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color: Colorless **Odor:** Harsh fuel oil

Specific Gravity (water=1): .8314 **Density:** 6.9 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Layers: ☒ Single-phase ☐ Multi-phase

Container Type:	☐ Drum	☐ Tote	☒ Truck	☐ Other (explain)
Container Size:			5,000gal	

Frequency: ☐ Weekly ☒ Monthly ☐ Quarterly ☐ Yearly

Product

Proper U.S. DOT Shipping Name: RQ, UN1993, Flammable Liquids, N.O.S. (n-butyl alcohol, i-butyl alcohol), 3, PG II

EPAHO104001364

Class: 3 **UN/NA:** UN1993 **PG:** II **RQ:** 100

Flash Point	pH	N/A	N/A	Solids
<10 F	5-9			0%

Oil&Grease	TOC	Zinc	Copper	Nickel
0mg/l	N/Amg/l	N/Amg/l	N/Amg/l	N/Amg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	Concentration	Units
The material / product consists of the following materials	**Ranges are acceptable**	**or %**
OXO Lights	95-100	%
Water	0-5	%

SECTION 5: Safety Related Data

If the handling of this material / product requires the use of special protective equipment, please explain.
Flammable PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.
MSDS

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
Strong oxidizers

SECTION 8: Material Producer's Certification

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** 3/12/09

Printed Name/Title: Linda Salinas/Environmental Manager

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Technical Manager: _____

Date: 3-13-09 Approved Rejected

Approval Number: _____

EPAHO104001365

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pricing (including freight):**

Charge $.15 / gallon + transportation

2. **Contamination Limits (maximum limit before surcharges apply):**

3. **Surcharge Pricing:**

4. **Special Testing Requirements:**

5. **Treatment and Handling Protocol:**

Product Management to handle.
Call Matt with questions

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

EPAHO104001366

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

7. **Tests for Product Recovered/Recycled (if applicable):**

8. **Management for Product Recovered/Recycled (if applicable);**

EPAHO104001367

TEXMARK

MSDS

Material Safety Data Sheet

P.O. Box 67
900 CLINTON
GALENA PARK,TX 77547
(713) 455-1206

HAZARD INDEX

FLAMMABILITY	3
HEALTH	1
REACTIVITY	1

OXO LIGHTS

SECTION 1: IDENTIFICATION

CHEMICAL NAME:	NA, Mixed alcohols in C3-C6 range, mostly C4
CHEMICAL FAMILY:	Alcohols
TRADE NAME:	OXO Lights
SYNONYMS:	C4 Alcohol Blendstock
FORMULA:	NA
CAS NUMBER:	See composition
MANUFACTURER:	Texmark Chemicals, Inc. 900 Clinton Drive Galena Park, TX 77547

TELEPHONE NUMBERS

EMERGENCY:	TEXMARK	(713) 455-1206
	CHEMTREC	(800) 424-9300
PRODUCT SAFETY:		(713) 455-1206

SECTION 2: COMPOSITION

COMPONENT NAME	CAS No.	ACGIH TLV	ACGIH STEL	OSHA PEL	OSHA STEL	WT%
n-Butyl Alcohol	71-36-3	50 ppm	NA	NA	NA	9-20
i-Butyl Alcohol	78-83-1	NA	NA	NA	NA	4-20
butyraldehyde	123-72-8	NA	NA	NA	NA	2-12

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: **Material is extremely flammable. Keep away from electric motors, heaters, open flames, high intensity heat sources or other ignition sources. Do not grind, weld, cut, or drill on or near containers or pipes. Vapors can ignite explosively.**

SIGNAL WORD: DANGER!

PHYSICAL & HEALTH HAZARDS: FLAMMABLE LIQUID. Vapors can travel to a source of ignition and flash back. Prolonged and repeated exposure to vapors may cause damage to the CNS. Aspiration into the lungs may cause chemical pneumonia.

PHYSICAL STATE: Liquid

COLOR: Colorless

ODOR: Strong characteristic butanol odor. Harsh fuel oil and banana smell.

ODOR THRESHOLD: NA

ROUTES OF EXPOSURE: Inhalation, Skin contact, Eye contact, Ingestion

SIGNS & SYMPTOMS OF ACUTE EXPOSURE:	Headache, sneezing and cough may occur. N-butyl alcohol is an eye, skin, and respiratory tract irritant. High concentrations may cause CNS depression. Exposure to high concentration could cause lowering of consciousness.
SKIN CONTACT:	May be mildly irritating to the skin. Dry skin, roughness. Repeated or prolonged contact with skin may cause dermatitis.
INHALATION:	Coughing, dizziness, drowsiness, and headache may occur. Respiratory tract irritant
EYE CONTACT:	May be mildly irritating to the eyes. May cause blurred vision and burning sensation. Lachrymation and photophobia, possible corneal damage.
INGESTION:	Ingestion would likely cause abdominal pain, drowsiness, and vomiting.
CHRONIC HEALTH EFFECTS:	Prolonged and repeated exposure to vapors may cause damage to the CNS and may cause dermatitis.
CONDITIONS AGGRAVATED BY EXPOSURE:	Persons with pre-existing CNS disease, skin disorders, or chronic respiratory disease should avoid exposure.
CARCINOGENICITY:	OXO Lights is not listed as a human carcinogen by NTP, IARC, or OSHA.

SECTION 4: FIRST AID MEASURES

Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid.
For specific information refer to the EMERGENCY OVERVIEW in Section 3 of this MSDS.

EYE CONTACT:	Flush eyes with water. If irritation persists, seek medical attention.
SKIN CONTACT:	Remove contaminated clothing; wash skin with soap and water. If irritation persists, seek medical attention. Thoroughly clean contaminated clothing before reuse; discard contaminated leather goods (gloves, shoes, wallets, belts, etc.).
INHALATION:	Remove subject to fresh air. If breathing has stopped, perform artificial respiration. When breathing is difficult, properly trained personnel may assist the affected person by administering oxygen. Keep the affected person warm and at rest. Seek medical attention immediately.
INGESTION:	Rinse mouth. Give plenty of water to drink. DO NOT induce vomiting. If vomiting does occur, have victim lean forward to reduce risk of aspiration. Get medical attention immediately.

SECTION 5: FIRE FIGHTING

FLAMMABILITY CLASSIFICATION:	IB Flammable Liquid.
FLASH POINT:	< 10°F (-12°C), TCC
AUTO-IGNITION TEMPERATURE:	NA
FLAMMABLE LIMITS:	LEL: 1.4%, UEL: 11.3% (n-butyl alcohol)
NFPA RATING:	HEALTH: 1 FLAMMABILITY: 3 REACTIVITY: 1 SPECIAL: NA
HAZARDOUS COMBUSTION PRODUCTS:	Carbon monoxide (CO), and unidentified organic compounds may be formed.
SPECIAL CONDITIONS TO AVOID:	Exposure to extreme heat and ignition sources.
NORMAL EXTINGUISHING MEDIA:	Alcohol-resistant foam, carbon dioxide, dry chemical.

50% th

FIRE FIGHTING INSTRUCTIONS:	PPE: Wear a NIOSH-approved positive pressure self-contained breathing apparatus and firefighter's turnout gear. Containers exposed to intense heat should be cooled with water to prevent pressure build up; clear area of unprotected personnel. Fight from a maximum distance or use unmanned hose holders or monitor nozzles. Withdraw immediately in case of rising sound from venting safety devices or discoloration of vessel. ALWAYS stay away from the ends of 'bullet' tanks.

SECTION 6: ACCIDENTAL RELEASE MEASURES

RELEASE RESPONSE:	Eliminate all sources of ignition. Stop leak if without risk. Use water spray curtain to divert vapor drift. Prevent entry into waterways, sewers, basements, or confined areas; dike if needed. Depending on the size and nature of the release, all responders may need to be HAZWOPER trained and local, state, and federal authorities may need to be notified.

SECTION 7: HANDLING AND STORAGE

HANDLING:	Do not handle near heat, sparks, or open flame. Avoid contact with incompatible agents. Use only with adequate ventilation or personal protection. Avoid breathing vapors and contact with eyes, skin and clothing. Metal containers involved in the transfer of this material should be grounded and bonded.
STORAGE:	Keep containers tightly closed in a cool, well-ventilated place. Store away from oxidizers and other combustible material by a distance of at least 20 feet. Ground all equipment containing this material.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

ENGINEERING CONTROLS:	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommend exposure limits. If user operations generate fumes or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
PERSONAL PROTECTION	
INHALATION:	A respiratory protection program that meets OSHA's 29CFR1910.134 or ANSI Z88.2 requirements must be followed, whenever workplace conditions warrant respirator use.
SKIN:	Appropriate protective clothing should be worn to prevent skin contact.
EYES:	Safety glasses for normal use. Goggles and face shield should be used if there is the chance of liquid splash or spray.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

SPECIFIC GRAVITY (H20 = 1) :	0.8314	BOILING POINT:	167-331°F (75-166°C)
VAPOR DENSITY (AIR = 1) :	NA	VAPOR PRESSURE:	6-10psi (100 mmHg)@68°F (20°C)
MELTING PT:	NA	WATER SOLUBILITY:	Soluble
pH:	NA	VISCOSITY:	NA
EVAPORATION RATE(Butyl Acetate=1):	NA		

SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY:	Stable
CONDITIONS TO AVOID:	High temperature. All sources of ignition.
INCOMPATIBILITY WITH:	Strong oxidizers.

HAZARDOUS PRODUCTS OF DECOMPOSITION:	NA
HAZARDOUS POLYMERIZATION:	NA

SECTION 11: TOXICOLOGICAL INFORMATION

NONE AVAILABLE.

SECTION 12: ECOLOGICAL INFORMATION

NONE AVAILABLE.

SECTION 13: TRANSPORTATION INFORMATION

PROPER SHIPPING NAME:	Flammable Liquid N.O.S. (n-butyl alcohol, i-butyl alcohol)		
DOT HAZARD CLASS:	3		
UN ID:	UN 1993		
PACKING GROUP:	II	MARINE POLLUTANT:	No
REPORTABLE QUANTITY:	22, 000 lb due to n-butyl alcohol content 71, 000 lb due to i-butyl alcohol content	NAER GUIDEBOOK:	129
LABEL/PLACARD:	FLAMMABLE LIQUID	DOT STATUS:	Regulated

SECTION 14: REGULATORY INFORMATION

THIS PRODUCT CONTAINS THE FOLLOWING TOXIC CHEMICAL(S) SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 SARA TITLE III AND 40 CFR 372:
n-Butyl Alcohol, CAS: 71-36-3, 9-20% WT.

THIS INFORMATION MUST BE INCLUDED IN ALL MSDS's THAT ARE COPIED AND DISTRIBUTED FOR THIS MATERIAL.

THE INFORMATION CONTAINED HEREIN IS BASED ON THE DATA AVAILABLE TO US AND IS BELIEVED TO BE CORRECT. HOWEVER, TEXMARK MAKES NO WARRANTY, EXPRESSED OR IMPLIED, REGARDING THE COMPLETENESS OR ACCURACY OF THIS DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF. TEXMARK ASSUMES NO RESPONSIBILITY FOR, AND EXPRESSLY DISCLAIMS LIABILITY FOR, LOSS OR INJURY ARISING OUT OF CONTACT WITH OR USE OF THE PRODUCT DESCRIBED HEREIN.

REVISED: December 6, 2001, #2

Recent tank analysis of OXO lights

	TKCK
RC# / P.O.#	
Material	OXO LTS
Tank #	405
Time	11:00 AM
Date	2/26/2009
API	35.8
LE	0.47
P ALD.	19.81
PROP-IB. ALD	13.02
B. ALD	21.62
IBA	2.83
NBA	9.95
HEPT.	15.44
2ME 1 B	0.04
2ME 2PE	0.05
HEAV.	11.84
FLASH	
COLOR	
WATER%	4.93
n-Pentanol	

Thanks

Linda Salinas
Environmental Manager
Texmark Chemicals Inc.
713-495-1229

EPAHO104001372

3214
Calpine

EPAHO104001373

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **4/8/2009**

Dear **Rick Damon**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3214

Expiration Date 4/8/2011

Generator: Calpine Baytown Energy Center
Address: 8605 FM 1405
Baytown, TX 77520

Waste Information

Name of Waste: Non RCRA Waste Dessicant
TCEQ Waste Code #: 00223101
Container Type:
Detailed Description of Process Generating Waste:
spent dessicant from air dryers. Used to remove moisture
Color: white to grey **Odor:** none **pH:** na
Physical State:
Incompatibilities: none
Safety Related Data/Special Handling:
level D PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

DB/MM

15

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility 4904 Griggs Road, Houston, TX 77021 Phone (713) 676-1460 Fax: (713) 676-1676 U.S. EPA ID Number: TXD008950461 ISWR Number: 30900 TCEQ Industrial Solid Waste Permit Number: 30948	☐ CES Environmental Services - Port Arthur Facility 2420 S. Gulfway Dr., Port Arthur, TX 77641 Phone (713) 676-1460 Fax: (713) 676-1460 U.S. EPA ID Number: TXR000079307 ISWR Number: 88585

SECTION 1: Generator Information

Company: Calpine Baytown Energy Center
Address: 8605 FM 1485
City: Baytown **State:** TX **Zip:** 77520
Contact: Rick Daymond **Title:** Plant Engineer
Phone Number: 281-303-4216 **Fax Number:** 281-303-4299
24/hr Phone Number: 281-303-4216
US EPA ID No: TXR000043976
State ID No: 86845 **SIC Code:**

SECTION 2: Billing Information - ☐ **Same as Above**

Company:
Address:
City: **State:** **Zip:**
Contact: **Title:**
Phone Number: **Fax Number:**

SECTION 3: General Description of the Waste

Name of Waste: Non RCRA Waste Dessicant
Detailed Description of Process Generating Waste:

Spent Dessicant from air dryers. Used to remove moisture.

Physical State: ☐ **Liquid** ☐ **Sludge** ☐ **Powder**
☑ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: White to Grey **Odor:** None

Specific Gravity (water=1): .5-1 **Density:** 6 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ **Single-phase** ☐ **Multi-phase**

Container Type: ☑ **Drum** ☐ **Tote** ☐ **Truck** ☐ **Other (explain)**

Frequency: ☐ **Weekly** ☐ **Monthly** ☑ **Yearly** ☐ **One-Time**
Quantity: 5

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Na

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes: Na

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes: Na

Texas State Waste Code Number: 00223101

Proper US DOT Shipping Name: Non-RCRA Waste Solids

Class: Na **UN/NA:** Na **PG :** Na **RQ:** Na

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>200		Na		0	mg/l	0	mg/l	100	%
Oil & Grease		**TOC**		**Zinc**		**Copper**		**Nickel**	
>1500	mg/l	Na	mg/l	Na	mg/l	Na	mg/l	Na	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Spent Dessicant	100	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Level D PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. Analysis

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

None

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	
TCLP Volatiles:	Na-None in Process- Benzene ran as a precaution
TCLP Semi-Volatiles:	Na-None in Process
Reactivity:	Na-None in Process
Corrosivity:	Na-None in Process
Ignitability:	Na-None in Process

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory*: *Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory*: *Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

***Organics Subcategory*: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☐ generator knowledge and/or ☒ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Richard Damon **Date:** 4/3/2009

Printed Name/Title: Richard Damon/ Plant Engineer

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: Robert Thomas
Date: 4-8-09 ☑ Approved ☐ Rejected
Approval Number: HOU-3214

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pricing (including freight):**

$50/dm

2. **Contamination Limits (maximum limit before surcharges apply):**

Reject if non conforming to profile

3. **Surcharge Pricing:**

Na

4. **Special Testing Requirements:**

Na-visual-make sure it conforms to profile

5. **Treatment and Handling Protocol:**

Class 1 landfill

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

EPAHO104001379

7. **Tests for Product Recovered/Recycled (if applicable):**

Na

8. **Management for Product Recovered/Recycled (if applicable):**

Na

Mercury Environmental Services, Inc.

6913 HWY 225, Deer Park, TX 77536
Phone: (281)-476-4534 Fax: (281)-476-4406

Calpine - Baytown Energy Center
P.O. Box 840
Baytown, TX 77521

Phone: (281) 303-4216
Fax: (281) 303-4299

Attn: **Rick Damon**

- CERTIFICATE OF RESULTS -

MES Lab#: 9030341

Client Sample ID: Used Dessicant
Extended ID: Prj: Disposal of Air Dryer Dessicant

Sample Collect Date: 3/24/2009 @ 9:00:00 AM
Sample Receipt Date: 3/24/2009 @ 12:45:00 PM
Sample Type: Grab

Test Group / Method

TCLP Metals (11) Method: SW-846 6010B	MDL	RL	Result	Units	Analyst: JCA Date / Time
Antimony	0.032	1	< 0.032	mg/L	3/25/2009 / 3:22 PM
Arsenic	0.014	5	**0.021**	mg/L	3/25/2009 / 3:22 PM
Barium	0.0005	100	**0.529**	mg/L	3/25/2009 / 3:22 PM
Beryllium	0.0005	0.08	< 0.0005	mg/L	3/25/2009 / 3:22 PM
Cadmium	0.002	1	< 0.002	mg/L	3/25/2009 / 3:22 PM
Chromium	0.002	5	< 0.002	mg/L	3/25/2009 / 3:22 PM
Lead	0.005	5	< 0.005	mg/L	3/25/2009 / 3:22 PM
Nickel	0.003	70	< 0.003	mg/L	3/25/2009 / 3:22 PM
Selenium	0.024	1	**0.032**	mg/L	3/25/2009 / 3:22 PM
Silver	0.002	5	< 0.002	mg/L	3/25/2009 / 3:22 PM

TCLP Mercury Method: SW-846 7470A	MDL	RL	Result	Units	Analyst: JCA Date / Time
Mercury	0.0002	0.2	< 0.0002	mg/L	3/26/2009 / 10:30 AM

Total Petroleum Hydrocarbons Solid Method: TNRCC 1005	MDL	Result	Units	Analyst: HDG Date / Time
C8 - C12 Hydrocarbons	4	< 4	mg/kg	3/30/2009 / 9:26 PM
>C12 - C28 Hydrocarbons	8	**714**	mg/kg	3/30/2009 / 9:26 PM
>C28 - C36 Hydrocarbons	8	**1060**	mg/kg	3/30/2009 / 9:26 PM
Total TPH	20	**1770**	mg/kg	3/30/2009 / 9:26 PM

TCLP Benzene Method: SW-846 8260B	MDL	RL	Result	Units	Analyst: HDG Date / Time
Benzene	0.005	0.5	< 0.005	mg/L	3/25/2009 / 3:50 PM

01/25/2008 01:37 2814764406 MERCURY PAGE 01/03

EPAHO104001381

- CERTIFICATE OF RESULTS -

MES Lab#: 9030341

Client Sample ID: Used Dessicant
Extended ID: Prj: Disposal of Air Dryer Dessicant

Sample Collect Date: 3/24/2009 @ 9:00:00 AM **Sample Type:** Grab
Sample Receipt Date: 3/24/2009 @ 12:45:00 PM

Flags: H: Exceeds "High Limit" L: Below "Low Limit" RL=regulatory limit

John Keller, Ph.D., Lab Director

Wednesday, April 01, 2009
Date

01/25/2008 01:37 2814764406 MERCURY PAGE 02/03

EPAHO104001382

MES - CHAIN OF CUSTODY

Mercury Environmental Services
6913 Hwy. 225 • Deer Park, TX 77536
1-800-771-4MES
(281) 476-4534
Fax (281)-476-4406

1

COMPANY NAME: (BILL TO:) Calpine Bayfown Energy Center
COMPANY ADDRESS: 8605 FM1405
CITY Bayfown STATE TX ZIP 77523
CONTACT PERSON'S NAME: Rick Damon
CONTACT PERSON'S PHONE: 281-303-4216 FAX #: 281-303-4297

2

YOUR PROJECT NO.: | YOUR P.O. #: AX20060401 | YOUR PROJECT NAME: Disposal of Air Dryer Dessicant
PROJECT ADDRESS:

3

YOUR SAMPLE DESCRIPTION	GRAB/COMP.	DATE	TIME	MATRIX	TCLP 11 Metals	TPH	TCLP Benzene					NUMBER OF CONTAINERS	PRESERVATIONS
Used Dessicant	Grab	3/24/09	09:00		X	X	X						
~~Used Dessicant~~ RAD													

9030341

4 PARAMETERS FOR ANALYSIS

5 REMARKS
TURNAROUND TIME: STD
DETECTION LIMITS SPECIAL LIMITS REQUIRED: Yes No
Please circle one, if Yes, please describe below or include separate sheet detailing requirements.

6

PERSON TAKING SAMPLE SIGNATURE (a. - Print Name & b. - Sign.): a. Richard Damon b. Richard Damon
RELINQUISHED BY: (Signature) [signature] DATE 3-24-09 TIME 1215 RECEIVED BY: (Signature) Allison Diamond

7

RELINQUISHED BY: (Signature) Allison Diamond DATE 3/24/09 TIME 12:45 RECEIVED BY: (Signature) R. Hargrave
RELINQUISHED BY: (Signature) DATE TIME RECEIVED BY: (Signature)
METHOD OF PAYMENT | SHIPPED BY: (Signature) | COURIER (Signature) | RECEIVED FOR MES BY: (Signature) Ronda Hargrave DATE 3/24/09 TIME 12:45

8

Sample Remainder Disposal
☐ Return Sample Remainder To Client Via
☐ Request Lab To Dispose Of All Sample Remainders
(Signature) (Date)

Form # MES - CCRI

WHITE & CANARY – Shipped with Sample PINK – Retained by Customer WHITE – Returned with Report

3215
Dana Container

EPAHO104001384

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/13/2009**

Dear **Ruben Fernandez**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3215

Expiration Date 3/13/2011

Generator: Dana Container
Address: 902 Sens Road
La Porte, TX 77572

Waste Information

Name of Waste: Soil
TCEQ Waste Code #: 10084891
Container Type:
Detailed Description of Process Generating Waste:
Used oil spilled on ground & area was dug up
Color: Brown to black **Odor:** hydrocarbon **pH:** 4-9
Physical State:
Incompatibilities: None known
Safety Related Data/Special Handling:
Standard PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

#325 JB JR IS

Need RCRA metals
BTEX

CES Environmental Services, Inc.
4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit Number: 30948
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

SECTION 1: Generator Information

Company: Dana Container
Address: 902 Sens Road
City: La Porte State: TX Zip: 77572
Contact: Ruben Fernandez Title:
Phone Number: 281-471-4700 Fax Number: 281-470-2570
24/hr Phone Number:
US EPA ID No: TXR000011155
State ID No: 41563 SIC Code:

SECTION 2: Billing Information - ☐ Same as Above

Company: Dana Container
Address: PO Box 1023
City: La Porte State: TX Zip: 77572
Contact: Title:
Phone Number: Fax Number:

SECTION 3: General Description of the Waste

Name of Waste: Soil
Detailed Description of Process Generating Waste:

used Oil spilled on ground & area was dug up.

Physical State: ☐ Liquid ☐ Sludge ☐ Powder ☑ Solid ☐ Filter Cake ☐ Combination

Color: Brown to Black Odor: Hydrocarbon

Specific Gravity (water=1): N/A Density: N/A lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ Single-phase ☐ Multi-phase

Container Type: ☐ Drum ☐ Tote ☐ Truck ☑ Other (explain)

Frequency: ☐ Weekly ☑ Monthly ☐ Yearly ☐ One-Time
Quantity: 1 CY BOX

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No
If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011
Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: 10084891

Proper US DOT Shipping Name: Non-Hazardous, Non-Regulated Material (soil)
Class: na UN/NA: na PG: na RQ: na

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>140		4-9		BRL	mg/l	BRL	mg/l	100	%
Oil & Grease		TOC		Zinc		Copper		Nickel	
>1500	mg/l	N/A	mg/l	BRL	mg/l	BRL	mg/l	BRL	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Soil	80-95	%
Oil	5-20	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Standard PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. ~~None~~ Analysis - A&B Sample# 09030105.01

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

N/A

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	BRL
TCLP Volatiles:	BRL
TCLP Semi-Volatiles:	BRL
Reactivity:	Non-Reactive
Corrosivity:	Non-Corrosive
Ignitability:	Non-Ignitable

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Pertaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory: Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory: Subpart C

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** 3/4/2009

Printed Name/Title: Julio Cuellar

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: _____
Date: 3-13-09 ☑ Approved ☐ Rejected
Approval Number: _____

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$45/yd + $70/hr trans

2. Contamination Limit (maximum limit before surchages apply):

3. Surcharge Pricing:

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

Wil be redirected to Class 1 landfill

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

Laboratory Analysis Report

Total Number of Pages: 8

Job ID : 09030105

10100 East Freeway, Suite 100, Houston, TX 77029 tel: 713-453-6060, fax: 713-453-6091, http://www.ablabs.com

Client Project Name :
0309-06 Dana Containers / Sens Rd.

Report To :	Client Name:	CES Environmental	P.O.#.:	0309-06
	Attn:	Jenny Rust	Sample Collected By:	Durim T.
	Client Address:	4904 Griggs Rd	Date Collected:	03/05/09
	City, State, Zip:	Houston, Texas, 77021		

A&B Labs has analyzed the following samples...

Client Sample ID	Matrix	A&B Sample ID
0309-06 Soil from oil soil	Soil	09030105.01

Shantall Carpenter

Released By: Shantall Carpenter
Title: Project Manager
Date: 3/9/2009

This Laboratory is NELAP (T104704213-08B-TX) accredited. Effective: 07/01/2008; Expires: 06/03/2009
Scope: Non-Potable Water, Drinking Water, Air, Solid, Hazardous Waste

I am the laboratory manager, or his/her designee, and I am responsible for the release of this data package. This laboratory data package has been reviewed and is complete and technically compliant with the requirements of the methods used, except where noted in the attached exception reports. I affirm, to the best of my knowledge that all problems/anomalies observed by this laboratory (and if applicable, any and all laboratories subcontracted through this laboratory) that might affect the quality of the data, have been identified in the Laboratory Review Checklist, and that no information or data have been knowingly withheld that would affect the quality of the data.

This report cannot be reproduced, except in full, without prior written permission of A&B Labs. Results shown relate only to the items tested. Samples are assumed to be in acceptable condition unless otherwise noted. Blank correction is not made unless otherwise noted. Air concentrations reported are based on field sampling information provided by client.

Date Received : 03/05/2009 15:25

EPAHO104001392

LABORATORY TERM AND QUALIFIER DEFINITION REPORT

Job ID : 09030105

Date: 3/9/2009

General Term Definition

Back-Wt	Back Weight	Post-Wt	Post Weight
BRL	Below Reporting Limit	ppm	parts per million
cfu	colony-forming units	Pre-Wt	Previous Weight
Conc.	Concentration	Q	Qualifier
D.F.	Dilution Factor	RegLimit	Regulatory Limit
Front-Wt	Front Weight	RPD	Relative Percent Difference
LCS	Laboratory Check Standard	RptLimit	Reporting Limit
LCSD	Laboratory Check Standard Duplicate	surr	Surrogate
MS	Matrix Spike	T	Time
MSD	Matrix Spike Duplicate	TNTC	Too numerous to count
MW	Molecular Weight		

Qualifier Definition

M1	Matrix Spike/Matrix Spike Duplicate recovery is above laboratory control limits due to matrix interference.
S2	Surrogate recovery is below control limit.

EPAHO104001393

LABORATORY TEST RESULTS

Job ID : 09030105

Date 3/9/2009

Client Name: CES Environmental

Attn: Jenny Rust

Project Name: 0309-06 Dana Containers / Sens Rd.

Client Sample ID: 0309-06 Soil from oil soil

Date Collected: 03/05/09

Time Collected: 09:45

Other Information:

Job Sample ID: 09030105.01

Sample Matrix Soil

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 6010C	Total Metals								
	Arsenic	BRL	mg/Kg	1	0.5			03/06/09 17:26	TK
	Barium	146	mg/Kg	1	0.5			03/06/09 17:26	TK
	Cadmium	BRL	mg/Kg	1	0.5			03/06/09 17:26	TK
	Chromium	4.44	mg/Kg	1	0.5			03/06/09 17:26	TK
	Lead	4.31	mg/Kg	1	0.5			03/06/09 17:26	TK
	Selenium	0.695	mg/Kg	1	0.5			03/06/09 17:26	TK
	Silver	BRL	mg/Kg	1	0.5			03/06/09 17:26	TK
SW-846 7470A	Total Metals - Mercury								
	Mercury	0.012	mg/Kg	1	0.01			03/06/09 13:40	TK
SW-846 8021B	Purgeable Aromatics								
	Benzene	BRL	mg/Kg	1	0.01			03/05/09 18:34	HK
	Toluene	0.069	mg/Kg	1	0.01			03/05/09 18:34	HK
	Ethylbenzene	0.144	mg/Kg	1	0.01			03/05/09 18:34	HK
	m- & p-Xylenes	0.262	mg/Kg	1	0.02			03/05/09 18:34	HK
	o-Xylene	0.194	mg/Kg	1	0.01			03/05/09 18:34	HK
	Xylenes	0.456	mg/Kg	1	0.03			03/05/09 18:34	HK
	Trifluorotoluene(surr)	59.6	%	1	81-111		S2	03/05/09 18:34	HK

EPAHO104001394

QUALITY CONTROL CERTIFICATE

Job ID : 09030105 **Date :** 3/9/2009

Analysis : **Purgeable Aromatics** **Method :** **SW-846 8021B** **Reporting Units :** **mg/Kg**

QC Batch ID : Qb09030608 **Created Date :** 03/06/09 **Created By :** Hkhuc

Samples in This QC Batch : 09030105.01

Sample Preparation : PB09030607 **Prep Method :** SW-846 5035A **Prep Date :** 03/05/09 16:12 **Prep By :** Hkhuc

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Benzene	71-43-2	BRL	mg/Kg	1	0.01		
Toluene	108-88-3	BRL	mg/Kg	1	0.01		
Ethylbenzene	100-41-4	BRL	mg/Kg	1	0.01		
m- & p-Xylenes	108-38-3&106-42-3	BRL	mg/Kg	1	0.02		
o-Xylene	95-47-6	BRL	mg/Kg	1	0.01		
Xylenes		BRL	mg/Kg	1	0.03		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Benzene	0.1	0.101	101	0.1	0.096	96	5.1	20	80-120	
Toluene	0.1	0.087	87	0.1	0.087	87	0	20	80-120	
Ethylbenzene	0.1	0.104	104	0.1	0.103	103	1	20	80-120	
m- & p-Xylenes	0.2	0.226	113	0.2	0.223	112	1.3	20	80-120	
o-Xylene	0.1	0.099	99	0.1	0.098	98	1	20	80-120	
Xylenes	0.3	0.325	108	0.3	0.321	107	1.2	20	80-120	

QC Type: MS and MSD
QC Sample ID: 09030099.02

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Benzene	BRL	0.1	0.106	106						68-138	
Toluene	BRL	0.1	0.088	87.4						67-135	
Ethylbenzene	BRL	0.1	0.102	102						71-127	
m- & p-Xylenes	BRL	0.2	0.219	109						56-135	
o-Xylene	BRL	0.1	0.098	97.5						56-134	
Xylenes	BRL	0.3	0.317	106						59-134	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 09030105 **Date :** 3/9/2009

Analysis : **Total Metals - Mercury** **Method :** **SW-846 7470A** **Reporting Units :** **mg/Kg**

QC Batch ID : Qb09030642 **Created Date :** 03/06/09 **Created By :** Sathish

Samples in This QC Batch : 09030105.01

Digestion : PB09030625 **Prep Method :** SW-846 7470A **Prep Date :** 03/06/09 10:00 **Prep By :** Sathish

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Mercury	7439-97-6	BRL	mg/Kg	1	0.01		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Mercury	0.1	0.093	92.7	0.1	0.101	101	8.3	20	80-120	

QC Type: MS and MSD
QC Sample ID: 09030105.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Mercury	0.012	0.1	0.111	98.7						70-130	

Refer to the Definition page for terms.

EPAHO104001396

QUALITY CONTROL CERTIFICATE

Job ID : 09030105 **Date :** 3/9/2009

Analysis : Total Metals **Method : SW-846 6010C** **Reporting Units : mg/Kg**

QC Batch ID : Qb09030902 **Created Date :** 03/06/09 **Created By :** Tkhuc

Samples in This QC Batch : 09030105.01

Digestion : PB09030902 **Prep Method :** SW-846 3050B **Prep Date :** 03/06/09 12:00 **Prep By :** Tkhuc

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Arsenic	7440-38-2	BRL	mg/Kg	1	0.5		
Barium	7440-39-3	BRL	mg/Kg	1	0.5		
Cadmium	7440-43-9	BRL	mg/Kg	1	0.5		
Chromium	7440-47-3	BRL	mg/Kg	1	0.5		
Lead	7439-92-1	BRL	mg/Kg	1	0.5		
Selenium	7782-49-2	BRL	mg/Kg	1	0.5		
Silver	7440-22-4	BRL	mg/Kg	1	0.5		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Arsenic	25	25.0	100	25	25.6	102	2.4	20	80-120	
Barium	25	24.6	98.4	25	25.3	101	2.8	20	80-120	
Cadmium	25	23.2	92.8	25	23.8	95.2	2.6	20	80-120	
Chromium	25	25.1	100	25	25.8	103	2.8	20	80-120	
Lead	25	24.9	99.6	25	25.4	102	2	20	80-120	
Selenium	25	23.4	93.6	25	23.8	95.2	1.7	20	80-120	
Silver	25	24.5	98	25	25.2	101	2.8	20	80-120	

QC Type: MS and MSD
QC Sample ID: 09030105.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Arsenic	BRL	25	22.8	90.7						70-130	
Barium	146	25	190	176						70-130	M1
Cadmium	BRL	25	21.1	83.8						70-130	
Chromium	4.44	25	24.4	79.8						70-130	
Lead	4.31	25	23.9	78.4						70-130	
Selenium	0.695	25	22.0	85.2						70-130	
Silver	BRL	25	25.7	101						70-130	

Refer to the Definition page for terms.

EPAHO104001397

A & B Labs — *Chain of Custody*

The Chain of Custody is a Legal Document

Page 1 of 1

10100 East Fwy (I-10) Ste. 100
Houston, TX 77029
713-453-6060
1-877-478-6060 Toll Free
713-453-6091 Fax
ablabs.com

A&B JOB ID # 09030105

5. Project #

1. REPORT TO:
Company: CES ENVIRONMENTAL
Address: 4904 GRIGGS ROAD
HOUSTON, TX 77021
Contact: JENNY RUST
Phone: (713)676-1460
Fax: ☒ (713)676-1676
E-mail: ☒ jrust@cesenvironmental.com

2. INVOICE TO:
Company: SAME
Address:
Contact:
Phone:
Fax: ☐
E-mail: ☐

3. PO # 0309-06

4. Turnaround Time (Business Days)
☐ 1 Day* ☐ Other
☒ 2 Days*
☐ 3 Days* *Surcharge applies
☐ 7 Days - Standard

6. Project Name/Location: DANA CONTAINERS / SENS RD.

7. Reporting Requirement:
☐ TRRP Limits only ☐ TRRP Rpt. Package ☐ See Attached ☐ Standard Level II

8. Sampler's Name & Company (PLEASE PRINT): DURIM TAFILAJ / CES
Sampler's Signature & Date: [signature] 3/5

13. 14. Containers*
15. Preservatives**
16. PH-Lab Only
17. Analyses/Methods: RCRA 8 METALS; BTEX

LAB USE ONLY	9. Sample ID and Description	10. Sampling Date	Time	11. Comp.	Grab	12. Matrix Water	Soil	Sludge	Oil	Air	Other	No. of Containers	RCRA 8 METALS	BTEX					18. REMARKS
01A	0309-06 SOIL FROM OIL SPILL	3/5/09	9:45		X		X					1	X	X					

19. RELINQUISHED BY	DATE	TIME	20. RECEIVED BY	DATE	TIME
1 [signature]	3/5	3:25P			
2					
3			21. RECEIVED BY LABORATORY [signature]	3/5/09	15:25

*Containers: VOA - 40 ml vial; A/G - Amber/Glass 1 Liter; 4 oz/8 oz - glass wide mouth; P/O - Plastic/other

**Preservatives: C - Cool; H - HCl; N - HNO_3; S - H_2SO_4; OH - NaOH; T - $Na_2S_2O_3$; X - Other

METHOD OF SHIPMENT

BILL OF LADING/TRACKING #

LAB USE ONLY SAMPLING _____ RENTAL _____ P/U _____

22. KNOWN HAZARDS/COMMENTS

Temperature: 21.8 °C

Intact: Y or N (Y circled) Initials: DRW

A&B cannot accept verbal changes
Please FAX written changes to 713-453-6091

Samples will be disposed of after 30 days

EPAHO104001398

Sample Condition Checklist

Date : **03/09/09**

A&B JobID : **09030105**	Date Received : **03/05/2009**	Time Received : **3:25PM**
Client Name : **CES Environmental**		
Temperature : **21.8°C**	Sample pH : **n/a**	

	Check Points	Yes	No
1.	**Cooler seal present and signed.**	N/A	
2.	**Sample(s) in a cooler.**		X
3.	**If yes, ice in cooler.**		X
4.	**Sample(s) received with chain-of-custody.**	X	
5.	**C-O-C signed and dated.**	X	
6.	**Sample(s) received with signed sample custody seal.**	N/A	
7.	**Sample containers arrived intact. (If no comment).**	X	
8.	**Matrix :** Water ☐ Soil ☑ Liquid ☐ Sludge ☐ Solid ☐ Cassette ☐ Tube ☐ Bulk ☐ Badge ☐ Food ☐ Other ☐		
9.	**Sample(s) were received in appropriate container(s).**	X	
10.	**Sample(s) were received with proper preservative**		
11.	**All samples were logged or labeled.**	X	
12.	**Sample ID labels match C-O-C ID's**	X	
13.	**Bottle count on C-O-C matches bottles found.**	X	
14.	**Sample volume is sufficient for analyses requested.**	X	
15.	**Samples were received within the hold time.**	X	
16.	**VOA vials completely filled.**	N/A	
17.	**Sample accepted.**	X	

Comments : Include actions taken to resolve discrepancies/problem:

Received by : Mgonzalez

Check in by/date : Dwarner / 03/05/2009

3216

Metton America, Inc.

EPAHQ104001400

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/13/2009**

Dear **James Campbell**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3216

Expiration Date 3/13/2011

Generator: Metton America, Inc.
Address: 2727 Miller Cut Off Road
La Porte, TX 77571

Waste Information

Name of Waste: Crushed Glass
TCEQ Waste Code #: 0013881
Container Type:
Detailed Description of Process Generating Waste:
laboratory testing
Color: varies **Odor:** none **pH:** neutral
Physical State:
Incompatibilities: none known
Safety Related Data/Special Handling:
Standard PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

IS JB/AL

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility	☐ CES Environmental Services - Port Arthur Facility
4904 Griggs Road, Houston, TX 77021	2420 S. Gulfway Dr., Port Arthur, TX 77641
Phone (713) 676-1460 Fax: (713) 676-1676	Phone (713) 676-1460 Fax: (713) 676-1460
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900	U.S. EPA ID Number: TXR000079307 ISWR Number: 88585
TCEQ Industrial Solid Waste Permit Number: 30948	

SECTION 1: Generator Information

Company: Metton America, Inc.
Address: 2727 Miller Cut-off Rd
City: La Porte State: TX Zip: 77571
Contact: Judy Johnson Title:
Phone Number: 281.479.9768 Fax Number: 281.479.4906
24/hr Phone Number: 713.817.1627
US EPA ID No: TXD00726026
State ID No: 32049 SIC Code:

SECTION 2: Billing Information - ☑ Same as Above

Company:
Address:
City: State: Zip:
Contact: Title:
Phone Number: Fax Number:

SECTION 3: General Description of the Waste

Name of Waste: crushed glass
Detailed Description of Process Generating Waste:

Laboratory testing

Physical State: ☐ Liquid ☐ Sludge ☐ Powder ☑ Solid ☐ Filter Cake ☐ Combination

Color: varies Odor: none

Specific Gravity (water=1): na Density: na lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ Single-phase ☐ Multi-phase

Container Type: ☑ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☐ Monthly ☑ Yearly ☐ One-Time
Quantity: variable

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No
If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011
Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: 00013881

Proper US DOT Shipping Name: Non RCRA Non DOT Regulated Material (broken glass)
Class: na UN/NA: na PG: na RQ: na

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>140		neutral		na	mg/l	na	mg/l	100	%
Oil & Grease		TOC		Zinc		Copper		Nickel	
>1500	mg/l	na	mg/l	na	mg/l	na	mg/l	na	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
crushed glass	100	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Standard PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. none

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

none known

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generator knowledge:

TCLP Metals:	x
TCLP Volatiles:	x
TCLP Semi-Volatiles:	x
Reactivity:	x
Corrosivity:	x
Ignitability:	x

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Pertaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory*: *Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory*: *Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory: Subpart C

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Judy Johnson Date: 3-9-09

Printed Name/Title: Judy JOHNSON / Customer Svc

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: [illegible]
Date: 3-12-09 ☑ Approved ☐ Rejected
Approval Number:

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$65/drum + TRANS + PSC

2. Contamination Limit (maximum limit before surchages apply):

3. Surcharge Pricing:

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

CLASS 2 Solids

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

3217
Allied Petro

EPAHO104001408

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/16/2009**

Dear **Jack Kessel**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3217

Expiration Date 3/13/2011

Generator: Allied Petrochemical LLC
Address: 2330 FM 2917
Alvin, TX 77511

Waste Information

Name of Waste: Filter Sludge
TCEQ Waste Code #: 00023191
Container Type:
Detailed Description of Process Generating Waste:
Lime neutralization of free sulfuric acid in 470 MV Sulfonic acid
Color: tan **Odor:** hydrocarbon **pH:** 6-9
Physical State:
Incompatibilities: none known
Safety Related Data/Special Handling:
standard

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

ZMB

15

CES Environmental Services, Inc.
4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit Number: 30948
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

SECTION 1: Generator Information

Company: Allied Petrochemical
Address: 2330 FM 2917
City: Alvin State: TX Zip: 77511
Contact: J.A. Kessel Title: President
Phone Number: 281-393-1233 Fax Number: 281-393-1242
24/hr Phone Number:
US EPA ID No: TXR000065300
State ID No: 87747 SIC Code: 2911

SECTION 2: Billing Information - ☑ Same as Above

Company:
Address: P.O. Box 459
City: Friendswood State: TX Zip: 77549
Contact: David Bolton Title: Controler
Phone Number: 281 393-1233 Fax Number: 281 393-1242

SECTION 3: General Description of the Waste

Name of Waste: Filter Sludge
Detailed Description of Process Generating Waste:
Lime neutralization of free sulfuric acid in 470 mv sulfonic acid

Physical State: ☐ Liquid ☒ Sludge ☐ Powder
☒ Solid ☒ Filter Cake ☒ Combination

Color: tan Odor: hydrocarbon

Specific Gravity (water=1): 1.33 Density: 11 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☒ No
Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☒ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☒ Monthly ☐ Yearly ☐ One-Time
Quantity: 10

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☒ No
If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011
Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: 0002 3191

Proper US DOT Shipping Name: Non haz Non Regi
Class: UN/NA: PG: RQ:

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
Solid	6 - 9	0 mg/l	0 mg/l	100 %
Oil & Grease	**TOC**	**Zinc**	**Copper**	**Nickel**
NA mg/l	NA mg/l	0 mg/l	0 mg/l	0 mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The waste consists of the following materials	CONCENTRATOIN Ranges are acceptable	UNITS or %
470 mw dialkylated benzene sulfonic Acid	0 - 1	%
Lime	0 - 10	%
Calcium Sulfate Salt	80 - 90	%
Calcium Sulfite Salt	0 - 1	%
Water	0 - 5	%
heptane	0 - 1	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package.

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

NONE KNOWN

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generator knowledge:

TCLP Metals: None
TCLP Volatiles: None
TCLP Semi-Volatiles: None
Reactivity: None
Corrosivity: None
Ignitability: None

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Pertaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☒ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory: Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixdures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources.
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

***Organics Subcategory*: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** 6-17-08

Printed Name/Title: J. A. Kessel, President

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Compliance Officer:	
Date: 3-13-09	☒ Approved ☐ Rejected
Approval Number: HOU-3217	

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$60/dm

2. Contamination Limit (maximum limit before surchages apply):

No free liquids

3. Surcharge Pricing:

None - contact salesman w/ problems

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

Class 1 solids box

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

Material Safety Data Sheet

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME(S): ALONATE SA 470

COMPANY IDENTIFICATION
Petroleum Chemicals Marketing Services
2395 El Camino Ave. #5, Sacramento, CA 95821
General Product Information: (916)487-1660

EMERGENCY TELEPHONE NUMBERS (24hr)
Chemtrec: (800)424-9300 or (703)527-3887

Manufactured by Allied Petrochemical, Alvin, TX 77511

2. COMPOSITION/INFORMATION ON INGREDIENTS

100% ALONATE SA 470

CONTAINING

COMPONENTSAMOUNT		LIMIT/QTY	AGENCY/TYPE
Alkylated aryl sulfonic acid	90%		
Solvent Extracted Mineral Oil	10%		

3. HAZARDS IDENTIFICATION

Brown, viscous liquid
Corrosive Liquid

★★★★★★★★★★★★★ **EMERGENCY OVERVIEW** ★★★★★★★★★★★★★

- O MAY CAUSE EYE AND SKIN IRRITATION
- O MAY CAUSE AN ALLERGIC SKIN REACTION

★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★

4. FIRST AID MEASURES

EYE: Flush with water for 15 minutes or until irritation subsides, seek medical assistance.
SKIN: Remove contaminated clothing and wipe excess off. Wash with soap and water or use a waterless hand cleaner followed by soap and water. If irritation occurs, get medical attention.
INGESTION: Do not induce vomiting. Drink water and seek medical attention.
INHALATION: Remove to fresh air, seek medical assistance.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

- **FLASH POINT: >200 F (COC)**
- **AUTOIGNITION: NDA**
- **FLAMMABILITY LIMITS (% by volume in air): Lower: NDA Upper: NDA**
- **EXTINGUISHING MEDIA: Foam, CO2, dry powder**

NFPA RATINGS: Health 1; Flammability 1; Reactivity 1

Prepared According to the OSHA Hazard Communications Standard (29 CFR 1910.1200) and the ANSI MSDS Standard (Z400.1) by Petroleum Chemicals Marketing Services, 2395 El Camino Avenue, Sacramento, CA 95821

EPAHO104001416

Material Safety Data Sheet

FIRE FIGHTING INSTRUCTIONS: For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.
COMBUSTION PRODUCTS: Oxides of sulfur from combustion. Contact with water can lead to formation sulfuric acid.

6. ACCIDENTAL RELEASE MEASURES

CHEMTREC EMERGENCY NUMBER (24 hr); (800)424-9300 or (202)483-7616
STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Contain spill to small area. Pick up with absorbent material and transfer to suitable containers. If not contaminated, scoop up for reuse. Use cautious judgment when cleaning up large spills. For large spills, wear respirator and protective clothing. Shut off source of leak if safe to do so. Dike and contain spill. Remove with vacuum trucks or pump to storage/salvage vessels. Soak up residue with an absorbent material. Flush area with water to remove trace residues. Contact with water can lead to formation sulfuric acid. Dispose of all waste materials properly.
WASTE DISPOSAL METHOD: Employ contract service. Disposal procedures must be in accordance with Local, State, and Federal Regulations.

7. HANDLING AND STORAGE

HANDLING AND STORAGE: Keep containers closed when not in use. Store in cool dry place. Protect from moisture. This material is not considered a static accumulator but proper grounding procedures should be followed.
PERSONAL HYGIENE: Wash thoroughly before meals and at end of work periods. Launder or dry-clean soiled clothing before reuse.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION: Wear NIOSH approved respirator where overexposure by inhalation may occur. In accordance with 29 CFR 1910.134, use either an atmosphere supplying respirator or an air purifying respirator for organic vapors and particulates.
VENTILATION: Normal protective measures for organics with flash points > 100 deg. C
PROTECTIVE GLOVES: Chemical resistant gloves.
EYE PROTECTION: Safety eye glasses and face shield.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL DESCRIPTION:	Brown, viscous liquid
pH:	NA
VAPOR PRESSURE:	NA
VAPOR DENSITY (AIR=1):	NA
BOILING POINT:	NA
FREEZING POINT:	NA
MELTING POINT:	NA
SOLUBILITY:	NA
SPECIFIC GRAVITY:	1.0 @ 15.6°C
DENSITY:	NA
VISCOSITY:	45 to 100 cSt @ 100°C
MOLECULAR WEIGHT	>460
FLASH POINT:	>200 F (COC)

10. STABILITY AND REACTIVITY

STABILITY: Stable.
HAZARDOUS POLYMERIZATION: Will not occur.

Material Safety Data Sheet

CONDITIONS/ MATERIALS TO AVOID: Contact with water can lead to formation sulfuric acid.
HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of sulfur from combustion.
INCOMPATIBILITY: Strong oxidizing agents and alkali.

11. TOXICOLOGICAL INFORMATION

EYE EFFECTS: May cause eye irritation.
SKIN EFFECTS: May cause skin irritation.
ACUTE ORAL EFFECTS: Oral LD50 not established. Do not ingest.
ACUTE INHALATION EFFECTS: Mists may cause respiratory irritation.
CHRONIC EFFECTS: May cause permanent skin and eye tissue damage. Corrosive to the mouth, esophagus and stomach.
ADDITIONAL TOXICOLOGY INFORMATION: This product contains petroleum base oils which may be refined by various processes including severe solvent extraction, severe hydro-cracking, or severe hydro-treating. None of the oils requires a cancer warning under the OSHA Hazard Communication Standard (29 CFR 1910.1200). These oils have not been listed in the National Toxicology Program (NTP) Annual Report nor have they been classified by the International Agency for Research on Cancer (IARC) as: carcinogenic to humans (Group 1), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B).

12. ECOLOGICAL INFORMATION

ECOTOXICITY: This material may be toxic to aquatic organisms and should be kept out of sewage and drainage systems and all bodies of water.
ENVIRONMENTAL FATE: No data available.

13. DISPOSAL CONSIDERATIONS

Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations. Contact your local environmental or health authorities for approved disposal of this material.

14. TRANSPORT INFORMATION

Proper Shipping Name: Alkyl sulfonic acids, liquid with not more than 5% free sulfuric Acid
Hazard Class: 8 Corrosive Liquid
ID Number: UN2586, PG III ERG 153
Labels Required: Corrosive
Reportable Quantity: N/A
Freight Classification: Petroleum Oil, NOIBN
Special Transportation Notes: Container size limited to 5 liters in passenger aircraft or railcars. In cargo aircraft, container size limited to 60 liters.
Transportation of Dangerous Goods Classification Class: 8,2586, PGIII

15. REGULATORY INFORMATION

SARA 311 CATEGORIES:	1. Immediate (Acute) Health Effects:	YES
	2. Delayed (Chronic) Health Effects:	NO
	3. Fire Hazard:	NO
	4. Sudden Release of Pressure Hazard:	NO
	5. Reactivity Hazard:	NO

Prepared According to the OSHA Hazard Communications Standard (29 CFR 1910.1200) and the ANSI MSDS Standard (Z400.1)
by Petroleum Chemicals Marketing Services, 2395 El Camino Avenue, Sacramento, CA 95821

Material Safety Data Sheet

16. OTHER INFORMATION

NFPA RATINGS: Health 2; Flammability 1; Reactivity 0; (Least-0, Slight-l, Moderate-2, High-3, Extreme-4). Those values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

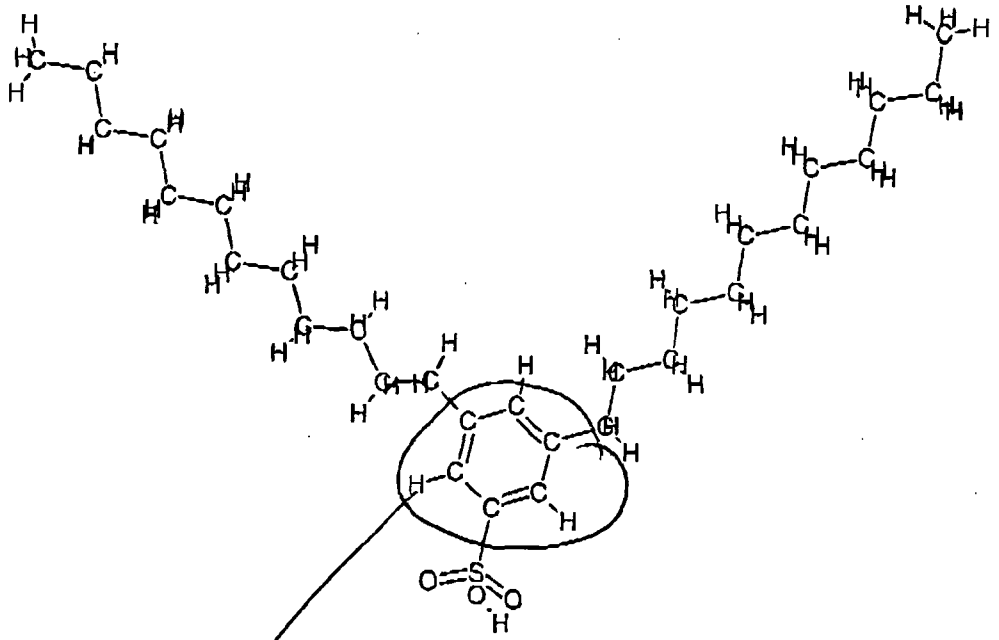
REVISION STATEMENT

This is a new Material Safety Data Sheet

★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modification of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

Prepared According to the OSHA Hazard Communications Standard (29 CFR 1910.1200) and the ANSI MSDS Standard (Z400.1)
by Petroleum Chemicals Marketing Services, 2395 El Camino Avenue, Sacramento, CA 95821



Didodecyl Benzene Sulfonic Acid MW = 470

Here is the benzene, its tied up in the molecule.

3218
Metton America

EPAHO104001421

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/16/2009**

Dear **James Campbell**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3218

Expiration Date 3/13/2011

Generator: Metton America, Inc.
Address: 2727 Miller Cut Off Road
La Porte, TX 77571

Waste Information

Name of Waste: RCRA Empty containers
TCEQ Waste Code #: Recycle
Container Type:
Detailed Description of Process Generating Waste:
RCRA empty Containers
Color: varies **Odor:** none **pH:** na
Physical State:
Incompatibilities: none known
Safety Related Data/Special Handling:
Standard PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

Rec'd JB/AL

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility 4904 Griggs Road, Houston, TX 77021 Phone (713) 676-1460 Fax: (713) 676-1676 U.S. EPA ID Number: TXD008950461 ISWR Number: 30900 TCEQ Industrial Solid Waste Permit Number: 30948	☐ CES Environmental Services - Port Arthur Facility 2420 S. Gulfway Dr., Port Arthur, TX 77641 Phone (713) 676-1460 Fax: (713) 676-1460 U.S. EPA ID Number: TXR000079307 ISWR Number: 88585

SECTION 1: Generator Information

Company: Metton America, Inc.
Address: 2727 Miller Cut-off Rd
City: La Porte State: TX Zip: 77571
Contact: Judy Johnson Title:
Phone Number: 281.479.9768 Fax Number: 281.479.4906
24/hr Phone Number: 713.817.1627
US EPA ID No: TXD000726026
State ID No: 32049 SIC Code:

SECTION 2: Billing Information ☑ Same as Above

Company:
Address:
City: State: Zip:
Contact: Title:
Phone Number: Fax Number:

SECTION 3: General Description of the Waste

Name of Waste: RCRA Empty containers
Detailed Description of Process Generating Waste:

RCRA Empty Containers

Physical State: ☐ Liquid ☐ Sludge ☐ Powder ☑ Solid ☐ Filter Cake ☐ Combination

Color: Varies Odor: none

Specific Gravity (water=1): na Density: na lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ Single-phase ☐ Multi-phase

Container Type: ☑ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☐ Monthly ☑ Yearly ☐ One-Time
Quantity: 60

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No
If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011
Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: Recycle

Proper US DOT Shipping Name: Non RCRA Non DOT regulated material
Class: na UN/NA: na PG: na RQ: na

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
na	na	na mg/l	na mg/l	100 %
Oil & Grease	**TOC**	**Zinc**	**Copper**	**Nickel**
na mg/l	na mg/l	na mg/l	na mg/l	na mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
RCRA Empty Containers	100	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package.

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:
TCLP Volatiles:
TCLP Semi-Volatiles:
Reactivity:
Corrosivity:
Ignitability:

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Pertaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☐ NO
If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory: Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory: Subpart C

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☐ generator knowledge and/or ☐ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Judy Johnson Date: 3-9-09

Printed Name/Title: Judy Johnson / Customer Svc

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: [signature]
Date: 3-12-09 ☑ Approved ☐ Rejected
Approval Number:

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$10/drum + Trans + FSC

2. Contamination Limit (maximum limit before surchages apply):

3. Surcharge Pricing:

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

Recycle drums

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

3219
World Pride

EPAHO104001429

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/16/2009**

Dear **Zac or Dave**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3219

Expiration Date 3/16/2011

Generator: World Pride (World Metalogical)
Address: 13500 Industrial Rd.
Houston, TX 77015

Waste Information

Name of Waste: Dirt contaminated with oil
TCEQ Waste Code #: CESQ4891
Container Type:
Detailed Description of Process Generating Waste:
small oil spill
Color: dark **Odor:** hydrocarbon **pH:** na
Physical State:
Incompatibilities: strong oxidizers
Safety Related Data/Special Handling:
level D

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

16-pages

CES Environmental Services, Inc.

Attn: Morgan DB/MM

4904 Griggs Road Houston, TX 77021
Phone: (713) 676-1460 ~~Fax: (713) 676-1676~~ 713-748-8669
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

05

SECTION 1: Generator Information

Company: World Ride, (World Metalogical)
Address: 13500 Industrial Rd
City, State, Zip: Houston TX 77015
Contact: Paul D Title: President
Phone No: 832-710-2209 Fax No:
24/hr Phone: Same
U.S. EPA I.D. No: ~~WA~~ TXCESQG
State I.D. CESQG SIC Code:

SECTION 2: Billing Information – ☐ Same as Above

Company: CES Services LLC
Address: 7420 Honea Egypt Rd
City, State, Zip: Montgomery TX 77316
Contact: Joe McKeough Title: President
Phone No: ~~936-756-1226~~ 481-3662 Fax No: 936-756-1226

SECTION 3: General Description of the Waste

Name of Waste: Dirt Contaminated with oil
Detailed Description of Process Generating Waste: "Small spill of oil"

Physical State: ☐ Liquid ☐ Sludge ☐ Powder ☑ Solid ☐ Filter Cake ☐ Combination

Color: Dark Odor: ____

Specific Gravity (water=1): 1 Density: ____ lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Layers: ☑ Single-phase ☐ Multi-phase

Container Type: ☑ Drum ☐ Tote ☐ Truck ☐ Other (explain)
Container Size: 55 gal

Frequency: ☐ Weekly ☐ Monthly ☐ Quarterly ☑ Yearly
Number of Units (containers): 5-10 drums Other: ____
Texas State Waste Code No: CESQ 4891
Proper U.S. DOT Shipping Name: Non Hazardous Waste Regulated
Class: ____ UN/NA: ____ PG: ____ RQ: ____

EPAHO104001431

Flash Point	pH	Reactive Sulfides ____mg/l	Reactive Cyanides ____mg/l	Solids ____%
Oil&Grease ____mg/l	TOC ____mg/l	Zinc ____mg/l	Copper ____mg/l	Nickel ____mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	Concentration	Units
The waste consists of the following materials	Ranges are acceptable	or %
Dirt & Grass	90 - 100	%
Oil	0 - 10	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

____

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.

____

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):

____

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generator knowledge:

TCLP Metals: ____
TCLP Volatiles: ____
TCLP Semi-Volatiles: ____
Reactivity: ____
Corrosivity: ____
Ignitability: ____

SECTION 9: Generator's Certification

The information contained herein is based on ☐ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** 3/12/09

Printed Name/Title: President Agent for World Pride

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Compliance Officer: [signature]	
Date: 3-13-09 Approved Rejected	
Approval Number: 3219	

EPAHO104001432

SECTION 10: Waste Receipt Classification Under 40 CFR 437

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory: Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory: Subpart C

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

EPAHO104001433

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

☐ Metals Subcategory

☐ Oils Subcategory

☐ Organics Subcategory

SECTION 11: Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

EPAHO104001434

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$35/drum

2. Contamination Limit (maximum limit before surchages apply):

NO FREE LIQUIDS

3. Surcharge Pricing:

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

material may be able to go to HPP or Class I solids

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

KAP TECHNOLOGIES, Inc.
9391 Grogans Mill Rd., Suite A2 The Woodlands, TX 77380

Chain-of-Custody Record
Ph:281.367.0065 FX:281.367.6772

Chain-of Custody (COC Pg.) 1 of 1

3 3 0 7

CCG Services

Project Number:

Site Name: World Metallogical

Project POC:

Project Manager: Eric McKaughn

Sampled By: (Print Name)

PH: FAX:

TAT Time: ☒ Standard Non-Rush ☐ RUSH

Report Needed By:

E-Mail Report To:
1
2
3

Remarks:

							BTEX and/or MTBE	VOCs - M8260	TPH (TX1005)	Metals RCRA-8	Metals RCRA-8+3	PAHs-8270SIM	SVOCs - M8270	PCB				COMMENTS	KAP LAB Sample ID:
1	2/26/09 - Contaminated Dirt	2/26/09	13:15		X	3	X		X		X			X					3307.01
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			

Relinquished by:	Date: 2/26/09	Time: 14:00	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:			

☐ Laboratory Pick-up ☒ OTC-Delivery From Client ☐ FedEX/UPS/ LoneStar ☐ OTHER

M. A. Bellar 2/26/09 14:00

PROBLEMS WITH SAMPLE SET; Refer to Sample Receipt Log record for Details: ☐

White Yellow - Laboratory Copies
Pink - Client Copy

EPAHO104001437

SAMPLE RECEIPT LOG RECORD KAP Technologies, Inc

KAP Lab Episode Number	Date Rec.	Time Rec.	Client/Customer	Project Name	Project Number
3307	2/26/09	14:00	CKG Services	World Metalogical	—

Samples Delivered By: KAP Staff (Client) FedEX/UPS LoneStar Other

Total Number of Coolers: N/A

Temperature/On Ice: Cooler (1) N/A (2)___ (3)___ (4)___ (5)___

Cooler(s) Received with Custody Seal: Yes___ NO ✓ See Comments

Sample(s) Received with Chain-of Custody--Dated & Signed: Yes ✓ NO___ See Comments

Sample Container(s) Received Intact: Yes ✓ NO___ See Comments

1	Matrix Received: ___Water ✓ Soil ___ Sludge ___ Liquid? ___Vapor ___ Other:_____	
2	Sample(s) were received in appropriate container(s)	Yes ✓ NO___ See Comments
3	All sample(s) were tagged & labeled	Yes ✓ NO___ See Comments
4	Sample(s) ID labels match C-O-C ID's	Yes ✓ NO___ See Comments
5	Bottle count on C-O-C matches bottles received	Yes ✓ NO___ See Comments
6	Sample volume received meets KAP Technologies Guideline for analyses requested	Yes ✓ NO___ See Comments
7	Sample(s) were received with-in the required holding time(s)	Yes ✓ NO___ See Comments
8	VOA vials completely filled (list any bubbles in comment section) N/A	~~Yes___ NO___ See Comments~~ N/A
	Sample(s) Accepted by KAP TECHNOLOGIES, Inc.	Yes ✓ NO___ See Comments

Comments:

Checked in By/Date: M. A. Bellow 2/26/09

LIMS Log-in By/Date: _____

Action taken by KAP to Comments: By:_____ Date:_____

EPAHO104001438

KAP TECHNOLOGIES, Inc.
9391 Grogans Mill Rd., Suite A-2
The Woodlands TX, 77380
Ph: 281.367.0065 Fax: 281.367.6772

Laboratory Analysis Report
Quality Control Data - Soil LCS/D
TPH(TX1005)

TOTAL PETROLEUM HYDROCARBONS (TX1005)			
CLIENT NAME	: ---	CLIENT SAMPLE ID	: ---
PROJECT MANAGER	: ---	LAB SAMPLE ID	:TPHLCS32
PROJECT NAME	: ---	SAMPLE MATRIX	:Soil
PROJECT NUMBER	: ---	DATE SAMPLED	: ---
METHOD REFERENCE	:TX1005	DATE RECEIVED	: ---
INSTRUMENT ID	:A5890	DATE ANALYZED	:03/02/2009
INSTRUMENT FILE	:A10072	TIME ANALYZED	:18:30
EXTRACTION VOLUME	:10 g	ANALYST	:SK
DILUTION	:1		

Hydrocarbon Range	Units	LCS True Value	LCS Found Value	LCSD Found Value	LCS %Recovery	LCSD %Recovery	QC Limits LCS/D	RPD %	Qualifier
C_6 - C_{12}	mg/Kg	250	290	----	116	----	75-125	----	
$>C_{12}$ - C_{28}	mg/Kg	250	283	----	113	----	75-125	----	
$>C_{28}$ - C_{35}	mg/Kg	500	524	----	105	---	75-125	----	

QUALITY CONTROL DATA				
Surrogate Compounds	Spike Added	% Recovery	QC Limits	Qualifier
1-Chlorooctane	250 mg/Kg	120	70-130	
O-Terphenyl	250 mg/Kg	124	70-130	

KAP TECHNOLOGIES, Inc.
9391 Grogans Mill Rd., Suite A-2
The Woodlands TX. 77380
Ph: 281.367.0065 Fax: 281.367.6772

Laboratory Analysis Report
Quality Control Data - Soil Blank
TPH (TX1005)

TOTAL PETROLEUM HYDROCARBONS (TX1005)			
CLIENT NAME	: ---	CLIENT SAMPLE ID	: ---
PROJECT MANAGER	: ---	LAB SAMPLE ID	:TPHBLK32
PROJECT NAME	: ---	SAMPLE MATRIX	:Soil
PROJECT NUMBER	: ---	DATE SAMPLED	: ---
METHOD REFERENCE	:TX1005	DATE RECEIVED	: ---
INSTRUMENT ID	:A5890	DATE ANALYZED	:03/02/2009
INSTRUMENT FILE	:A10071	TIME ANALYZED	:17:42
EXTRACTION VOLUME	:10 g	ANALYST	:SK
DILUTION	:1		

Hydrocarbon Range	Units	Quantitation Limit	Results	Qualifier
C_6 - C_{12}	mg/Kg	20.0	ND	
$>C_{12}$ - C_{28}	mg/Kg	20.0	ND	
$>C_{28}$ - C_{35}	mg/Kg	50.0	ND	

QUALITY CONTROL DATA				
Surrogate Compounds	Spike Added	% Recovery	QC Limits	Qualifier
1-Chlorooctane	250 mg/Kg	129	70-130	
O-Terphenyl	250 mg/Kg	128	70-130	

KAP TECHNOLOGIES, Inc.
9391 Grogans Mill Rd., Suite A-2
The Woodlands TX. 77380

Laboratory Analysis Report
Quality Control Data - LCS
PCB by SW846-8082

PCB ANALYSIS REPORT BY 8082			
CLIENT NAME	: ---	CLIENT SAMPLE ID	: ---
PROJECT MANAGER	: ---	LAB SAMPLE ID	:ALCS30
PROJECT NAME	: ---	SAMPLE MATRIX	:Soil
PROJECT NUMBER	: ---	DATE SAMPLED	: ---
METHOD REFERENCE	:SW846-8082	DATE RECEIVED	: ---
INSTRUMENT ID	:P6890	DATE ANALYZED	:03/06/2009
INSTRUMENT FILE	:P21631	DATE EXTRACTED	:03/02/2009
EXTRACTION WEIGHT	:30 g	TIME ANALYZED	:12:30
FINAL VOLUME	:10 mL	ANALYST	:KVR
		DILUTION	:1

Analyte	Units	LCS True Value	LCS Found Value	LCS %Recovery	QC Limits LCS	Qualifier
Aroclor 1016	ug/Kg	100	111	111	30-150	
Aroclor 1260	ug/Kg	100	102	102	30-150	

QUALITY CONTROL DATA				
Surrogate Compounds	Spike Added	% Recovery	QC Limits	Qualifier
Tetrachloroxylene	200 ug/kg	65	30-150	
Decachlorobiphenyl	400 ug/kg	84	30-150	

KAP TECHNOLOGIES, Inc.
9391 Grogans Mill Rd., Suite A-2
The Woodlands TX 77380
Ph: 281.367.0066 Fax: 281.367.6772

Laboratory Analysis Report
Quality Control Data - Blank
PCB by SW846-8082

PCB ANALYSIS REPORT BY 8082			
CLIENT NAME	: ---	CLIENT SAMPLE ID	: ---
PROJECT MANAGER	: ---	LAB SAMPLE ID	:ABLK30
PROJECT NAME	: ---	SAMPLE MATRIX	:Soil
PROJECT NUMBER	: ---	DATE SAMPLED	: ---
METHOD REFERENCE	:SW846-8082	DATE RECEIVED	: ---
INSTRUMENT ID	:P6890	DATE ANALYZED	:03/05/2009
INSTRUMENT FILE	:P21630	DATE EXTRACTED	:03/02/2009
EXTRACTION WEIGHT	:30 g	TIME ANALYZED	:11:55
FINAL VOLUME	:10 mL	ANALYST	:KVR
		DILUTION	:1

Analyte	Units	Quantitation Limit	Results	Qualifier
Aroclor 1016	ug/Kg	33	ND	
Aroclor 1221	ug/Kg	33	ND	
Aroclor 1232	ug/Kg	33	ND	
Aroclor 1242	ug/Kg	33	ND	
Aroclor 1248	ug/Kg	33	ND	
Aroclor 1254	ug/Kg	33	ND	
Aroclor 1260	ug/Kg	33	ND	

QUALITY CONTROL DATA				
Surrogate Compound	Spike Added	% Recovery	QC Limits	Qualifier
Tetrachloroxylene	200 ug/kg	73	30-150	
Decachlorobiphenyl	400 ug/kg	91	30-150	

EPAHO104001442

KAP TECHNOLOGIES, Inc.
9391 Grogans Mill Rd., Suite A-2
The Woodlands TX. 77380
Ph: 281.367.0065 Fax: 281.367.6772

Laboratory Analysis Report
Quality Control Data - TCLP LCS/D
TCLP Metals 6010B/7471A

TCLP Metals by EPA Method 6010B/7471A

CLIENT NAME	: ---	CLIENT SAMPLE ID	: ---
PROJECT MANAGER	: ---	LAB SAMPLE ID	:MLCS080
PROJECT NAME	: ---	SAMPLE MATRIX	:TCLP Extract
PROJECT NUMBER	: ---	ANALYST	:RA
DATE RECEIVED	: ---	DATE ANALYZED	:03/10/2009 & 03/11/2009
DATE SAMPLED	: ---		

Analyte	Units	LCS True Value	LCS Found Value	LCSD Found Value	LCS %Rec	LCSD %Rec	QC Limits LCS/D	RPD %	RPD QC Limits	Qualifier
Antimony	mg/L	1.00	1.02	1.02	102	102	75 - 125	0.5	25	
Arsenic	mg/L	1.00	1.10	1.09	110	109	75 - 125	0.6	25	
Barium	mg/L	1.00	0.982	0.938	98	94	75 - 125	4.7	25	
Beryllium	mg/L	1.00	1.05	1.04	105	104	75 - 125	0.5	25	
Cadmium	mg/L	1.00	1.05	1.05	105	105	75 - 125	0.2	25	
Chromium	mg/L	1.00	1.07	1.05	107	105	75 - 125	2.2	25	
Lead	mg/L	1.00	1.04	1.03	104	103	75 - 125	1.0	25	
Mercury	mg/L	0.005	0.0051	0.0046	102	91	75 - 125	11	25	
Nickel	mg/L	1.00	1.12	1.13	112	113	75 - 125	0.6	25	
Selenium	mg/L	1.00	1.07	1.07	107	107	75 - 125	0.4	25	
Silver	mg/L	0.50	0.447	0.443	89	89	75 - 125	0.9	25	

KAP TECHNOLOGIES, Inc.
9391 Grogans Mill Rd., Suite A-2
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Laboratory Analysis Report
Quality Control Data - TCLP Blank
TCLP Metals 6010B/7471A

TCLP Metals by EPA Method 6010B/7471A

CLIENT NAME	: ---	CLIENT SAMPLE ID	: ---
PROJECT MANAGER	: ---	LAB SAMPLE ID	:MBLK080
PROJECT NAME	: ---	SAMPLE MATRIX	:TCLP Extract
PROJECT NUMBER	: ---	ANALYST	:RA
DATE RECEIVED	: ---		
DATE SAMPLED	: ---		

Analyte	Date Prepared	Date Analyzed	Dilution	Quantitation Limit	Results	Units	Qualifier
Antimony	3/9/09	3/10/09	1	0.50	ND	mg/L	
Arsenic	3/9/09	3/10/09	1	0.50	ND	mg/L	
Barium	3/9/09	3/10/09	1	1.00	ND	mg/L	
Beryllium	3/9/09	3/10/09	1	0.25	ND	mg/L	
Cadmium	3/9/09	3/10/09	1	0.05	ND	mg/L	
Chromium	3/9/09	3/10/09	1	0.25	ND	mg/L	
Lead	3/9/09	3/10/09	1	0.25	ND	mg/L	
Mercury	3/9/09	3/11/09	1	0.05	ND	mg/L	
Nickel	3/9/09	3/10/09	1	0.25	ND	mg/L	
Selenium	3/9/09	3/10/09	1	0.25	ND	mg/L	
Silver	3/9/09	3/10/09	1	0.50	ND	mg/L	

EPAHO104001444

KAP TECHNOLOGIES, Inc.
9391 Grogans Mill Rd., Suite A2
The Woodlands TX. 77380
Ph: 281.367.0065 Fax: 281.367.6772

Laboratory Analysis Report
Quality Control Data - Soil LCS
BTEX/MtBE - SW846/8260B

BTEX/MtBE by GC/MS-8260B			
CLIENT NAME	: ---	CLIENT SAMPLE ID	: ---
PROJECT MANAGER	: ---	LAB SAMPLE ID	:VLCS46
PROJECT NAME	: ---	SAMPLE MATRIX	:Soil
PROJECT NUMBER	: ---	DATE SAMPLED	: ---
METHOD REFERENCE	:SW846-8260B	DATE RECEIVED	: ---
INSTRUMENT ID	:A5973	DATE ANALYZED	:03/05/2009
INSTRUMENT FILE	:A19170	TIME ANALYZED	:23:30
PURGE VOLUME	:5 g	ANALYST	:SB
DILUTION	:1		

Analyte	Units	LCS True Value	LCS Found Value	LCS %Recovery	QC Limits LCS/D	Qualifier
Methyl tert-Butyl Ether	ug/Kg	50	64.0	128	63 - 138	
Benzene	ug/Kg	50	49.8	100	69 - 130	
Toluene	ug/Kg	50	55.5	111	69 - 132	
Ethyl Benzene	ug/Kg	50	45.7	91	69 - 130	
Xylenes, Total	ug/Kg	150	136	91	70 - 131	

QUALITY CONTROL DATA				
Surrogate Compound	Spike Added	% Recovery	QC Limits	Qualifier
Dibromofluoromethane	50 ug/Kg	126	56 - 153	
1,2-Dichloroethane-d4	50 ug/Kg	125	64 - 130	
Toluene-d8	50 ug/Kg	123	68 - 124	
4-Bromofluorobenzene	50 ug/Kg	87	70 - 137	

KAP TECHNOLOGIES, Inc.
9391 Grogans Mill Rd., Suite A-2
The Woodlands TX. 77380
Ph: 281.367.0065 Fax: 281.367.6772

Laboratory Analysis Report
Quality Control Data - Soil Blank
BTEX/MtBE - SW846/8260B

BTEX/MtBE by GC/MS-8260B			
CLIENT NAME	: ---	CLIENT SAMPLE ID	: --
PROJECT MANAGER	: ---	LAB SAMPLE ID	:VBLK46
PROJECT NAME	: ---	SAMPLE MATRIX	:Soil
PROJECT NUMBER	: ---	DATE SAMPLED	: --
METHOD REFERENCE	:SW846-8260B	DATE RECEIVED	: --
INSTRUMENT ID	:A5973	DATE ANALYZED	:09/05/2009
INSTRUMENT FILE	:A19168	TIME ANALYZED:	:22:22
PURGE VOLUME	:5 g	ANALYST	:SB
DILUTION	: 1		

Analyte	Units	Quantitation Limit	Results	Qualifier
Methyl tert-Butyl Ether	ug/Kg	5.0	ND	
Benzene	ug/Kg	5.0	ND	
Toluene	ug/Kg	5.0	ND	
Ethyl Benzene	ug/Kg	5.0	ND	
Xylenes, Total	ug/Kg	15.0	ND	

QUALITY CONTROL DATA

Surrogate Compound	Spike Added	% Recovery	QC Limits	Qualifier
Dibromofluoromethane	50 ug/Kg	116	56 - 153	
1,2-Dichloroethane-d4	50 ug/Kg	122	64 - 130	
Toluene-d8	50 ug/Kg	118	68 - 124	
4-Bromofluorobenzene	50 ug/Kg	81	70 - 137	

KAP TECHNOLOGIES, Inc.
9391 Grogans Mill Rd., Suite A-2
The Woodlands TX, 77380
Ph: 281.367.0065 Fax: 281.367.6772

Laboratory Analysis Report
TPH (TX1005)

TOTAL PETROLEUM HYDROCARBONS (TX1005)			
CLIENT NAME	:CKG Services LLC	CLIENT SAMPLE ID	:2/26/09 - Contaminated Dirt
PROJECT MANAGER	:Zac McKaughn	LAB SAMPLE ID	:3307.01
PROJECT NAME	:World Metalogical	SAMPLE MATRIX	:Soil
PROJECT NUMBER	: ---	DATE SAMPLED	:02/26/2009
METHOD REFERENCE	:TX1005	DATE RECEIVED	:02/26/2009
INSTRUMENT ID	:A5890	DATE ANALYZED	:03/02/2009
INSTRUMENT FILE	:A10079	TIME ANALYZED	:23:56
EXTRACTION VOLUME	:5 g	ANALYST	:SK
DILUTION	: 5X		

Hydrocarbon Range	Units	Quantitation Limit	Results	Qualifier
C_6 - C_{12}	mg/Kg	200	ND	D
>C_{12} - C_{28}	mg/Kg	4000	**105,000**	D
>C_{28} - C_{35}	mg/Kg	10000	**223,000**	D

QUALITY CONTROL DATA				
Surrogate Compounds	Spike Added	% Recovery	QC Limits	Qualifier
1-Chlorooctane	250 mg/Kg	**129**	70-130	
O-Terphenyl	250 mg/Kg	**128**	70-130	

KAP TECHNOLOGIES, Inc.
9391 Grogans Mill Rd., Suite A-2
The Woodlands TX. 77380
Ph: 281.367.0066 Fax: 281.367.6772

Laboratory Analysis Report
PCB by SW846-8082

PCB ANALYSIS REPORT BY 8082

CLIENT NAME	:CKG Services LLC	CLIENT SAMPLE ID	:2/26/09 - Contaminated Dirt
PROJECT MANAGER	:Zac McKaughn	LAB SAMPLE ID	:3307.01
PROJECT NAME	:World Metalogical	SAMPLE MATRIX	:Soil
PROJECT NUMBER	: ---	DATE SAMPLED	:02/26/2009
METHOD REFERENCE	:SW846-8082	DATE RECEIVED	:02/26/2009
INSTRUMENT ID	:P6890	DATE ANALYZED	:03/05/2009
INSTRUMENT FILE	:P21633	DATE EXTRACTED	:03/02/2009
EXTRACTION WEIGHT	:5.0 g	TIME ANALYZED	:13:42
FINAL VOLUME	:10 mL	ANALYST	:KVR
		DILUTION	:1

Analyte	Units	Quantitation Limit	Results	Qualifier
Aroclor 1016	ug/Kg	200	ND	
Aroclor 1221	ug/Kg	200	ND	
Aroclor 1232	ug/Kg	200	ND	
Aroclor 1242	ug/Kg	200	ND	
Aroclor 1248	ug/Kg	200	ND	
Aroclor 1254	ug/Kg	200	ND	
Aroclor 1260	ug/Kg	200	ND	

QUALITY CONTROL DATA

Surrogate Compound	Spike Added	% Recovery	QC Limits	Qualifier
Tetrachloroxylene	200 ug/kg	103	30-150	
Decachlorobiphenyl	400 ug/kg	117	30-150	

KAP TECHNOLOGIES, Inc.
9391 Grogans Mill Rd., Suite A-2
The Woodlands TX. 77380
Ph: 281.367.0085 Fax: 281.367.6772

Laboratory Analysis Report
TCLP Metals 6010B/7471A

TCLP Metals by EPA Method 6010B/7471A

CLIENT NAME	:CKG Services LLC	CLIENT SAMPLE ID	:2/26/09 - Contaminated Dirt
PROJECT MANAGER	:Zac McKaughn	LAB SAMPLE ID	:3307.01
PROJECT NAME	:World Metalogical	SAMPLE MATRIX	:TCLP Extract
PROJECT NUMBER	: ---	ANALYST	:RA
DATE SAMPLED	:02/26/2009		
DATE RECEIVED	:02/26/2009		

Analyte	Date Prepared	Date Analyzed	Dilution	Quantitation Limit	Results	Units	Qualifier
Antimony	3/9/09	3/10/09	1	0.50	ND	mg/L	
Arsenic	3/9/09	3/10/09	1	0.50	ND	mg/L	
Barium	3/9/09	3/10/09	1	1.00	ND	mg/L	
Beryllium	3/9/09	3/10/09	1	0.25	ND	mg/L	
Cadmium	3/9/09	3/10/09	1	0.05	ND	mg/L	
Chromium	3/9/09	3/10/09	1	0.25	ND	mg/L	
Lead	3/9/09	3/10/09	1	0.25	**0.261**	mg/L	
Mercury	3/9/09	3/11/09	1	0.05	ND	mg/L	
Nickel	3/9/09	3/10/09	1	0.25	**0.295**	mg/L	
Selenium	3/9/09	3/10/09	1	0.25	ND	mg/L	
Silver	3/9/09	3/10/09	1	0.50	ND	mg/L	

EPAHO104001449

KAP TECHNOLOGIES, Inc.
9391 Grogans Mill Rd., Suite A-2
The Woodlands TX. 77380
Ph: 281.367.0085 Fax: 281.367.6772

Laboratory Analysis Report
BTEX/MtBE - SW846/8260B

BTEX/MtBE by GC/MS-8260B			
CLIENT NAME	:CKG Services LLC	CLIENT SAMPLE ID	:2/26/09 - Contaminated Dirt
PROJECT MANAGER	:Zac McKaughn	LAB SAMPLE ID	:3307.01
PROJECT NAME	:World Metalogical	SAMPLE MATRIX	:Soil
PROJECT NUMBER	: ---	DATE SAMPLED	:02/26/2009
METHOD REFERENCE	:SW846-8260B	DATE RECEIVED	:02/26/2009
INSTRUMENT ID	:A5973	DATE ANALYZED	:03/06/2009
INSTRUMENT FILE	:A19173	TIME ANALYZED	:01:12
PURGE VOLUME	:5 g	ANALYST	:SB
DILUTION	: 1		

Analyte	Units	Quantitation Limit	Results	Qualifier
Methyl tert-Butyl Ether	ug/Kg	5.0	ND	
Benzene	ug/Kg	5.0	ND	
Toluene	ug/Kg	5.0	ND	
Ethyl Benzene	ug/Kg	5.0	ND	
Xylenes, Total	ug/Kg	15.0	ND	

QUALITY CONTROL DATA				
Surrogate Compound	Spike Added	% Recovery	QC Limits	Qualifier
Dibromofluoromethane	50 ug/Kg	117	56 - 153	
1,2-Dichloroethane-d4	50 ug/Kg	132	64 - 130	S
Toluene-d8	50 ug/Kg	121	68 - 124	
4-Bromofluorobenzene	50 ug/Kg	82	70 - 137	

EPAHO104001450

KAP TECHNOLOGIES, Inc.
9391 Grogans Mill Rd., Suite A-2
The Woodlands, TX 77380
Ph: 281.367.0065 Fax: 281.367.6772

Report Date: 03/11/2009

Laboratory Term and Qualifier Definitions

GENERAL TERMS DEFINITIONS

c/100mL	Colonies per 100mL of sample	ND	Analyte not detected at or above the reporting limit.
Conc.	Concentration	ppm	parts per million
DF	Dilution Factor	QC	Quality Control
LCS	Laboratory Control Standard	Reg Limit	Regulatory Limit
LCSD	Laboratory Control Standard Duplicate	Rpt Limit	Reporting Limit
MDL	Method Detection Limit	RPD	Relative Percent Difference
MQL	Method Quantitation Limit	SQL	Sample Quantitation Limit (Reflects any adjustments made during analysis such as dry weight or dilution.)
MS	Matrix Spike		
MSD	Matrix Spike Duplicate	TNTC	Too numerous to count

QUALIFIER DEFINITIONS

D	Elevated reporting limit due to dilution. Dilution resulted from sample matrix interference or high target analytes or both.
E	Estimated result due to insufficient sample for additional dilution.
H	Sample analyzed outside the EPA recommended holding time for the requested analysis.
I	Estimated result due to % RSD or correlation coefficient outside the QC limits in the initial calibration.
J	Result is between the MDL and the reporting limit.
L	LCS or LCSD recovery is outside the QC limits.
M	MS or MSD recovery is outside the QC limits.
R	Percent RPD is outside the QC limits
S	Surrogate recovery is outside the QC limits. Sample results were confirmed by re-analysis.
U	Analyte not detected above the MDL

LABORATORY ANALYSIS REPORT

KAP TECHNOLOGIES, Inc.
9391 Grogans Mill Rd., Suite A-2
The Woodlands TX. 77380
Ph: 281-367-0065 Fax: 281-367-6772

Report Date: March 11, 2009

KAP Lab Episode No: 3307

Customer Project Information/Analytical Requirements			
Client Project Name:	**World Metalogical**	***Client Project Number:***	**....**

Reported To:

CKG Services, LLC.
10707 Honea Egypt Rd.
Montgomery, TX 77316
936-483-3662

Project Manager: Zac McKaughn
E-Mail Address: zacm@ckg-services.com

KAP TECHNOLOGIES, Inc. has analyzed the following samples as indicated on the attached Chain-of-Custody:

	Client Sample Identification	Matrix	Sampling Date	Sampling Time	KAP Lab ID:	Analysis
1	2/26/09 - Contaminated Dirt	Soil	2/26/09	13:15	3307-01	BTEX, TCLP Metals, PCBs, TPH
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

Analytical Report Approved by: M. A. Bellows
Meagan A. Bellows
QA Manager

3220
US Flowchem

EPAHO104001453

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/16/2009**

Dear **Steve Erikson**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3220

Expiration Date 3/16/2011

Generator: US Flowchem
Address: 43253 Old Houston Hwy
Waller, TX 77484

Waste Information

Name of Waste: Unused Red Diesel and Water
TCEQ Waste Code #: Recycle
Container Type:
Detailed Description of Process Generating Waste:
Unused Diesel and water mixture (rain water)
Color: Red **Odor:** hydrocarbon **pH:** 5-9
Physical State:
Incompatibilities: oxidizers
Safety Related Data/Special Handling:
Level C PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

✓ Recycle Tote #4 DB/MM

CES Environmental Services, Inc.

☑ CES Environmental Services – Houston Facility
4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

☒ CES Environmental Services – Port Arthur Facility
2420 S. Gulfway Drive, Port Arthur, TX 77641
Phone: (713) 676-1460 Fax: (713) 676-1676
U.S. EPA ID No: TXR000079307 ISWR No: 88585

SECTION 1: Material Producer Information

Company:	US Flowchem		
Address:	43253 Old Houston Hwy		
City, State, Zip:	Waller, TX 77484		
Contact:	Steve Erikson	**Title:**	
Phone No:	936-372-5347	**Fax No:**	936-372-0058
24/hr Phone:			
U.S. EPA I.D. No:	TXR000079112		
State I.D.	88479	**SIC Code:**	

SECTION 2: Billing Information – ☒ Same as Above

Company:			
Address:			
City, State, Zip:			
Contact:		**Title:**	
Phone No:		**Fax No:**	

SECTION 3: General Description of the Material / Product

Name of Material / Product: Unused Red Diesel and Water
Detailed Description of Process Generating or Producing the Material / Product: Unused diesel and water mixure. Water contamination came from rain.

Physical State: ☒ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color: Red **Odor:** Hydrocarbon

Specific Gravity (water=1): .8-.9 **Density:** 7-8 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Layers: ☐ Single-phase ☒ Multi-phase

Container Type: ☐ Drum ☒ Tote ☐ Truck ☐ Other (explain)
Container Size: ____ 300 ____ ____

Frequency: ☐ Weekly ☐ Monthly ☐ Quarterly ☐ Yearly
Number of Units (containers): 1 **Other:** ____

Proper U.S. DOT Shipping Name: N/A Hydrocarbon and Water Mixture

Class: Na **UN/NA:** Na **PG:** NA **RQ:** Na

Flash Point	pH	N/A	N/A	Solids
>150	5-9			0-2%

Oil&Grease	TOC	Zinc	Copper	Nickel
Namg/l	Namg/l	Namg/l	Namg/l	Namg/l

SECTION 4: Physical and Chemical Data

COMPONENT/VALUE	Concentration	Units
The material / product consists of the following materials	Ranges are acceptable	or %
Red Diesel	90-100	%
Water	0-10	%
Debris, dust, dirt	0-2	%

SECTION 5: Safety Related Data

If the handling of this material / product requires the use of special protective equipment, please explain.
Level C PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.
Generator Knowledge

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
Oxidizers

SECTION 8: Material Producer's Certification

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: [signature] **Date:** 3/12/09

Printed Name/Title: ____

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Technical Manager: [signature]	
Date: 3-13-09 Approved Rejected	
Approval Number: HOW-3220	

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pricing (including freight):**

$95/tote

2. **Contamination Limits (maximum limit before surcharges apply):**

Fails Chlor-d-Tect

3. **Surcharge Pricing:**

Solids >2%, Low Flash

4. **Special Testing Requirements:**

% Water, Flash, Solids, Chlor-d-tect, if solids are present, Phenol

5. **Treatment and Handling Protocol:**

Send for recycling based on flash
Send to Used Oil or Other Recycleable Hydrocarbon Streams for sale

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A ☒ Subcategory B ☐ Subcategory C

EPAHO104001457

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

7. **Tests for Product Recovered/Recycled (if applicable):**

Used oil standard or hydrocarbon Standard

8. **Management for Product Recovered/Recycled (if applicable):**

Can go into used oil if flash is >150
Can go into other light end recycleables if flash is <150

EPAHO104001458

3221
AT&T

EPAHO104001459

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/17/2009**

Dear **Dan Stinson**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3221

Expiration Date 3/17/2011

Generator: AT&T (Jones Rd.)
Address: 11239 Jones Rd.
Houston, TX 77070

Waste Information

Name of Waste: Recyclable Hydrocarbon and Water mixture
TCEQ Waste Code #: Recycle
Container Type:
Detailed Description of Process Generating Waste:
removal from UST
Color: varies **Odor:** diesel **pH:** 4-10
Physical State:
Incompatibilities: none known
Safety Related Data/Special Handling:
Level D PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

CES Environmental Services, Inc.

REG

☒ CES Environmental Services – Houston Facility
4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

☐ CES Environmental Services – Port Arthur Facility
2420 S. Gulfway Drive, Port Arthur, TX 77641
Phone: (713) 676-1460 Fax: (713) 676-1676
U.S. EPA ID No: TXR000079307 ISWR No: 88585

SECTION 1: Material Producer Information

Company:	AT&T		
Address:	11239 Jones Rd		
City, State, Zip:	Houston, TX 77070		
Contact:	Dan Stinson	Title:	VP B+K Service Inc.
Phone No:	713-829-6906	Fax No:	281-331-9509
24/hr Phone:	713-829-6906		
U.S. EPA I.D. No:	TXCESQG		
State I.D.	CESQG	SIC Code:	

SECTION 2: Billing Information – ☐ Same as Above

Company:	B & K Services, Inc.		
Address:	PO Box 2563		
City, State, Zip:	Alvin, TX 77512		
Contact:	Dan Stinson	Title:	VP
Phone No:	713-829-6906	Fax No:	281-331-9509

SECTION 3: General Description of the Material / Product

Name of Material / Product: Recyclable Hydrocarbon and Water Mixture
Detailed Description of Process Generating or Producing the Material / Product: Removal of U.S.T.

Physical State: ☒ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color: Varies Odor: Diesel

Density: 7-8 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Layers: ☐ Single-phase ☒ Multi-phase

Container Type:	☐ Drum	☐ Tote	☒ Truck	☐ Other (explain)
Container Size:			10-1000	

Frequency: ☐ Weekly ☐ Monthly ☒ Quarterly ☐ Yearly

Proper U.S. DOT Shipping Name: Recycleable Hydrocarbon and Water Mixture

Class: Na UN/NA: Na PG: Na RQ: Na

Flash Point	pH	N/A	N/A	Solids
>150	4-10			0-8%

Oil&Grease	TOC	Zinc	Copper	Nickel
>1500mg/l	Labmg/l	Labmg/l	Labmg/l	Labmg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The material / product consists of the following materials	Concentration Ranges are acceptable	Units or %
Unused Diesel	5-30	
Water	70-95	%
Solid Debris	0-2	%

SECTION 5: Safety Related Data

If the handling of this material / product requires the use of special protective equipment, please explain.
Level D PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.
None-Unused Diesel (on road)

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
None

SECTION 8: Material Producer's Certification

The information contained herein is based on ☐ generator knowledge and/or ☒ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Dan Stinson **Date:** 03/17/09

Printed Name/Title: Dan Stinson

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Technical Manager: [illegible]	
Date: 3-17-09 Approved Rejected	
Approval Number: HOU 3221	

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pricing (including freight):**

.12/gal ($250 Min)

2. ***Contamination Limits (maximum limit before surcharges apply):***

Flashes <121

3. **Surcharge Pricing:**

TOC >5000, standard surcharges apply

4. **Special Testing Requirements:**

Flash, Phenols, TOC,

5. **Treatment and Handling Protocol:**

Oily Water/ Hydrocarbon and Water Treatment area

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A ☒ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

7. **Tests for Product Recovered/Recycled (if applicable):**

Na

8. **Management for Product Recovered/Recycled (if applicable):**

Na

3222

Southwest Shipyard

EPAHO104001465

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/18/2009**

Dear **Edwin Anderson**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # PA-3222

Expiration Date 3/18/2011

Generator: Southwest Shipyard
Address: 18310 Market Street
Channelview, TX 77530

Waste Information

Name of Waste: Sulfidic Caustic Solution
TCEQ Waste Code #: PRODUCT
Container Type:
Detailed Description of Process Generating Waste:
Processing of fuels using caustic to remove sulfides
Color: Brown to Red **Odor:** Sulfur / H2S smell **pH:** 10.5-12.4
Physical State:
Incompatibilities: Metals, Oxidizing agents
Safety Related Data/Special Handling:
Chemical suit, rubber gloves, rubber boots, safety goggles, face shield, hard hat

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

#3202

CES Environmental Services, Inc.

GB Product

☐ **CES Environmental Services – Houston Facility**
4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

☒ **CES Environmental Services – Port Arthur Facility**
2420 S. Gulfway Drive, Port Arthur, TX 77641
Phone: (713) 676-1460 Fax: (713) 676-1676
U.S. EPA ID No: TXR000079307 ISWR No: 88585

SECTION 1: Material Producer Information

Company: Southwest Shipyard, LP
Address: 18310 Market Street
City, State, Zip: Channelview, TX 77530
Contact: George Sladecek **Title:**
Phone No: (281) 860-3200 **Fax No:** (281) 860-3215
24/hr Phone:
U.S. EPA I.D. No: N/A
State I.D. NA **SIC Code:** NA

SECTION 2: Billing Information – ☒ Same as Above

Company:
Address:
City, State, Zip:
Contact: **Title:**
Phone No: **Fax No:**

SECTION 3: General Description of the Material / Product

Name of Material / Product: Suflidic Caustic Solution
Detailed Description of Process Generating or Producing the Material / Product: Processing of fuels using caustic to remove sulfides.

Physical State: ☒ **Liquid** ☐ **Sludge** ☐ **Powder** ☐ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: Brown to Red **Odor:** Sulfur / H2S smell

Specific Gravity (water=1): 1.03 **Density:** 8.6-9.2 lbs/gal

Does this material contain any total phenolic compounds? ☐ **Yes** ☒ **No**

Does this material contain any para substituted phenolic compounds? ☐ **Yes** ☒ **No**

Layers: ☒ **Single-phase** ☐ **Multi-phase**

Container Type: ☐ **Drum** ☐ **Tote** ☒ **Truck** ☐ **Other (explain)**
Container Size: 5000 gal

Frequency: ☐ **Weekly** ☐ **Monthly** ☒ **Quarterly** ☒ **Yearly**
Number of Units (containers): 4 **Other:**

Product

Proper U.S. DOT Shipping Name: Sodium Hydroxide Solution

Class: 8 **UN/NA:** UN1824 **PG:** PG II **RQ:**

Flash Point	pH	N/A	N/A	Solids
N/A	10.5-12.4			0%

Oil&Grease	TOC	Zinc	Copper	Nickel
NAmg/l	NAmg/l	NAmg/l	NAmg/l	NAmg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	Concentration	Units
The material / product consists of the following materials	Ranges are acceptable	or %
Water	90-95	%
Sodium Hydroxide	5-10	%
Solids	0-5	%

SECTION 5: Safety Related Data

If the handling of this material / product requires the use of special protective equipment, please explain.
Chemical Suit, Rubber Gloves, Rubber Boots, Safety Goggles, Face Shield, Hard Hat

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.
MSDS

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
Metals, Oxidizing Agents

SECTION 8: Material Producer's Certification

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: George P. Slabecek **Date:** 3-17-09

Printed Name/Title: GEORGE SLABECEK / ENV. MANAGER

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Technical Manager: [signature]	
Date: 3-17-09 (Approved) Rejected	
Approval Number:	

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

30¢/gal - 350.00 Trans + FSC

Trailer Rinse - 125.00 If necessary

2. Contamination Limit (maximum limit before surchages apply):

3. Surcharge Pricing:

notify Gary at % solids if > 3%

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

Port Arthur - Na Silt Prod.

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

Material Safety Data Sheet

Sodium hydrosulfide solution

MSDS Number 8000TDC (Revised: 02/23/2007) 6 Pages

Section 1: CHEMICAL PRODUCT and COMPANY IDENTIFICATION

1.1 **Product Name** ..... **Sodium hydrosulfide solution**
Chemical Family ..... Inorganic salt solution
Synonyms ..... Sodium hydrogen sulfide, sodium sulfhydrate' sodium bisulfide, sodium mercaptan, KI-300
Formula ..... H-Na-S

1.2 **Manufacturer** ..... TDC, LLC
1916 Farmerville Highway
Ruston, Louisiana 71270
Information ..... (318) 242-5305

1.3 **Emergency Contact** ..... (800) 422-6274
(800) 424-9300 (CHEMTREC)

Section 2: COMPOSITION, INFORMATION ON INGREDIENTS

2.1 **Chemical Ingredients (% by wt.)**

Sodium hydrosulfide	CAS #:16721-80-5	20-45%
Sodium sulfide	CAS #: 1313-82-2	<1.0% (Typical)
Sodium carbonate	CAS #: 497-19-8	<3.0% (Typical)
Water	CAS #:7732-18-5	54-79%

(See Section 8 for exposure guidelines)

Section 3: HAZARDS IDENTIFICATION

NFPA: **Health - 3** **Flammability - 2** **Reactivity - 1**

Section 3: HAZARDS IDENTIFICATION, Cont.

EMERGENCY OVERVIEW

Warning: Solution is highly alkaline
Contains hydrogen sulfide , a highly toxic gas.
Eye contact will cause marked eye irritation and possibly severe corneal damage.
Skin contact will result in irritation and possible corrosion of the skin. Ingestion will irritate/burn mouth, throat and gastrointestinal tract. Contact with stomach acid will cause hydrogen sulfide vapors to be released. Heating or acid will cause hydrogen sulfide gas to evolve. Dilution of NaHS with water will also cause increased evolution of hydrogen sulfide.

3.1 POTENTIAL HEALTH EFFECTS

EYE: Contact with the eyes will cause marked eye irritation and possibly severe corneal damage.

SKIN CONTACT: Contact with the skin will cause skin irritation or burning sensation. Prolonged contact will result in corrosion of the skin.

SKIN ABSORPTION: Absorption is unlikely to occur.

INGESTION: Ingestion will result in severe burning and corrosion of mouth, throat and the gastrointestinal tract. If the ingested material contacts stomach acid, highly toxic hydrogen sulfide gas will be evolved.

INHALATION: Product solution and vapors contain highly toxic hydrogen sulfide gas. Exposure to this gas causes, headaches, nausea, dizziness and vomiting. Continued exposure can lead to loss of consciousness and death..

CHRONIC EFFECTS/CARCINOGENICITY: Not listed as a carcinogen by NTP, IARC or OSHA.

Section 4: FIRST AID MEASURES

4.1 EYES: Immediately flush with large quantities of water for 15 minutes. Hold eyelids apart during irrigation to insure thorough flushing of the entire area of the eye. Obtain immediate medical attention.

4.2 SKIN: Immediately flush with large quantities of water. Remove contaminated clothing under a safety shower. Obtain immediate medical attention

4.3 INGESTION: DO NOT INDUCE VOMITING. If victim is conscious, immediately give 2 to 4 glasses of water. If vomiting does occur, repeat fluid administration. Obtain immediate medical attention.

4.4 INHALATION: Remove victim from contaminated atmosphere. If breathing is labored, administer oxygen. If breathing has ceased, clear airway and start mouth to mouth resuscitation. If heart has stopped beating, external heart massage should be applied. Obtain immediate medical attention.

Section 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

FLASH POINT: Not flammable **METHOD USED:** NA

Section 5: FIRE FIGHTING MEASURES, Cont.

5.2 FLAMMABLE LIMITS **Hydrogen sulfide** **LFL**: 4% **UFL**: 44%

5.3 EXTINGUISHING MEDIA: Water spray or foam or as appropriate for combustibles involved in fire.

5.4 FIRE & EXPLOSIVE HAZARDS: Solution is non-flammable. However if these solutions are exposed to heat or acids, hydrogen sulfide will be released and may form explosive mixtures with air (see above).

Keep containers/storage vessels in fire area cooled with water spray. Heating may cause the release of hydrogen sulfide vapors.

5.5 FIRE FIGHTING EQUIPMENT: Because of the possible presence of toxic gases and the corrosive nature of the product, wear self-contained breathing apparatus, pressure demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1 Small releases: Isolate for 100 feet. Confine area to qualified response personnel. Wear proper Personnel Protective equipment (See Section 8). Confine release material by berming or diverting its path. Absorb on sand, earth or other inert dry absorbent. Do not allow into sewer, storm drains or any waterway. Oxidize residual reactive sulfides with a weak (3-5%) hydrogen peroxide solution to stop the release of toxic hydrogen sulfide. Remove contaminated soil and dispose of in accordance with all governmental regulations.

6.2 Large releases: Activate Emergency Response Plan procedures. Isolate release area for 700 feet. Confine area to qualified response personnel. Wear proper Personnel Protective Equipment (See Section 8). Shut off release, if safe to do so. Dike spill area to prevent runoff into sewers, drains (potential toxic and explosive mixtures of hydrogen sulfide in confined spaces) or surface waterways (potential aquatic toxicity). Recover as much of the solution as possible. Treat remaining material as a small release (above).

Section 7: HANDLING and STORAGE

7.1 Handling: Wear proper protective equipment (See Section 8). Avoid breathing product vapors. Avoid contact with skin and eyes. Use only in a well ventilated area. Dilute product only in enclosed containers. Wash thoroughly after handling.

7.2 Storage: Store in well ventilated areas. Do not store combustibles in the area of storage vessels. Keep away from any sources of heat or flame. Store tote and smaller containers out of direct sunlight at moderate temperatures [<80° F (27° C)]. (See Section 10.4 for materials of construction)

Section 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

8.1 RESPIRATORY PROTECTION: If working near open container, storage vessel opening or open tank truck dome cover, wear self-contained breathing apparatus, pressure demand, MSHA/NIOSH (approved or equivalent).

Section 8: EXPOSURE CONTROLS, PERSONAL PROTECTION, Cont.

8.2 SKIN PROTECTION: Neoprene rubber gloves, chemical suit and boots should be worn to prevent contact with the liquid. Wash contaminated clothing prior to reuse. Contaminated leather shoes cannot be cleaned and should be discarded.

8.3 EYE PROTECTION: Chemical goggles and a full face shield.

8.4 EXPOSURE GUIDELINES:

	OSHA		ACGIH	
	TWA	STEL	TLV	STEL
Hydrogen sulfide	20 ppm (ceiling)		10 ppm (ceiling)	

8.5 ENGINEERING CONTROLS: Use adequate exhaust ventilation to prevent inhalation of product vapors. Where feasible scrub process or storage vessel vapors with caustic solution.
Maintain eyewash/safety shower in areas where chemical is handled.

Section 9: PHYSICAL and CHEMICAL PROPERTIES

9.1 APPEARANCE:	May be yellow to red, to dark green to black liquid.
9.2 ODOR:	Hydrogen sulfide (rotten egg), hydrocarbon (mercaptan) odor.
9.3 BOILING POINT:	253 °F(122.8 °C) - 269 °F (131.7 °C)
9.4 VAPOR PRESSURE:	17 mm Hg @ 68 °F (20 °C)
9.5 VAPOR DENSITY: (Air = 1.0)	1.17
9.6 SOLUBILITY IN WATER:	Complete
9.7 SPECIFIC GRAVITY:	1.152 - 1.303 (9.6 - 10.9 lbs/gal)
9.8 FREEZING POINT:	0° F (-17.8° C) - 20% 56° F (13.3° C) - 45%
9.9 pH:	11.5 - 12.5
9.10 VOLATILE:	Not determined

Section 10: STABILITY and REACTIVITY

10.1 STABILITY: This is a stable material

10.2 HAZARDOUS POLYMERIZATION: Will not occur.

10.3 HAZARDOUS DECOMPOSITION PRODUCTS: Heating this product will evolve hydrogen sulfide. Fire conditions will also cause the production of sulfur dioxide. Hydrogen sulfide (4-44%) may form flammable mixtures with air. Heating to decomposition emits toxic fumes of sulfoxides and Na_2O

10.4 INCOMPATIBILITY: Acids will cause the release of highly toxic hydrogen sulfide. Reacts violently with diazonium salts. Sodium hydrosulfide solution is not compatible with copper, zinc, aluminum or their alloys (i.e. bronze, brass, galvanized metals, etc.). Corrosive to steel above 150° F (65.5° C). These materials of construction should not be used in handling systems or storage containers for this product (SEE Section 7.2, Storage). Dilution of NaHS with water will increase the evolution of hydrogen sulfide. Dilution should be done in an enclosed container.

Section 11: TOXICOLOGICAL INFORMATION

11.1 ORAL: Data not available

Section 11: TOXICOLOGICAL INFORMATION, Cont.

11.2 DERMAL: Data not available

11.3 INHALATION: INH-RAT LC_{50}: 444 ppm (hydrogen sulfide)
INH-MOUSE LC_{50}: 1,500 mg/m^3 18 minutes
INH-RAT LC_{50}: 1,500 mg/m^3 14 minutes

11.4 CHRONIC/CARCINOGENICITY: No evidence available

11.5 TERATOLOGY: Data not available

11.6 REPRODUCTION: Data not available

11.7 MUTAGENICITY: Data not available

Section 12: ECOLOGICAL INFORMATION

Static acute 96 hour-LC_{50} for mosquito fish is 206 mg/L. (Tl_m - fresh water)
LC_{50} fly inhalation 1,500 mg/m^3, 7 minutes
TL_m Gammarus 0.84 mg/L, 96 hours (hydrogen sulfide)
TL_m Ephemera 0.316 mg/L, 96 hours (hydrogen sulfide)
TL_m Flathead minnow 0.071 – 0.55 mg/L @ 6-24°C, 96 hour flow through bioassay (hydrogen sulfide)
TL_m Bluegill 0.0090 – 0.0140 mg/L @ 20-22°C, 96 hour flow through bioassay (hydrogen sulfide)
TL_m Brook trout 0.0216 – 0.0308 mg/L @ 8-12.5°C, 96 hour flow through bioassay (hydrogen sulfide)

Section 13: DISPOSAL CONSIDERATIONS

If released to the environment for other than its intended purpose, this product contains some reactive sulfides which may be in sufficient quantity to meet the definition of a D003, hazardous waste.

Section 14: TRANSPORT INFORMATION

14.1 DOT Shipping Name:	Corrosive liquids, toxic, n.o.s.	
14.2 DOT Hazard Class:	8 (6.1)	
14.3 UN/NA Number:	UN2922	UN2949 (IMDG - over water)
14.4 Packing Group:	II	
14.5 DOT Placard:	Corrosive	
14.6 DOT Label(s):	Corrosive, Toxic	
14.7 IMO Shipping Name:	Sodium hydrosulphide solution	
14.8 RQ (Reportable Quantity):	5,000 lbs (2268 Kg) 100% basis [2,604 gal (20%) 1,019 gal (45%)]	

Section 14: TRANSPORT INFORMATION, Cont

14.9 RR STCC Number: 26-123-33/49-352-04

14.10 USCG Codes: Bulk — SHR (sodium hydrosulfide solution)
Barge — SSI (Sodium sulfide, hydrosulfide solutions, H_2S greater than 15 ppm but less than 200 ppm)

Section 15: REGULATORY INFORMATION

15.1 OSHA: This product is listed as a hazardous material under criteria of the Federal OSHA Hazard Communication Standard, 29 CFR 1910.1200.

15.2 SARA TITLE III:

a.	**EHS** (Extremely Hazardous Substance) List:		No
b.	Section 311/312, (Tier I,II) Categories:	Immediate (acute)	Yes
		Fire	Yes
		Sudden release	No
		Reactivity	Yes
		Delayed (chronic)	No
c.	Section 313 (Toxic Release Report-Form R):		No
d.	**TPQ** (Threshold Planning Quantity):		No

15.3 CERCLA/SUPERFUND: RQ (Reportable Quantity) — 5,000 lbs (2270 Kg)

15.4 TSCA (Toxic Substance Control Act) Inventory List: Yes

15.5 RCRA (Resource Conservation and Recovery Act) Status: D003 (See Section 13)

15.6 WHMIS (Canada) Hazard Classification: E, D1

15.7 DOT Hazardous Material: (See Section 14) Yes

15.8 CAA Hazardous Air Pollutant (HAP) No

Section 16: OTHER INFORMATION

REVISIONS: The entire MSDS was reformatted to comply to ANSI Standard Z400.1-1993.

Revised Sections 1.1, 8.3, 11, 12, 5/7/02
Revised pH range in Section 8, 6/19/02
Revised shipping info & RQ data, 1/15/03
Revised Section 3, Emergency Overview & Section 10.4 to include dilution caution. 1/23/04
Revised Section 2.1, Ingredients & Section 15, added USCG Codes. 5/3/04
Revised Section14.10 (added), 15.9 (deleted), USCG shipping codes, 7/21/04.
Revised Logo and Emergency contact telephone number, 2/23/07

THE INFORMATION PUBLISHED IN THIS MATERIAL SAFETY DATA SHEET HAS BEEN COMPILED FROM OUR EXPERIENCE AND OSHA, ANSI, NFPA, DOT, ERG, AND CHRIS. IT IS THE USER'S RESPONSIBILITY TO DETERMINE THE SUITABILITY OF THIS INFORMATION FOR THE ADOPTION OF NECESSARY SAFETY PRECAUTIONS. WE RESERVE THE RIGHT TO REVISE MATERIAL SAFETY DATA SHEETS PERIODICALLY AS NEW INFORMATION BECOMES AVAILABLE.

3223
Brenntag

EPAHO104001477

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/19/2009**

Dear **Dave Allen**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3223

Expiration Date 3/19/2011

Generator: Brenntag
Address: 14826 Hooper Road
Houston, TX 77047

Waste Information

Name of Waste:
TCEQ Waste Code #:
Container Type:
Detailed Description of Process Generating Waste:

Color: **Odor:** **pH:**
Physical State:
Incompatibilities:
Safety Related Data/Special Handling:

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

#3223

Product 3R

CES Environmental Services, Inc.

☐ **CES Environmental Services – Houston Facility**
4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

☒ **CES Environmental Services – Port Arthur Facility**
2420 S. Gulfway Drive, Port Arthur, TX 77641
Phone: (713) 676-1460 Fax: (713) 676-1676
U.S. EPA ID No: TXR000079307 ISWR No: 88585

SECTION 1: Material Producer Information

Company:	Brenntag		
Address:	14826 Hooper Road		
City, State, Zip:	Houston, TX 77047		
Contact:	Dave Allen	**Title:**	
Phone No:	713-433-6771	**Fax No:**	713-433-8572
24/hr Phone:			
U.S. EPA I.D. No:	TXD062128004		
State I.D.	30205	**SIC Code:**	NA

SECTION 2: Billing Information – ☒ Same as Above

Company:			
Address:			
City, State, Zip:			
Contact:		**Title:**	
Phone No:		**Fax No:**	

SECTION 3: General Description of the Material / Product

Name of Material / Product: Potassium Hydroxide Line Flush
Detailed Description of Process Generating or Producing the Material / Product: From flushing out transfer piping

Physical State: ☒ **Liquid** ☐ **Sludge** ☐ **Powder** ☐ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: white to clear **Odor:** none

Specific Gravity (water=1): 1.2 **Density:** 10 lbs/gal

Does this material contain any total phenolic compounds? ☐ **Yes** ☒ **No**

Does this material contain any para substituted phenolic compounds? ☐ **Yes** ☒ **No**

Layers: ☒ **Single-phase** ☐ **Multi-phase**

Container Type: ☐ **Drum** ☒ **Tote** ☐ **Truck** ☐ **Other (explain)**
Container Size: ____ 250gal ____ ____

Frequency: ☐ **Weekly** ☐ **Monthly** ☒ **Quarterly** ☐ **Yearly**
Number of Units (containers): 1-5 **Other:** ____

Product

Proper U.S. DOT Shipping Name: UN1760, Corrosive liquids, n.o.s., (Potassium hydroxide)

Class: 8 **UN/NA:** UN1760 **PG:** PG II **RQ:** 1000

Flash Point >140	**pH** 12-14	**N/A**	**N/A**	**Solids** 2%
Oil&Grease <1500mg/l	**TOC** <1500mg/l	**Zinc** 0mg/l	**Copper** 0mg/l	**Nickel** 0mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The material / product consists of the following materials	Concentration Ranges are acceptable	Units or %
Potassium Hydroxide	5-15	%
Water	85-95	%
Solids (dirt)	0-2	%

SECTION 5: Safety Related Data

If the handling of this material / product requires the use of special protective equipment, please explain.
Level C

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
Acid

SECTION 8: Material Producer's Certification

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** 3/17/09

Printed Name/Title: Dave Allen

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Technical Manager: _____

Date: 3-19-09 Approved Rejected

Approval Number: _____

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pricing (including freight):**

$100 / Tote

2. **Contamination Limits (maximum limit before surcharges apply):**

3. **Surcharge Pricing:**

4. **Special Testing Requirements:**

5. **Treatment and Handling Protocol:**

Will use in tank wash & w/w nuetralization

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

7. **Tests for Product Recovered/Recycled (if applicable):**

8. **Management for Product Recovered/Recycled (if applicable):**

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

To: Gary Brauckman
Cc: Matt Bowman, Prabhaker, Joe Camp, Clint Hopkins

Date: 3/2/09

From: Miles Root

Lab Memo: 09-034

Subject: **Brenntag Evaluation 0309-03**

A sample of caustic from Brenntag, Houston, has been evaluated for potential use at CES/PACES. This sample is evaluation 0309-03 and represents caustic from a line flush. The potential volume of this stream is 2-4 totes per month. Overall, this caustic looks good for use at CES but is too low strength to effectively help us at PACES. Its acquisition is recommended.

This caustic has a density of 1.084, which is equivalent to 8% NaOH. The caustic value by titration is 8.3 wt%, so this is a pretty close match. This particular sample has a slight ammonia odor which Gary indicates is in one of the three totes currently available. I do not believe that this will be an issue for our use. Its main use will be pH adjustment on incoming loads as needed, tank wash, and caustic use in our waste water treatment system. Since this material will be coming to us in totes there will be minor handling issues. Charge accordingly.

3224
B W Services

EPAHO104001484

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/20/2009**

Dear **Brandon White**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3224

Expiration Date 3/19/2011

Generator: BW Services
Address: 1100 Wayne Drive
Angleton, TX 77515

Waste Information

Name of Waste: Unused Ferric Sulfate
TCEQ Waste Code #: Product
Container Type:
Detailed Description of Process Generating Waste:
cleaning of railcars that contained virgin material
Color: reddish brown **Odor:** acrid **pH:** <2
Physical State:
Incompatibilities: alkalis and metals
Safety Related Data/Special Handling:
level C PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

DB/MM

CES Environmental Services, Inc.

Product

☒ **CES Environmental Services – Houston Facility**
4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

☐ **CES Environmental Services – Port Arthur Facility**
2420 S. Gulfway Drive, Port Arthur, TX 77641
Phone: (713) 676-1460 Fax: (713) 676-1676
U.S. EPA ID No: TXR000079307 ISWR No: 88585

SECTION 1: Material Producer Information

Company: BW Services
Address: 1100 Wayne Drive
City, State, Zip: Angelton, TX 77515
Contact: Brandon Douglas **Title:**
Phone No: 979-848-8800 **Fax No:** 979-848-9990
24/hr Phone: 281-734-8478
U.S. EPA I.D. No: TXD086467800
State I.D. 30207 **SIC Code:**

SECTION 2: Billing Information – ☒ Same as Above

Company:
Address:
City, State, Zip:
Contact: **Title:**
Phone No: **Fax No:**

SECTION 3: General Description of the Material / Product

Name of Material / Product: Unused Ferric Sulfate
Detailed Description of Process Generating or Producing the Material / Product: Unused Ferric Sulfate Solution in drums from cleaning a rail car that contained virgin material.

Physical State: ☒ **Liquid** ☐ **Sludge** ☐ **Powder** ☐ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: Reddish Brown **Odor:** Acrid

Specific Gravity (water=1): 1-1.5 **Density:** 12.5 lbs/gal

Does this material contain any total phenolic compounds? ☐ **Yes** ☒ **No**

Does this material contain any para substituted phenolic compounds? ☐ **Yes** ☒ **No**

Layers: ☒ **Single-phase** ☐ **Multi-phase**

Container Type: ☒ **Drum** ☐ **Tote** ☐ **Truck** ☐ **Other (explain)**
Container Size: 55

Frequency: ☐ **Weekly** ☐ **Monthly** ☐ **Quarterly** ☐ **Yearly**
Number of Units (containers): 2 **Other:**

Product
Proper U.S. DOT Shipping Name: Corrosive Liquid, nos (Ferric Sulfate Solution)

Class: 8 **UN/NA:** UN1760 **PG:** III **RQ:** 1000

Flash Point	pH	N/A	N/A	Solids
>200	<2			0%

Oil&Grease	TOC	Zinc	Copper	Nickel
0mg/l	Namg/l	Namg/l	Namg/l	Namg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	Concentration	Units
The material / product consists of the following materials	Ranges are acceptable	or %
Ferric Sulfate	75	%
Water	25	%

SECTION 5: Safety Related Data

If the handling of this material / product requires the use of special protective equipment, please explain.
Level C PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.
MSDS Sheets

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
Alkalis and metals

SECTION 8: Material Producer's Certification

The information contained herein is based on ☐ generator knowledge and/or ☒ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** 03/10/09

Printed Name/Title: Brandan White Vice President

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Technical Manager: _____	
Date: 3-19-09 (Approved) Rejected	
Approval Number: HOU-3224	

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pricing (including freight):**

$255/dm

2. **Contamination Limits (maximum limit before surcharges apply):**

Off-Spec, Has solids or contaminants

NEEDS TO BE IN A POLY DRUM IF NOT ALREADY

3. **Surcharge Pricing:**

None

4. **Special Testing Requirements:**

Check Purity- SHould be clear to Yellow with very low PH

5. **Treatment and Handling Protocol:**

Use in waste water treatment or on Irvin's cleaning jobs offsite

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

EPAHO104001488

2-Drums

CES #255 Ham

MATERIAL SAFETY DATA SHEET

SECTION 1 – IDENTITY INFORMATION

Product Name:	**FERRIC SULFATE SOLUTION**
Chemical Formula:	$Fe_2(SO_4)_3$
Synonyms:	Iron (111) Sulfate, Iron Persulfate
Chemical Family:	Iron salt solution
Molecular Weight:	399.88
NIOSH RTECS NO:	8505000
Latest Revision Date:	5-15-97

SECTION 2 – HAZARDOUS INGREDIENTS

		OSHA PEL	ACGIH TLV	%
Ferric Sulfate – $Fe_2(SO_4)_3$	CAS# 10028-22-5	1mg/m3	1mg/m3	36-43
Sulfuric Acid - H_2SO_4	CAS# 7664-93-9	1mg/m3	1mg/m3	0-.5
Water – H_2O		N/A	N/A	56-64

SECTION 3 – PHYSICAL CHARACTERISTICS

Boiling Point:	220° - 235° F
Freezing Point:	-50° F (Concentration dependent)
Vapor Pressure:	N/A
Vapor Density (Air =1):	N/A (liquid)
Specific Gravity:	.1 –1.57
Evaporation Rate (Ether =1):	Greater than 1
Solubility in water:	Very Soluble
PH:	.1 – 1.5
Appearance and Odor:	Reddish brown solution, slight odor.

SECTION 4 – FIRE AND EXPLOSION DATA

Flash Point (method used):	None
Flammable Limits:	Non-Flammable
Extinguishing Media:	Dry Chemical, Water Spray or Carbon Dioxide
Special Fire Fighting Procedures:	Use water spray or foam in large fires. Wear self contained breathing apparatus.
Unusual Fire and Explosion Hazards:	Dangerous and irritating sulfur dioxide fumes may be Present in fire involving this substance.
NFPA Rating:	Health-2, Flammability-O, Reactivity-O

SECTION 5 – REACTIVITY DATA

Stability:	Stable
Incompatibilities:	Materials to void: Corrosive to cast iron, cast bronze, copper and its alloys and galvanized steel. May be corrosive to aluminum, enamel paints and concrete. Corrosive metal salt solutions may generate hydrogen gas when contacting alkaline metals.
Hazardous Polymerization:	May not occur
Decomposition Products:	When heated to decomposition, toxic sulfur dioxide, sulfur trioxide, And iron oxide fumes are produced.
Conditions to Avoid:	Open flames; avoid forming product mists.

SECTION 6 – HEALTH HAZARD DATA

Routes of Entry:	Inhalation, ingestion and skin contact.
Skin, Eye and Respiratory Irritation:	Yes
Carcinogenicity:	NTP: No data found. IARC: No data found. OSHA: No data found

SIGNS OR SYMPTOMS OF EXPOSURE:

Inhalation:	Minimal risk due to low vapor pressure. Product mists are irritating to mucous membranes, respiratory tract, and lung tissues.
Skin:	Short duration contact may cause skin irritation. Prolonged contact may cause Dermatitis and burns. Highly toxic by intravenous route.
Ingestion:	Oral ingestion may produce mild to moderately severe oral and esophageal burns, which could lead to liver cirrhosis and fibrosis of the pancreas. Other complications may include somnolence, diarrhea, irregular heart beat and vomiting blood.
Eyes:	Exposure results in pain and corrosive to the eyes. May cause burns to the inner Eyelids.

ESTIMATED FATAL DOSE: Ferric salts is 30 grams.
LD50 (mouse) = 601mg/kg

TOXIC HAZARD RATING: Moderately Toxic. Probable oral lethal dose in humans Ranges from .5-5g/kg or 1 oz. to 1 pint (1 lb.)

FIRST AID PROCEDURES:

Inhalation: Remove from affected area and give oxygen/artificial respiration if Needed. Seek medical attention for breathing difficulty.

Ingestion: DO NOT INDUCE VOMITING!
Do not give bicarbonate to neutralize. Activated charcoal is of no value. Passing a nasogastric tube into the stomach is controversial at this time. Irrigate all affected areas with copious amounts of water. Immediately dilute with 4 to 8 oz. of milk or water in adults and 2 to 4 oz. in children. Seek immediate medical attention. Perform saline catharsis. Evaluate for esophopharyngeal and gastric burns. In severe cases of gastrointestinal Necrosis, surgical consultation should be obtained.

Laboratory: Obtain baseline CBC and electrolytes, if needed.

Eye Exposure: Exposed eyes should be irrigated with copious amounts of water for at Least 15 minutes. Seek medical attention immediately! If irritation, lacrimation, swelling or photophobia persist, the patient should be re-examined at a health care facility.

Dermal Exposure: Remove contaminated clothing and wash thoroughly with copious amounts of soap and water for 15 minutes. A physician may need to be seen.

SECTION 7 – PRECAUTIONS FOR SAFE USE AND HANDLING

Steps to be taken in case of Release: Neutralize with Sodium Bicarbonate or Soda Ash. Transfer to an EPA approved container. When neutralized dispose of in accordance with local, state or federal environmental regulations. Dike spill to prevent run-off onto public land or waterways. Follow Response Guide #171 in DOT Emergency Response Guide Book 1996. In Canada emergency response assistance can be obtained by calling CANUTEC at 613-996-6666. (CERCLA RQ is 1000 lbs.)

Persons in charge of vessels or facilities are required to notify the National Response Center (NRC) immediately, as required under 40 CFR 302.6, when there is a release of this hazardous substance in an amount equal to or greater than its reportable quantity of 1000 lbs. or 454 kg. The toll free telephone number of the NRC in Canada and the U.S. is (800) 424-8802. Serious penalties are prescribed for failing to make the required notifications. Calling CHEMTREC does not constitute compliance with this requirement. Only a phone call to the NRC satisfies these reporting requirements.

Waste disposal methods: Neutralize and landfill or incinerate in accordance with local, state or Federal environmental regulations.

Precautions to be taken In Handling & Storage:	Keep containers closed and away from light. Protect containers against physical damage. Keep carboys from shifting during transport. Be sure carboys are loaded in accordance with DOT regulations. Product may be safely stored in fiberglass, plastics (PE, PP, PVC, ABS, FRP), rubber or type 316 or better grades of steel.
DOT Hazard Class:	Corrosive Material
DOT Shipping Name:	Corrosive liquid, n.o.s. (Ferric Sulfate Solution). 8, UN1760, II (RQ) 1000 pounds, DOT Response Guide #171
DOT Placard:	Corrosive

SECTION 8 – SPECIAL PROTECTION INFORMATION

Respiratory Protection:	If vapors or mists are excessive, wear a NIOSH/MSHA approved respirator for protection against acid gases with a dusts and mist prefilter.
Eye Protection:	If splashing can occur, wear full face shield, especially if pH is below 3.0. In any case, safety glasses or chemical goggles should be worn. An eye wash station and emergency shower should be readily available
Other Protective Clothing:	Use rubber gloves, apron and shoe covers. Polyethylene, Saranex, Butyl and natural rubber have been shown having greater breakthrough resistance than neoprene or PVC when exposed to sulfuric acids. Wash protective equipment after completing work . Check with your supplier for additional test data before making your choice.
Precautionary Labeling:	Warning! Irritant! May cause skin burns. Do not get in eyes, on skin or on clothing. Keep container closed. Use with adequate ventilation. Wash thoroughly after handling.

3225
B/W Services

EPAHO104001494

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/20/2009**

Dear **Brandon White**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3225

Expiration Date 3/19/2011

Generator: BW Services
Address: 1100 Wayne Drive
Angleton, TX 77515

Waste Information

Name of Waste: Unused Ethoxylated Alcohols
TCEQ Waste Code #: 00062191
Container Type:
Detailed Description of Process Generating Waste:
unused product cleaned from railcars
Color: clear **Odor:** mild sweet **pH:** 4-10
Physical State:
Incompatibilities: oxidizers, inorganic acids, halogens
Safety Related Data/Special Handling:
LEVEL D

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

DB/MM

CES Environmental Services, Inc.

OL

☑ CES Environmental Services - Houston Facility 4904 Griggs Road, Houston, TX 77021 Phone (713) 676-1460 Fax: (713) 676-1676 U.S. EPA ID Number: TXD008950461 ISWR Number: 30900 TCEQ Industrial Solid Waste Permit Number: 30948	☐ CES Environmental Services - Port Arthur Facility 2420 S. Gulfway Dr., Port Arthur, TX 77641 Phone (713) 676-1460 Fax: (713) 676-1460 U.S. EPA ID Number: TXR000079307 ISWR Number: 88585

SECTION 1: Generator Information

Company: BW Services
Address: 1100 Wayne Drive
City: Angelton **State:** TX **Zip:** 77515
Contact: Brandon Douglas **Title:** Manager
Phone Number: 979-848-8800 **Fax Number:** 979-848-9990
24/hr Phone Number: 281-734-8478
US EPA ID No: TXD086467800
State ID No: 30207 **SIC Code:**

SECTION 2: Billing Information - ☑ **Same as Above**

Company:
Address:
City: **State:** **Zip:**
Contact: **Title:**
Phone Number: **Fax Number:**

SECTION 3: General Description of the Waste

Name of Waste: Unused Ethoxylated Alcohols
Detailed Description of Process Generating Waste:

Unused product cleaned from railcars

Physical State: ☑ **Liquid** ☐ **Sludge** ☐ **Powder** ☐ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: Clear **Odor:** Mild-sweet

Specific Gravity (water=1): 0.97 **Density:** 8.25 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ **Single-phase** ☐ **Multi-phase**

Container Type: ☑ **Drum** ☐ **Tote** ☐ **Truck** ☐ **Other (explain)**

Frequency: ☐ **Weekly** ☑ **Monthly** ☐ **Yearly** ☐ **One-Time**
Quantity: 1-10 ~~10 gal~~

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: 00062191

Proper US DOT Shipping Name: Environmentally Hazardous Materials, Liquid, NOS

Class: 9 **UN/NA:** 3082 **PG :** III **RQ:** Marine Pollutant

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>150		4-10		0	mg/l	0	mg/l	0-10	%
Oil & Grease		**TOC**		**Zinc**		**Copper**		**Nickel**	
NA	mg/l	NA	mg/l	NA	mg/l	NA	mg/l	NA	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Alfonic 1412 Ethoxylate	0-100	%
Alfonic TDA 3 Ethoxylate	0-100	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Level D PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. MSDS Sheets

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

Oxidizers, inorganic Acids, Halogens

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	X, None in Product
TCLP Volatiles:	X, None in Product
TCLP Semi-Volatiles:	X, None in Product
Reactivity:	X, None in Product
Corrosivity:	X, None in Product
Ignitability:	X, None in Product

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory: Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

***Organics Subcategory*: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: [signature] **Date:** 3-14-09

Printed Name/Title: Brandan White Vice President

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: [signature]
Date: 3-19-09 ☑ Approved ☐ Rejected
Approval Number: 3225

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$70/dm

2. Contamination Limit (maximum limit before surchages apply):

None

3. Surcharge Pricing:

None

4. Special Testing Requirements:

Make sure it conforms with profile

5. Treatment and Handling Protocol:

Class 1 liquids to LANDFILL for solidification

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

Na

8. Management for Product Recovered/Recycled (if applicable)

Na

unused
Ethoxylated
alcohols

1 Drum

CES

$70/drum

Material Safety Data Sheet

SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade name	ALFONIC® 1412-7 Ethoxylate	
Synonyms	Ethoxylated Alcohol, Laureth-7, Pareth-7	
Manufacturer/Supplier	Sasol North America Inc.	
Address	900 Threadneedle, Houston, TX 77079	
Telephone	CHEMTREC North America Transportation Emergency (24-hr)	(800) 424-9300
	CHEMTREC World Wide	(703) 527-3887
	Other Emergencies (24-hr)	(337) 494-5142
	MSDS and Product Information (8:00am-4:30pm CST)	(281) 588-3491
	Health and Safety Information (8:00am-4:00pm CST)	(281) 588-3492

SECTION 2 COMPOSITION AND INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
Alcohols, C10-16, ethoxylated	68002-97-1	100

See Section 8 for Exposure Guidelines and Section 15 for Regulatory Classifications.

SECTION 3 HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Appearance Cloudy. liquid

Odor Sweet, pungent

Precautions **WARNING!** CAUSES EYE IRRITATION. Avoid contact with eyes. Wash thoroughly after handling.

Environmental precautions Do not flush into surface water or sanitary sewer system. Toxic to aquatic organisms. Product will biodegrade rapidly in the environment especially under waste treatement plant conditions.

POTENTIAL HEALTH EFFECTS

Eyes Irritating to eyes. May cause corneal inflammation.

EPAHO104001503

Skin Repeated or prolonged contact can cause redness, irritation and scaling of the skin (dermatitis). Normal care and personal hygiene should prevent skin effects.

Inhalation Irritating to respiratory system.

Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Additional advice This product contains residual levels of alcohols which, even under normal handling conditions, may smell and irritate the eyes, nose, and throats of some individuals.

(See Section 11 for Toxicological Information)

SECTION 4 FIRST AID MEASURES

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. When symptoms persist or in all cases of doubt seek medical advice. Wash contaminated clothing before re-use.

Inhalation Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Call a physician immediately.

Ingestion If swallowed, call a physician or poison control center immediately. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

SECTION 5 FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

Flash point 166 °C 330 °F

Autoignition temperature 349 °C 660 °F

Flammable limits in air % by volume **Lower explosion limit:** Approximately 0.1 %(V)
Upper explosion limit: Approximately 0.9 %(V)

Fire and explosion NFPA Class IIIB combustible liquid.

Extinguishing media Water spray or fog, foam, dry chemical, CO_2.

Fire fighting instructions Wear self contained breathing apparatus for fire fighting if necessary.

EPAHO104001504

Further information Keep containers and surroundings cool with water spray. Do not use a solid water stream as it may scatter and spread fire. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Steps to be taken in case of spill or leak Evacuate personnel to safe areas. Remove all sources of ignition. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13). Do not flush into surface water or sanitary sewer system.

SECTION 7 HANDLING AND STORAGE

Electrostatic accummulation hazard Take precautionary measures against static discharges.

Storage/Transport pressure Ambient

Load/Unload temperature 32 - 49 °C
90 - 120 °F

Storage and handling materials Suitable: Carbon steel coated with baked phenolic. Any moisture may cause rusting of carbon steel. If product is moisture free, uncoated carbon steel tanks.

Further information on storage conditions When stored in the liquid form, ethoxylates should be padded with a dry inert gas, such as nitrogen, to prevent oxygen or air from entering the tank. Prolonged storage in the presence of air or oxygen may cause product degradation. Oxidation is not expected when stored under a nitrogen atmosphere. Inert gas blanket and breathing system needed to maintain color stability. Use dry inert gas having at least -40 F dew point.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING MEASURES

Mechanical ventilation may be necessary if working with this product in enclosed areas and/or at elevated temperatures. Trace amounts of ethylene oxide may be present in the product and could accumulate in vapor spaces of storage or transport vessels.

PERSONAL PROTECTIVE EQUIPMENT

Eyes When contact with liquid is possible, use a face shield and/or chemical splash goggles. Otherwise use safety glasses with side shields or goggles.

EPAHO104001505

Skin Full protective clothing, chemical boots, and chemical gloves.

Inhalation NIOSH-approved organic vapor air-purifying respirator, self-contained breathing apparatus, or air-supplied respirators where there may be potential for overexposure.

EXPOSURE GUIDELINES

Components	Exposure limit(s)
Ethylene Oxide	OSHA PEL 1 ppm(1.8 mg/m3) OSHA EL 5 ppm(9 mg/m3) ACGIH TLV (8-hour) 1 ppm(1.8 mg/m3)

There are no exposure limits established for this product. Trace amounts of ethylene oxide may be present in this product. The ethylene oxide in this product is not expected to result in significant exposures or present a health hazard.

PEL= Permissible Exposure Limits
TLV= Threshold Limit Value
EL= Excursion Limit
TWA= Time Weighted Average (8 hr.)
STEL= Short Term Exposure Limit (15 min.)
WEEL= Workplace Environmental Exposure Level

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance liquid

Colour Cloudy.

Odour Sweet, pungent

Form liquid

Boiling point/range 148 °C 298 °F

Vapour pressure 0.16 hPa @ 93 °C

Vapor density 17 - 18

Solubility (water) Miscible.

Viscosity 35 cSt @ 38 °C

Melting point/range 19 - 25 °C 66 - 77 °F

Specific gravity 0.970 g/cm3 @ 39 °C

SECTION 10 STABILITY AND REACTIVITY

Conditions to avoid Reacts slowly with air or oxygen. Storage under heated conditions in the presence of air or oxygen increases reaction rate. For example, after storing at 95 F/35 C for 30 days in the presence of air, there is measureable oxidation of the ethoxylate. Lower temperatures will allow for longer storage time and higher temperatures will shorten the storage time if stored under an air or oxygen atmosphere.

Hazardous decomposition products When storing this product in air or oxygen, decomposition may occur, generating vapors which could be irritating. Mechanical ventilation or exhaust is recommended. Oxidation is not expected when stored under a nitrogen atmosphere.

Incompatability with other materials Can react with strong oxidizers, inorganic acids, and halogens.

Hazardous polymerization None.

SECTION 11 TOXICOLOGICAL INFORMATION

Additional Remarks This product has not been specifically tested. Data for a similar product are provided below.

Eyes Primary irritation index (rabbit): 50.8 (Maximum score is 110.)

Skin Primary irritation index (rabbit): 24 hours 4.4 (Maximum score is 8.0.)
Acute dermal LD50 (rabbit): 3,870 - 8,000 mg/kg

Inhalation Acute LC50 (rat): .22 - 8 mg/l

Ingestion Acute oral LD50 (rat): 2,750 mg/kg

CARCINOGENICITY

Ethylene Oxide
NTP Known to be a human carcinogen.
OSHA Carcinogen and reproductive hazard.
IARC Carcinogenic to humans.

SECTION 12 ECOLOGICAL INFORMATION

Aquatic toxicity Toxic to aquatic organisms.

LC50 (Daphnia magna) 48 hours .6 mg/l

Biodegradation Product will biodegrade rapidly in the environment especially under waste treatement plant conditions.

SECTION 13 DISPOSAL CONSIDERATIONS

Waste code Any unused product or empty containers may be disposed of as non-hazardous in accordance with state and federal requirements. Re-evaluation of the product may be required by the user at the time of disposal, since the product uses, transformations, mixtures, contamination, and spillage may change the classification. If the resulting material is determined to be hazardous, please dispose in accordance with state and federal (40 CFR 262) hazardous waste regulations.

Disposal methods Dispose of only in accordance with local, state, and federal regulations.

Empty containers Empty containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner, or properly disposed of.

SECTION 14 TRANSPORT INFORMATION

DOT description Environmentally hazardous substance, liquid, n.o.s. (Alcohol C12-C16 poly (1-6) ethoxylate), 9, UN 3082, III Marine pollutant This product is regulated as a hazardous material according to the Department of Transportation in bulk quantities (greater than 119 gallons per package) only.

IATA description This product is not regulated as a dangerous good when shipped by air in quantities less than 119 gallons per package.

IMDG description Environmentally hazardous substance, liquid, n.o.s. (Alcohol C12-C16 poly (1-6) ethoxylate), 9, UN 3082, III, Marine pollutant This product is regulated as a Marine Pollutant when shipped by water in all quantities according to the IMDG Code.

EPAHO104001508

SECTION 15 REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

OSHA classification

Eye irritant

TSCA Inventory Listing

Components	CAS-No.
Alcohols, C10-16, ethoxylated	68002-97-1

SARA 302 Status

Components	CAS-No.	Weight %
Contains no chemicals subject to SARA 302 reporting.		

SARA 311/312 Classification

"Immediate (acute) health hazard"

SARA 313 Chemical

Components	CAS-No.	Weight %
Contains no chemicals subject to SARA 313 reporting.		

CERCLA Hazardous Substance

Components	CERCLA RQ	Weight %
Contains no chemicals subject to CERCLA.		

INTERNATIONAL REGULATIONS

Workplace Hazardous Materials Information System (WHMIS) Classification

Class D, Division 2, Subdivision B: Toxic material.

Australian Inventory of Chemical Substances (AICS) Listing

The components of this product are listed on the AICS.

Japanese Minister of International Trade and Industry (MITI) Inventory Listing

The components of this product are listed on the MITI.

Canadian Domestic Substance List (DSL) Inventory Listing

The components of this product are listed on the DSL.

EPAHO104001509

European Inventory of Existing Commercial Chemical Substances (EINECS) Listing
The components of this product are listed on the EINECS listing.

Phillipines Inventory List (PICCS)
The components of this product are listed on the PICCS.

Korean Inventory List
The components of this product are listed on the ECL.

China Inventory List
The components of this product are listed on the China inventory.

STATE REGULATIONS

California Safe Drinking Water Act (Prop 65) Listing

Components	CAS-No.
Ethylene Oxide	75-21-8

Sasol North America Inc. ethoxylates may contain detectable quantities of ethylene oxide which is a chemical on the California Proposition 65 list. The level is typically below 1.0 ppm, although it may vary. The manufacturing process is controlled to reduce the residual ethylene oxide content.

SECTION 16 OTHER INFORMATION

HAZARD RATINGS

	Health	Flammability	Reactivity
HMIS	2	1	0
NFPA	1	1	0

THE DATA AND INFORMATION CONTAINED HEREIN ARE BEING FURNISHED FOR INFORMATIONAL PURPOSES ONLY, UPON THE EXPRESS CONDITION THAT EACH CUSTOMER SHALL MAKE ITS OWN ASSESSMENT OF APPROPRIATE USE AND APPROPRIATE SHIPPING, TRANSFER AND STORAGE MATERIALS AND PROCEDURES FOR SASOL NORTH AMERICA'S PRODUCTS. ALTHOUGH BASED ON INFORMATION SOURCES WHICH SASOL NORTH AMERICA CONSIDERS ACCURATE AND RELIABLE, SASOL NORTH AMERICA MAKES NO WARRANTY, EITHER EXPRESS OR IMPLIED, INCLUDING ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, REGARDING THE VALIDITY OF THIS INFORMATION, THE INFORMATION SOURCES UPON WHICH THE SAME ARE BASED, OR THE RESULTS TO BE OBTAINED, AND EXPRESSLY DISCLAIMS LIABILITIES FOR DAMAGES OR INJURIES RESULTING FROM THE USE THEREOF.

EPAHO104001510

1 DRum

CES
$70/drum

Material Safety Data Sheet

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

Trade name	ALFONIC® TDA-3 Ethoxylate	
Synonyms	Ethoxylated Alcohol	
Manufacturer/Supplier	Sasol North America Inc.	
Address	900 Threadneedle, Houston, TX 77079	
Telephone	CHEMTREC North America Transportation Emergency (24-hr)	(800) 424-9300
	CHEMTREC World Wide	(703) 527-3887
	Other Emergencies (24-hr)	(337) 494-5142
	MSDS and Product Information (8:00am-4:30pm CST)	(281) 588-3491
	Health and Safety Information (8:00am-4:00pm CST)	(281) 588-3492

SECTION 2 COMPOSITION AND INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
Isotridecanol, ethoxylated	9043-30-5	100

See Section 8 for Exposure Guidelines and Section 15 for Regulatory Classifications.

SECTION 3 HAZARDS IDENTIFICATION

Emergency Overview

Appearance Clear, colorless liquid

Odour mild

Precautions **WARNING!** CAUSES EYE AND SKIN IRRITATION. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling.

Environmental precautions Do not flush into surface water or sanitary sewer system. Toxic to aquatic organisms. Biodegradable. Not expected to present a hazard to downstream aquatic life (fish, invertebrates and phytoplankton).

Potential Health Effects

Eyes Irritating to eyes. May cause corneal inflammation.

Skin May cause skin irritation and/or dermatitis. High standards of skin care and personal hygiene should be exercised at all times.

EPAHO104001512

Inhalation Irritating to respiratory system.

Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Additional advice This product contains residual levels of alcohols which, even under normal handling conditions, may smell and irritate the eyes, nose, and throats of some individuals.

(See Section 11 for Toxicological Information)

SECTION 4 FIRST AID MEASURES

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. When symptoms persist or in all cases of doubt seek medical advice. Wash contaminated clothing before re-use.

Inhalation Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Call a physician immediately.

Ingestion If swallowed, call a poison control centre or doctor immediately. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

SECTION 5 FIRE-FIGHTING MEASURES

FLAMMABLE PROPERTIES

Flash point > 136 °C 277 °F

Autoignition temperature approximately 330 °C 626 °F

Flammable limits in air % by volume **Lower explosion limit:** no data available
Upper explosion limit: no data available

Fire and explosion NFPA Class IIIB combustible liquid.

Extinguishing media Water spray or fog, foam, dry chemical, CO2.

Fire fighting instructions Wear self contained breathing apparatus for fire fighting if necessary.

Further information Keep containers and surroundings cool with water spray. Do not use a solid water stream as it may scatter and spread fire. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

EPAHO104001513

SECTION 6 ACCIDENTAL RELEASE MEASURES

Steps to be taken in case of spill or leak Evacuate personnel to safe areas. Remove all sources of ignition. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Do not flush into surface water or sanitary sewer system.

SECTION 7 HANDLING AND STORAGE

Safe handling advice Take precautionary measures against static discharges.

Storage/Transport pressure Ambient

Load/Unload temperature 15 - 38 °C
60 - 100 °F

Storage and handling materials Suitable: Carbon steel coated with baked phenolic. Any moisture may cause rusting of carbon steel. If product is moisture free, uncoated carbon steel tanks.

Further information on storage conditions When stored in the liquid form, ethoxylates should be padded with a dry inert gas, such as nitrogen, to prevent oxygen or air from entering the tank. Prolonged storage in the presence of air or oxygen may cause product degradation. Oxidation is not expected when stored under a nitrogen atmosphere. Inert gas blanket and breathing system needed to maintain color stability. Use dry inert gas having at least -40 F dew point.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING MEASURES

Ensure adequate ventilation, especially in confined areas. Trace amounts of ethylene oxide may be present in the product and could accumulate in vapor spaces of storage or transport vessels.

PERSONAL PROTECTIVE EQUIPMENT

Eyes Chemical resistant goggles must be worn.

Skin Full protective clothing, chemical boots, and chemical gloves.

Inhalation Use NIOSH approved respiratory protection.

EPAHO104001514

EXPOSURE GUIDELINES

Components	Exposure limit(s)
Ethylene Oxide	OSHA PEL 1 ppm 1.8 mg/m3 OSHA EL 5 ppm 9 mg/m3 ACGIH TLV (8-hour) 1 ppm 1.8 mg/m3

There are no exposure limits established for this product. Trace amounts of ethylene oxide may be present in this product. The ethylene oxide in this product is not expected to result in significant exposures or present a health hazard.

PEL=	Permissible Exposure Limits	TWA=	Time Weighted Average (8 hr.)
TLV=	Threshold Limit Value	STEL=	Short Term Exposure Limit (15 min.)
EL=	Excursion Limit	WEEL=	Workplace Environmental Exposure Level

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	liquid
Colour	Clear, colorless
Odour	mild
Form	liquid
Boiling point/range	ca. 250 - 270 °C 482 - 518 °F
Vapour pressure	ca. 0.01 hPa @ 20 °C
Vapor density	ca. 11
Solubility (water)	Dispersible
Viscosity	3.76 cSt @ 100 °C 18.7 cSt @ 40 °C
Viscosity, dynamic	ca. 15 mPa.s @ 50 °C
Melting point/range	< -5 °C 23 °F 0 °C 32 °F Pour point
Density	7.73 lb/gal @ 21 °C
Specific gravity	0.98 @ 40 °C
pH	5 - 7

EPAHO104001515

SECTION 10 STABILITY AND REACTIVITY

Conditions to avoid Reacts slowly with air or oxygen. Storage under heated conditions in the presence of air or oxygen increases reaction rate. For example, after storing at 95 F/35 C for 30 days in the presence of air, there is measureable oxidation of the ethoxylate. Lower temperatures will allow for longer storage time and higher temperatures will shorten the storage time if stored under an air or oxygen atmosphere.

Hazardous decomposition products When storing this product in air or oxygen, decomposition may occur, generating vapors which could be irritating. Ensure adequate ventilation, especially in confined areas. Oxidation is not expected when stored under a nitrogen atmosphere.

Incompatability with other materials Can react with strong oxidizers, inorganic acids, and halogens.

Hazardous polymerization None.

SECTION 11 TOXICOLOGICAL INFORMATION

Additional Remarks Some or all of the information provided below is from studies conducted on a similar product or products.

Eyes Primary irritation (rabbit): 29.3 (Maximum score is 110.)

Skin Primary irritation (rabbit): 4 hours 6.3 - 7.1 (Maximum score is 8.0.)

Inhalation no data available

Ingestion Acute oral LD50 (rat): > 2,000 mg/kg

CARCINOGENICITY

Ethylene Oxide

NTP Known to be a human carcinogen.
OSHA Carcinogen and reproductive hazard.
IARC Carcinogenic to humans.

SECTION 12 ECOLOGICAL INFORMATION

Aquatic toxicity Toxic to aquatic organisms.

EPAHO104001516

LC50 (Brachydanio rerio) 96 hours: 5.8 mg/l EC 92/69
Test Substance:C13-3 ethoxylate
LC0 (Brachydanio rerio) 96 hours: 5 mg/l EC 92/69
Test Substance:C13-3 ethoxylate

EC50 (Daphnia) 48 hours: 2.5 mg/l EC 92/69
Test Substance: (C13-3 ethoxylate)

EC10 (Pseudomonas putida (bacteria)) 5 hours: > 1,900 mg/l Oxygen Consumption Test
Test Substance: C13-3 ethoxylate
EC50 (S. subspicatus (algae)) 72 hours: 7.2 mg/l EC 92/69
NOEC (S. subspicatus (algae)) 72 hours: 2.4 mg/l EC 92/69
Test Substance: C13-3 ethoxylate

Biodegradation Biodegradable. Not expected to present a hazard to downstream aquatic life (fish, invertebrates and phytoplankton).

SECTION 13 DISPOSAL CONSIDERATIONS

Waste Code Any unused product or empty containers may be disposed of as non-hazardous in accordance with state and federal requirements. Re-evaluation of the product may be required by the user at the time of disposal, since the product uses, transformations, mixtures, contamination, and spillage may change the classification. If the resulting material is determined to be hazardous, please dispose in accordance with state and federal (40 CFR 262) hazardous waste regulations.

Disposal methods Dispose of only in accordance with local, state, and federal regulations.

Empty containers. Empty containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Empty drums should be completely drained, triple-rinsed, properly bunged and promptly returned to a drum reconditioner, or properly disposed.

SECTION 14 TRANSPORT INFORMATION

DOT UN 3082, Environmentally hazardous substance, liquid, n.o.s. (Alcohol C12-C16 poly (1-6) ethoxylate), 9, III , Marine pollutant
This product is regulated as a hazardous material according to the Department of Transportation in bulk quantities (greater than 119 gallons per package) only.

IATA This product is not regulated as a dangerous good when shipped by air in quantities less than 119 gallons per package.

EPAHO104001517

IMDG UN 3082, Environmentally hazardous substance, liquid, n.o.s. (Alcohol C12-C16 poly (1-6) ethoxylate), 9, III, Marine pollutant
This product is regulated as a Marine Pollutant when shipped by water in all quantities according to the IMDG Code.

SECTION 15 REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

OSHA classification
Eye and skin irritant

TSCA Inventory Listing

Components	CAS-No.
Poly(oxy-1,2-ethanediyl), a-isotridecyl-w-hydroxy-	9043-30-5

SARA 302 Status

Components	CAS-No.	Weight %
Contains no chemicals subject to SARA 302 reporting.		

SARA 311/312 Classification
"Immediate (acute) health hazard"

SARA 313 Chemical

Components	CAS-No.	Weight %
Contains no chemicals subject to SARA 313 reporting.		

CERCLA Hazardous Substance

Components	CERCLA RQ	Weight %
Contains no chemicals subject to CERCLA.		

INTERNATIONAL REGULATIONS

Workplace Hazardous Materials Information System (WHMIS) Classification
Class D, Division 2, Subdivision B: Toxic material.

Australian Inventory of Chemical Substances (AICS) Listing
Listed on the AICS.

EPAHO104001518

Japanese Minister of International Trade and Industry (MITI) Inventory Listing
Listed on MITI.

Canadian Domestic Substance List (DSL) Inventory Listing
Listed on the DSL.

European Inventory of Existing Commercial Chemical Substances (EINECS) Listing
Listed on EINECS.

Philippines Inventory List (PICCS)
Listed on PICCS.

Korean Inventory List
Listed on the ECL.

China Inventory List
Listed on the China inventory.

STATE REGULATIONS

California Safe Drinking Water Act (Prop 65) Listing

Components	CAS-No.
Ethylene Oxide	75-21-8

Sasol North America Inc. ethoxylates may contain detectable quantities of ethylene oxide which is a chemical on the California Proposition 65 list. The level is typically below 1.0 ppm, although it may vary. The manufacturing process is controlled to reduce the residual ethylene oxide content.

SECTION 16 OTHER INFORMATION

HAZARD RATINGS

	Health	Flammability	Reactivity
HMIS	2	1	0
NFPA	1	1	0

EPAHO104001519

THE DATA AND INFORMATION CONTAINED HEREIN ARE BEING FURNISHED FOR INFORMATIONAL PURPOSES ONLY, UPON THE EXPRESS CONDITION THAT EACH CUSTOMER SHALL MAKE ITS OWN ASSESSMENT OF APPROPRIATE USE AND APPROPRIATE SHIPPING, TRANSFER AND STORAGE MATERIALS AND PROCEDURES FOR SASOL NORTH AMERICA'S PRODUCTS. ALTHOUGH BASED ON INFORMATION SOURCES WHICH SASOL NORTH AMERICA CONSIDERS ACCURATE AND RELIABLE, SASOL NORTH AMERICA MAKES NO WARRANTY, EITHER EXPRESS OR IMPLIED, INCLUDING ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, REGARDING THE VALIDITY OF THIS INFORMATION, THE INFORMATION SOURCES UPON WHICH THE SAME ARE BASED, OR THE RESULTS TO BE OBTAINED, AND EXPRESSLY DISCLAIMS LIABILITIES FOR DAMAGES OR INJURIES RESULTING FROM THE USE THEREOF.

EPAHO104001520

3226
Ameriforge Corp

EPAHO104001521

7E
8-4-09
T-35
LAB

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/20/2009**

Dear **John Crespo**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3226

Expiration Date 3/19/2011

Generator: Ameriforge Corporation
Address: 13770 Industrial Rd.
Houston, TX 77015

Waste Information

Name of Waste: Switched containing Mercury
TCEQ Waste Code #: Univ
Container Type:
Detailed Description of Process Generating Waste:
equipment no longer in use
Color: dark **Odor:** none **pH:** na
Physical State:
Incompatibilities: none
Safety Related Data/Special Handling:
standard

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

DC/MM

Universal

CES Environmental Services, Inc.
4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit Number: 30948
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

SECTION 1: Generator Information

Company: Ameriforge Group Inc
Address: 13770 Industrial Road
City: Houston **State:** Tx **Zip:** 77015
Contact: John Crespo **Title:** HSE Manager
Phone Number: 713-393-4216 **Fax Number:** 713-393-4319
24/hr Phone Number: 281-732-8387
US EPA ID No: TXR000046690
State ID No: 82538 **SIC Code:** NA

SECTION 2: Billing Information - ☑ **Same as Above**

Company:
Address:
City: **State:** **Zip:**
Contact: **Title:**
Phone Number: **Fax Number:**

SECTION 3: General Description of the Waste

Name of Waste: Switches containng Mercury
Detailed Description of Process Generating Waste:

equipment no longer in use

Physical State: ☐ Liquid ☐ Sludge ☐ Powder ☑ Solid ☐ Filter Cake ☐ Combination

Color: dark **Odor:** none

Specific Gravity (water=1): 1.5 **Density:** 10 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ Single-phase ☐ Multi-phase

Container Type: ☑ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☐ Monthly ☑ Yearly ☐ One-Time
Quantity: 1

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No
If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011
Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: Universal

Proper US DOT Shipping Name: Mercury Contained in manufactured articles
Class: 8 **UN/NA:** UN2809 **PG:** II **RQ:** NA

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
NA		NA		0	mg/l	0	mg/l	100	%
Oil & Grease		**TOC**		**Zinc**		**Copper**		**Nickel**	
NA	mg/l	NA	mg/l	0	mg/l	0	mg/l	0	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Swithces containing mercury	100	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Standard

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. None

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

None

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	X
TCLP Volatiles:	X
TCLP Semi-Volatiles:	X
Reactivity:	X
Corrosivity:	X
Ignitability:	X

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

***Metals Subcategory*: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

***Oils Subcategory*: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐

- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory **: *Subpart C***

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☐ generator knowledge and/or ☐ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: [signature] **Date:** 3-18-09

Printed Name/Title: John M. Crespo Sr. HSE and Facilities Manager

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: [signature]

Date: 3-19-09 ☒ Approved ☐ Rejected

H00-3226

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$22.50/lb

2. Contamination Limit (maximum limit before surchages apply):

NA

3. Surcharge Pricing:

NA

4. Special Testing Requirements:

NA

5. Treatment and Handling Protocol:

WEIGH THE DRUM AND NOTE ON MANIFEST OR IN BILLING COMMENTS* Recycle with Universal Waste

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

NA

8. Management for Product Recovered/Recycled (if applicable)

NA

3200

T.T. Barge

EPAHO1010015

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/9/2009**

Dear **Accounts Payable- Donna Landry**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3200

Expiration Date 3/9/2011

Generator: T.T. Barge (Mile 237)
Address: 5190 North River Road
Port Allen, LA 70767

Waste Information

Name of Waste: Spent Sodium Hydroxide Solution
TCEQ Waste Code #: Product
Container Type:
Detailed Description of Process Generating Waste:
removal of caustic from barge cleaning operations
Color: varies **Odor:** strong **pH:** 12
Physical State:
Incompatibilities: acids
Safety Related Data/Special Handling:
caustic PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

DC/MM

Product for PACES

CES Environmental Services, Inc.

☐ **CES Environmental Services – Houston Facility**
4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

☒ **CES Environmental Services – Port Arthur Facility**
2420 S. Gulfway Drive, Port Arthur, TX 77641
Phone: (713) 676-1460 Fax: (713) 676-1676
U.S. EPA ID No: TXR000079307 ISWR No: 88585

SECTION 1: Material Producer Information

Company:	T.T. Barge (Mile 237)		
Address:	5190 North River Rd		
City, State, Zip:	Port Allen, LA 70767		
Contact:	Jeff Babin	**Title:**	E/S
Phone No:	225-267-4505	**Fax No:**	225-267-4570
24/hr Phone:	225-267-4505		
U.S. EPA I.D. No:	LAD 000132167		
State I.D.	D0022	**SIC Code:**	NA

SECTION 2: Billing Information – ☐ Same as Above

Company:	T.T. Barge Attn: Accounts Payable		
Address:	19368 Hwy 36		
City, State, Zip:	Covington, LA 70433		
Contact:	Donna Landry	**Title:**	
Phone No:	225-473-8222	**Fax No:**	225-473-2199

SECTION 3: General Description of the Material / Product

Name of Material / Product: Spent Sodium Hydroxide Solution
Detailed Description of Process Generating or Producing the Material / Product: removal of caustic from barge cleaning operations

Physical State: ☒ **Liquid** ☐ **Sludge** ☐ **Powder** ☐ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: varies **Odor:** strong

Density: 9.3 lbs/gal

Does this material contain any total phenolic compounds? ☐ **Yes** ☒ **No**

Does this material contain any para substituted phenolic compounds? ☐ **Yes** ☒ **No**

Layers: ☒ **Single-phase** ☐ **Multi-phase**

Container Type: ☒ **Drum** ☐ **Tote** ☐ **Truck** ☐ **Other (explain)**
Container Size: ____ ____ ____ ____

Frequency: ☐ **Weekly** ☒ **Monthly** ☐ **Quarterly** ☐ **Yearly**

Product

Proper U.S. DOT Shipping Name: Sodium Hydroxide Solution

Class: 8 **UN/NA:** UN 1824 **PG:** II **RQ:** NA

Flash Point	pH	N/A	N/A	Solids
>150	12			<1%

Oil&Grease	TOC	Zinc	Copper	Nickel
0mg/l	0mg/l	0mg/l	0mg/l	0mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The material / product consists of the following materials	Concentration Ranges are acceptable	Units or %
Sodium Hydroxide Solution	100	

SECTION 5: Safety Related Data

If the handling of this material / product requires the use of special protective equipment, please explain.
Standard PPE for handling caustic materails

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
acids

SECTION 8: Material Producer's Certification

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Jeffery Bal **Date:** 3/9/09

Printed Name/Title: E/S

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Technical Manager: [signature]	
Date: 3-9-09 Approved Rejected	
Approval Number:	

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pricing (including freight):**

<23% caustic value - $250/load
>23% caustic value - pay $50/dry ton

2. **Contamination Limits (maximum limit before surcharges apply):**

Solids - 5%
Floating Hydrocarbons - 5%

3. **Surcharge Pricing:**

Note results on the inbound report,

4. **Special Testing Requirements:**

Standard sulfidic caustic evaluations for use in the NaSH Production Process: Run full titration, density, percent solids and percent oil via centrifugation, and perform sample acid reaction to ensure normal reaction. Check to ensure oil does not appear post reaction. Check odor, color, and appearance to ensure they are normal. If anything seems abnormal, contact management immediately.

Complete inbound load report if: either solids or oil exceed 1%, arrangements are made for with customer service regarding customer test for percent solids and oil via centrifugation, pH, density, full titration

5. **Treatment and Handling Protocol:**

Feedstock for NaSH into RV2/RV1. Process through reactor vessel for the recovery of sulfur compounds in the production of NaSH

Wastewater may either go to System 1 or other wastewater treatment options

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

7. **Tests for Product Recovered/Recycled (if applicable):**

See above

8. **Management for Product Recovered/Recycled (if applicable):**

See above

3201

T.T. Barge

EPAHO104001537

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/10/2009**

Dear **Accounts Payable- Donna Landry**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3201

Expiration Date 3/11/2011

Generator: T.T. Barge (Mile 183)
Address: 7324 Hwy. 405
Donaldsonville, LA 70346

Waste Information

Name of Waste: Spent Sodium Hydroxide Solution
TCEQ Waste Code #: Product
Container Type:
Detailed Description of Process Generating Waste:
removal of caustic from barge cleaning operations
Color: varies **Odor:** strong **pH:** 12
Physical State:
Incompatibilities: acids
Safety Related Data/Special Handling:
caustic PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

DC/MM

CES Environmental Services, Inc.

Product to PACES

☐ **CES Environmental Services – Houston Facility**
4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

☒ **CES Environmental Services – Port Arthur Facility**
2420 S. Gulfway Drive, Port Arthur, TX 77641
Phone: (713) 676-1460 Fax: (713) 676-1676
U.S. EPA ID No: TXR000079307 ISWR No: 88585

SECTION 1: Material Producer Information

Company:	T.T. Barge (Mile 183)		
Address:	7324 Highway 405		
City, State, Zip:	Donaldsonville, LA 70346		
Contact:	Chuck Metzler	**Title:**	E/S
Phone No:	225-473-8222	**Fax No:**	225-473-2199
24/hr Phone:	800-969-8860		
U.S. EPA I.D. No:	LAD980870794		
State I.D.	D0022	**SIC Code:**	NA

SECTION 2: Billing Information – ☐ Same as Above

Company:	T.T. Barge Attn: Accounts Payable		
Address:	19368 Hwy 36		
City, State, Zip:	Covington, LA 70433		
Contact:	Donna Landry	**Title:**	
Phone No:	225-473-8222	**Fax No:**	225-473-2199

SECTION 3: General Description of the Material / Product

Name of Material / Product: Spent Sodium Hydroxide Solution
Detailed Description of Process Generating or Producing the Material / Product: removal of caustic from barge cleaning operations

Physical State: ☒ **Liquid** ☐ **Sludge** ☐ **Powder** ☐ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: varies **Odor:** strong

Specific Gravity (water=1): 1.11 **Density:** 9.3 lbs/gal

Does this material contain any total phenolic compounds? ☐ **Yes** ☒ **No**

Does this material contain any para substituted phenolic compounds? ☐ **Yes** ☒ **No**

Layers: ☒ **Single-phase** ☐ **Multi-phase**

Container Type: ☒ **Drum** ☐ **Tote** ☐ **Truck** ☐ **Other (explain)**
Container Size: ____ ____ ____ ____

Frequency: ☐ **Weekly** ☒ **Monthly** ☐ **Quarterly** ☐ **Yearly**
Number of Units (containers): 4 **Other:** Product

Proper U.S. DOT Shipping Name: Sodium Hydroxide Solution

Class: 8 **UN/NA:** UN 1824 **PG:** II **RQ:** NA

EPAHO104001539

Flash Point >150	**pH** 12	N/A	N/A	**Solids** <1%
Oil&Grease 0mg/l	**TOC** 0mg/l	**Zinc** 0mg/l	**Copper** 0mg/l	**Nickel** 0mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The material / product consists of the following materials	Concentration Ranges are acceptable	Units or %
Sodium Hydroxide Solution	100	%

SECTION 5: Safety Related Data

If the handling of this material / product requires the use of special protective equipment, please explain.
Standard PPE for handling caustic materails

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
acids

SECTION 8: Material Producer's Certification

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Charles T Metzler **Date:** 5MAR09

Printed Name/Title: Charles T. Metzler E/S

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Technical Manager: Robert C Thayer Date: 3-9-09 Approved Rejected Approval Number:	

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pricing (including freight):**

Concentration <23% charge $250.00/load
Concentration >23 % pay customer $: 50/dry ton

2. **Contamination Limits (maximum limit before surcharges apply):**

Solids - 5%
Floating Hydrocarbons - 5%

3. **Surcharge Pricing:**

Note ~~waste Report~~ results on the inbound report.

4. **Special Testing Requirements:**

Standard sulfidic caustic evaluations for use in the NaSH Production Process: Run full titration, density, percent solids and percent oil via centrifugation, and perform sample acid reaction to ensure normal reaction. Check to ensure oil does not appear post reaction. Check odor, color, and appearance to ensure they are normal. If anything seems abnormal, contact management immediately.

Complete inbound load report if: either solids or oil exceed 1%, arrangements are made for with customer service regarding customer test for percent solids and oil via centrifugation, pH, density, full titration

5. **Treatment and Handling Protocol:**

Feedstock for NaSH into RV2/RV1. Process through reactor vessel for the recovery of sulfur compounds in the production of NaSH

Wastewater may either go to System 1 or other wastewater treatment options

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

EPAHO104001541

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

7. **Tests for Product Recovered/Recycled (if applicable):**

See above

8. **Management for Product Recovered/Recycled (if applicable);**

See above

EPAHO104001542

3202
Electroless Nickel

EPAHO104001543

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/10/2009**

Dear **Lee Pinson**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3202

Expiration Date 3/10/2011

Generator: Electroless Nickel Plating of LA, Inc
Address: 44211 Stein road
Hammond, LA 70403

Waste Information

Name of Waste: Nickel Stripper solution
TCEQ Waste Code #: Product
Container Type:
Detailed Description of Process Generating Waste:
spent solution to strip metal
Color: varies **Odor:** mild **pH:** >12.5
Physical State:
Incompatibilities: none known
Safety Related Data/Special Handling:
Standard PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

JB|AL

CES Environmental Services, Inc.

☐ CES Environmental Services – Houston Facility
4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

☐ CES Environmental Services – Port Arthur Facility
2420 S. Gulfway Drive, Port Arthur, TX 77641
Phone: (713) 676-1460 Fax: (713) 676-1676
U.S. EPA ID No: TXR000079307 ISWR No: 88585

SECTION 1: Material Producer Information

Company:	Quality Assured Plating, LLC		
Address:	230 Holloway Blvd		
City, State, Zip:	Ville Platte, TX 70586		
Contact:	Lee Pinson, Chris Bickham	**Title:**	Env. Mgr / Plating Manager
Phone No:	337.363.6771	**Fax No:**	205.982.0608
24/hr Phone:	985.969.7678		
U.S. EPA I.D. No:	LAR000049973		
State I.D.	D0022	**SIC Code:**	

SECTION 2: Billing Information – ☐ Same as Above

Company:	Sierra Chemical Corp.		
Address:	4524 Southlake Parkway, Suite 34, PMP		
City, State, Zip:	Hoover, AL 35244		
Contact:	M. Pinson	**Title:**	VP AR AP
Phone No:	205.982.7799	**Fax No:**	205.982.0608

SECTION 3: General Description of the Material / Product

Name of Material / Product: Nickel Stripper solution
Detailed Description of Process Generating or Producing the Material / Product: Spent solution to strip metal

Physical State: ☒ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color: varies **Odor:** mild

Density: <9.8 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Layers: ☒ Single-phase ☐ Multi-phase

Container Type:	☐ Drum	☒ Tote	☐ Truck	☐ Other (explain)
Container Size:		275 gal		

Frequency: ☐ Weekly ☐ Monthly ☐ Quarterly ☒ Yearly

Proper U.S. DOT Shipping Name: Corrosive liquid, basic, inorganic, n.o.s. (Sodium Hydroxide)

Class: 8 **UN/NA:** UN3263 **PG:** II **RQ:** NA

Flash Point	pH	N/A	N/A	Solids
>140	>12.5			<20%

Oil&Grease	TOC	Zinc	Copper	Nickel
<100mg/l	NAmg/l	NAmg/l	<100mg/l	<10000mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The material / product consists of the following materials	Concentration Ranges are acceptable	Units or %
Sodium Hydroxide	5-30	
NTX (Nitrotetra acid)	0-10	%
Thiourea	<1	%
Citric acid	0-2.5	%
Ethylene diamone	<1	%
See attached components		

SECTION 5: Safety Related Data

If the handling of this material / product requires the use of special protective equipment, please explain.
Standard PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
none known

SECTION 8: Material Producer's Certification

The information contained herein is based on ☐ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** 3/10/09

Printed Name/Title: L. PINSON

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Technical Manager: Prabhu R Thyagarajan Date: 3-10-09 Approved Rejected Approval Number: _____	

COMPONETS TABLE	Concentration	Units
The material consist of the following materials	Ranges are acceptable	Or %
Ludigal	<5	%
Nickel	<1	%
Water	<50	%

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pricing (including freight):**

$250 Tote

2. **Contamination Limits (maximum limit before surcharges apply):**

3. **Surcharge Pricing:**

4. **Special Testing Requirements:**

pH and Metals

5. **Treatment and Handling Protocol:**

Bulk liquid portion of tote into trailers.Solids on bottom of totes should be sent to class I landfill. Reroute liquid to PACEs and put into tank bound for mills. Take must be mixed after adding liquid portion.

If Nickel level is too high consult with PACES operation before sending liquid portion.
** Contact customer service when liquid porion is ready**

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

EPAHO104001548

7. **Tests for Product Recovered/Recycled (if applicable):**

See Section 4

8. **Management for Product Recovered/Recycled (if applicable);**

See section 5

3203
Quality Assured

EPAHQ104001550

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/10/2009**

Dear **Lee Pinson**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3203

Expiration Date 3/10/2011

Generator: Quality Assured Plating, LLC
Address: 230 Holloway Blvd
Ville Platte, TX 70586

Waste Information

Name of Waste: Nickel stripper solution
TCEQ Waste Code #: Product
Container Type:
Detailed Description of Process Generating Waste:
Spent solution to strip metal
Color: varies **Odor:** mild **pH:** >12.5
Physical State:
Incompatibilities: none known
Safety Related Data/Special Handling:
Standard PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

JB/AL

CES Environmental Services, Inc.

☐ **CES Environmental Services – Houston Facility**
4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

☐ **CES Environmental Services – Port Arthur Facility**
2420 S. Gulfway Drive, Port Arthur, TX 77641
Phone: (713) 676-1460 Fax: (713) 676-1676
U.S. EPA ID No: TXR000079307 ISWR No: 88585

SECTION 1: Material Producer Information

Company:	Electoless Nickel Plating of LA, Inc		
Address:	44211 Stein Road		
City, State, Zip:	Hammond, LA 70403		
Contact:	Lee Pinson, Chris Bickham	**Title:**	Env. Mgr / Plating Manager
Phone No:	985.345.6352	**Fax No:**	205.982.0608
24/hr Phone:	985.969.7678		
U.S. EPA I.D. No:	LAD081414377		
State I.D.	D0022	**SIC Code:**	

SECTION 2: Billing Information – ☐ Same as Above

Company:	Sierra Chemical Corp.		
Address:	4524 Southlake Parkway, Suite 34, PMP		
City, State, Zip:	Hoover, AL 35244		
Contact:	M. Pinson	**Title:**	VP AR AP
Phone No:	205.982.7799	**Fax No:**	205.982.0608

SECTION 3: General Description of the Material / Product

Name of Material / Product: Nickel Stripper solution
Detailed Description of Process Generating or Producing the Material / Product: Spent solution to strip metal

Physical State: ☒ **Liquid** ☐ **Sludge** ☐ **Powder** ☐ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: varies **Odor:** mild

Density: ≤9.8 lbs/gal

Does this material contain any total phenolic compounds? ☐ **Yes** ☒ **No**

Does this material contain any para substituted phenolic compounds? ☐ **Yes** ☒ **No**

Layers: ☒ **Single-phase** ☐ **Multi-phase**

Container Type:	☐ **Drum**	☒ **Tote**	☐ **Truck**	☐ **Other (explain)**
Container Size:		275 gal		

Frequency: ☐ **Weekly** ☐ **Monthly** ☐ **Quarterly** ☒ **Yearly**

Proper U.S. DOT Shipping Name: Product Corrosive liquid, basic, inorganic, n.o.s. (Sodium Hydroxide)

Class: 8 **UN/NA:** UN3263 **PG:** II **RQ:** NA

EPAHO104001552

Flash Point	pH	N/A	N/A	Solids
>140	>12.5			<20%

Oil&Grease	TOC	Zinc	Copper	Nickel
<100mg/l	NAmg/l	NAmg/l	<100mg/l	<10000mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The material / product consists of the following materials	Concentration Ranges are acceptable	Units or %
Sodium Hydroxide	5-30	
NTX (Nitrotetra acid)	0-10	%
Thiourea	<1	%
Citric acid	0-2.5	%
Ethylene diamone	<1	%
See attached components		

SECTION 5: Safety Related Data

If the handling of this material / product requires the use of special protective equipment, please explain.
Standard PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
none known

SECTION 8: Material Producer's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** 3/10/09

Printed Name/Title: L. Pinson

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Technical Manager: Prabhu R Thyagh Date: 3-10-09 Approved Rejected Approval Number: 3202	

EPAHO104001553

COMPONETS TABLE	Concentration	Units
The material consist of the following materials	Ranges are acceptable	Or %
Ludigal	<5	%
Nickel	<1	%
Water	<50	%

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pricing (including freight):**

$250 Tote

2. **Contamination Limits (maximum limit before surcharges apply):**

3. **Surcharge Pricing:**

4. **Special Testing Requirements:**

pH and Metals

5. **Treatment and Handling Protocol:**

Bulk liquid portion of tote into trailers.Solids on bottom of totes should be sent to class I landfill. Reroute liquid to PACEs and put into tank bound for mills. Take must be mixed after adding liquid portion.

If Nickel level is too high consult with PACES operation before sending liquid portion.
** Contact customer service when liquid porion is ready**

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

EPAHO104001555

7. **Tests for Product Recovered/Recycled (if applicable):**

See Section 4

8. **Management for Product Recovered/Recycled (if applicable);**

See section 5

3204
Grimes Industrial

EPAHO104001557

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/12/2009**

Dear **Jody Grimes**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3204

Expiration Date 3/13/2011

Generator: Grimes Industrial
Address: 2828 Delafield Street
Houston, TX 77023

Waste Information

Name of Waste: Used Hydraulic Oil
TCEQ Waste Code #: recycle
Container Type:
Detailed Description of Process Generating Waste:
used hydraulic oil from machines at a structural and industrial sheet metal fabrication shc
Color: dark **Odor:** hydrocarbon **pH:** neutral
Physical State:
Incompatibilities: strong oxidizers
Safety Related Data/Special Handling:
standard

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

✓ DC/MM

Recycle

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility 4904 Griggs Road, Houston, TX 77021 Phone (713) 676-1460 Fax: (713) 676-1460 U.S. EPA ID Number: TXD008950461 ISWR Number: 30900 TCEQ Industrial Solid Waste Permit Number: 30948	☐ CES Environmental Services - Port Arthur Facility 2420 S. Gulfway Dr., Port Arthur, TX 77641 Phone (713) 676-1460 Fax: (713) 676-1460 U.S. EPA ID Number: TXR000079307 ISWR Number: 88585

SECTION 1: Generator Information

Company: Grimes Industrial
Address: 2828 Delafield Street
City: Houston **State:** TX **Zip:** 77023`
Contact: Jody Grimes **Title:**
Phone Number: 713-921-0000 **Fax Number:** 913-921-0005
24/hr Phone Number: 832-425-6482
US EPA ID No: TXCESQG
State ID No: CESQG **SIC Code:** NA

SECTION 2: Billing Information - ☑ **Same as Above**

Company:
Address:
City: **State:** **Zip:**
Contact: **Title:**
Phone Number: **Fax Number:**

SECTION 3: General Description of the Waste

Name of Waste: Used Hydraulic Oil
Detailed Description of Process Generating Waste:

used hydraulic oil from machines at a structural and industrial sheet metal fabrication shop

Physical State: ☑ **Liquid** ☐ **Sludge** ☐ **Powder** ☐ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: dark **Odor:** hydrocarbon

Specific Gravity (water=1): .9-1 **Density:** 8.3-8.34 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ **Single-phase** ☐ **Multi-phase**

Container Type: ☑ **Drum** ☐ **Tote** ☐ **Truck** ☐ **Other (explain)**

Frequency: ☐ **Weekly** ☐ **Monthly** ☑ **Yearly** ☐ **One-Time**
Quantity: 4

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: Recycle

Proper US DOT Shipping Name: Non RCRA Non DOT Regulated Material

Class: NA **UN/NA:** NA **PG :** NA **RQ:** NA

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>140		neutral		NA	mg/l	NA	mg/l	<2	%
Oil & Grease		**TOC**		**Zinc**		**Copper**		**Nickel**	
>1500	mg/l	NA	mg/l	NA	mg/l	NA	mg/l	NA	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Used hydraulic oil	99-100	%
Dirt	0-1	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Standard

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. MSDS

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

None known

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** *based upon the following generator knowledge:*

TCLP Metals:	X
TCLP Volatiles:	X
TCLP Semi-Volatiles:	X
Reactivity:	X
Corrosivity:	X
Ignitability:	X

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory*: *Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory*: *Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory *: Subpart C*

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ *Off-specification organic product*
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in *excess of the values listed below, the waste should be classified in the metals subcategory.*

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☐ generator knowledge and/or ☐ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** 3/10/09

Printed Name/Title: Jody Grimes

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: _____
Date: 3-11-09 ☑ Approved ☐ Rejected
Approval Number: 3204-HOU

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$45.00/drum or $25.00/5 gallon bucket plus freight

2. Contamination Limit (maximum limit before surchages apply):

~~NA~~ Reject if nonconforming

3. Surcharge Pricing:

NA

4. Special Testing Requirements:

check compatibility with black oils, chlordtect, flash, % solids

5. Treatment and Handling Protocol:

mix with black oils

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

see above

8. Management for Product Recovered/Recycled (if applicable)

See above

Unimark Oil Company Material Safety Data Sheet

UNIMARK OIL COMPANY	**Information:**	**870 864-6275**
484 E. 6TH ST.	**Emergency:**	**870-881-8700, Ext. 1163**
SMACKOVER, AR 71762	**Fax:**	**870 864-8656**

SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product: **NAPA QUALITY R&O & AW HYDRAULIC OILS AW,32,46,68, 85-101,85-105,85-155, 85-705,85-755, 85-805 85-855, 85-905, 85-955**

CAS Registry Number: Not applicable for mixtures.
Synonyms: MVI Hydraulic Fluids, AW Hydraulic Oils, R&O Hydraulic Oils
Item Number:
Generic/Chemical Name: Petroleum hydrocarbon fluid.
Product Type: Anti-wear , Rust and Oxidation Inhibited Hydraulic Oil
Preparation/Revision Date: 8-15-02

SECTION 2 COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENTS	CAS #	%	ACGIH TWA	OSHA PEL	OSHA STEL	SKIN
Severely hydrotreated naphthenic mineral oil	Mixture	90-100	5 mg/m³ (oil mist)	5 mg/m³ (oil mist)	10 mg/m³ (oil mist)	NO
Paraffinic base oil	Mixture	<10	5 mg/m³ (oil mist)	5 mg/m³ (oil mist)	10 mg/m³ (oil mist)	NO
Zinc Dialkyl Dithiophosphate	68649-42-3	<0.5	5 mg/m³ (oil mist)	5 mg/m³ (oil mist)	10 mg/m³ (oil mist)	NO

SECTION 3 HAZARDS IDENTIFICATION

WARNING: - NONE REQUIRED

Eye Contact: This product is not expected to cause eye irritation..
Skin Contact: Avoid prolonged skin contact. This product is not considered a skin irritant. This product may cause skin sensitization and allergic reaction in some individuals where prolonged or repeated contact may result in dermatitis (dryness, chapping and reddening of skin).
Inhalation: Overexposure by inhalation of hot material may cause nonspecific discomfort, such as nausea, headache, or weakness.
Ingestion: Do not ingest. Due to the concentration of oil ingestion is expected to be non-toxic unless lung aspiration occurs. Aspiration may lead to chemical pneumonitis, which is characterized by pulmonary edema and hemorrhage and may be fatal. Signs of lung involvement include increased respiratory rate, increased heart rate, and a bluish discoloration of the skin. Coughing, choking, and gagging are often noted at the time of aspiration. Gastrointestinal discomfort may develop, followed by vomiting with a further risk of aspiration. This product has laxative properties and may result in abdominal cramps and diarrhea.

SECTION 4 FIRST AID MEASURES

Eye Contact: Flush eyes with large amounts of water and continue flushing until irritation subsides. If irritation persists call a physician. If material is hot, treat for thermal burns and take victim to hospital immediately.

Skin Contact: Remove contaminated clothing. Wash contaminated area thoroughly with soap and water. If redness or irritation occurs, seek medical attention. If material is hot, submerge injured area in cold water. If victim is severely burned, remove to a hospital immediately. Wash contaminated clothing before reuse.

Inhalation: If overcome by inhalation of hot vapors, remove to fresh air. Use oxygen if there is difficulty breathing or artificial respiration if breathing has stopped. Do not leave victim unattended. Seek immediate medical attention if necessary.

Oral Contact: DO NOT INDUCE VOMITING. Do not induce vomiting due to aspiration hazard. Immediately give 2 glasses of water. Never give anything by mouth to an unconscious person. If vomiting occurs lower head below knees to avoid aspiration. Seek immediate medical attention.

SECTION 5 FIRE FIGHTING MEASURES

Flash Point: 182°C (360°F) by Cleveland Open Cup, ASTM D 92.

Upper Flammable Limit: Not determined.

Lower Flammable Limit: Not Determined.

Extinguishing Media: Use dry chemical, foam, water fog or carbon dioxide.

Special Fire fighting Procedures: Water may be ineffective but can be used to cool containers exposed to heat or flame. Caution should be exercised when using water or foam as frothing and splattering may occur, especially if sprayed into containers of hot, burning liquid.

Unusual Fire & Explosion Hazards: Dense smoke may be generated while burning. Toxic fumes, gases or vapors may evolve on burning. Heavy flammable vapors may settle along ground level and low spots to create an invisible fire hazard. The vapors may extend to sources of ignition and flash back.

Byproducts of Combustion: Oxides of C, S, and N.

Autoignition Temperature: Not determined.

Explosion Data: Not determined. Care should always be exercised in dust/mist areas.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Spill Control Procedures (Land): Immediately turn off or isolate any source of ignition (pilot lights, electrical equipment, flames, and heaters). Evacuate area and ventilate. Personnel wearing proper protective equipment should contain spill immediately with inert materials (sand, earth, chemical spill pads of cotton) by forming dikes. Dikes should be placed to contain spill in a manner that will prevent material from entering sewers and waterways. Large spill, once contained, may be picked up using explosion proof, non-sparking vacuum pumps, shovels, or buckets, and disposed of in suitable containers for disposal. If a large spill occurs notify appropriate authorities.

Spill Control Procedures (Water): Remove from surface by skimming or with suitable adsorbents. If a large spill occurs notify appropriate authorities.

UNIMARK OIL CO. · 484 E. 6TH ST. • SMACKOVER, AR 71762 USA • PH: 870 864-6275 • FAX: 870 864-8656

SECTION 6 ACCIDENTAL RELEASE MEASURES (continued)

Waste Disposal Method: All disposals must comply with federal, state, and local regulations. The material, if spilled or discarded may be a regulated waste. Refer to state and local regulations. Department of Transportation regulations may apply for transporting this material when spilled. See Section 14.

CAUTION - If spilled material is cleaned up using a regulated solvent, the resulting waste mixture may be regulated.

SECTION 7 HANDLING AND STORAGE

Handling Procedures: Keep containers closed when not in use. Do not transfer to unmarked containers. Fire extinguishers should be kept readily available. See NFPA 30 and OSHA 1910.106 -- Flammable and Combustible Liquids. Empty containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld, or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.

Storage Procedures: Store containers away from heat, sparks, open flame, or oxidizing materials.

Additional Information: No additional information.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal Protection: Applicable mainly to persons in repeated contact situations such as packaging of product, service/maintenance, and cleanup/spill control personnel.

Respiratory Protection: None required if airborne concentrations are maintained below threshold limits listed on page 1. Otherwise a respiratory protection program meeting OSHA 1910.134 and ANSI Z88.2 requirements must be followed. Where misting may occur, wear an MSHA/NIOSH approved (or equivalent) half-mask for dust/mist air purifying respirator.

Eye Protection: Eye protection is always recommended. If material is handled such that it could be splashed into the eyes, wear safety glasses with side shields or vented/splash proof goggles (ANSI Z87.1 or approved equivalent).

Hand Protection: Impervious gloves such as neoprene or nitrile rubber to avoid skin sensitization and absorption.

Other Protection: Use of an apron and over-boots of chemically impervious materials such as neoprene or nitrile rubber is recommended to avoid skin sensitization. If handling hot material use insulated protective equipment. Launder soiled clothes. Properly dispose of contaminated leather articles and other materials, which cannot be decontaminated.

Local Control Measures: Use adequate ventilation when working with material in an enclosed area. Mechanical methods such as fume hoods or area fans may be used to reduce localized vapor/mist areas. If vapor or mist is generated when the material is heated or handled, adequate ventilation in accordance with good engineering practice must be provided to maintain concentrations below the specified exposure. Eyewash stations and showers should be available in areas where this material is used and stored.

Other: Consumption of food and drink should be avoided in work areas where product is present. Always wash hands and face with soap and water before eating, drinking, or smoking.

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SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Vapor Pressure:	Negligible at STP (Standard Temperature and Pressure, 25°C at 1 ATM).
API Gravity:	22.5° at 15.6°C (60°F) by ASTM D 1298
Density:	7.65 lb./gal at 15.6°C (60°F) by ASTM D 1298
Specific Gravity:	0.919 at 15.6°C (60°F) by ASTM D 1298
Solubility:	Negligible in water, soluble in hydrocarbon solvents.
Percent Volatile:	Negligible at STP.
Vapor Density, Air = 1:	>1 at STP
Evaporation Rate, n-Butyl Acetate = 1:	Negligible at STP.
Odor:	Mild petroleum hydrocarbon odor.
Appearance:	Amber to yellow, clear fluid.
Viscosity:	5.7 cSt at 100°C (212°F) by ASTM D 445. 47.4 cSt at 40°C (104°F) by ASTM D 445.
Boiling Point:	Not determined. Expected to be >260°C (500°F).
Pour Point:	-34°C (-6°F) by ASTM D 97.
Molecular Weight:	Not determined.

SECTION 10 STABILITY AND REACTIVITY

Stability:	Material is stable at room temperature and pressure.
Conditions To Avoid:	Avoid high temperatures and product contamination.
Incompatibility With Other Materials:	Avoid contact with acids and oxidizing materials.
Hazardous Decomposition Products:	Smoke, carbon monoxide and dioxide, and other aldehydes of incomplete combustion. Oxides of Carbon, S N. Hydrogen sulfide and alkyl mercaptans and other sulfides may be released.
Hazardous Polymerization:	Will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

Oral Toxicity:	Not determined.
Dermal Toxicity:	Not determined.
Inhalation Toxicity:	On rare occasions, prolonged and repeated exposure to oil mist poses a risk of pulmonary disease such as chronic lung inflammation. This condition is usually asymptotic as a result of repeated small aspirations. Shortness of breath and cough are the most common symptoms. Based on data from similar materials.
Dermal Sensitization:	Prolonged or repeated contact may make skin more sensitive to other skin sensitizers. Based on data from similar materials.
Chronic Toxicity:	Not determined.
Carcinogenicity:	Not determined.
Mutagenicity:	Not determined.
Reproductive Toxicity:	Not determined.

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EPAHO104001568

SECTION 11 TOXICOLOGICAL INFORMATION (continued)

Teratogenicity: Not determined.

Other: This product contains petroleum base oils which may be refined by various processes including severe solvent extraction, severe hydrocracking, or severe hydrotreating. None of the oils require a cancer warning under the OSHA Hazard Communication Standard (29 CFR 1910.1200). These oils have not been listed in the National Toxicology Program (NTP) Annual Report nor have they been classified by the International Agency for Research on Cancer (IARC) as; carcinogenic to humans (Group 1), probably carcinogenic to humans (Group 2A), or possibly carcinogenic to humans (Group 2B).

SECTION 12 ECOLOGICAL INFORMATION

Environmental Toxicity: This material may be toxic to aquatic organisms and should be kept out of sewage and drainage systems and all bodies of water.

Environmental Fate: No data available.

SECTION 13 DISPOSAL CONSIDERATIONS

Waste Disposal: Under RCRA it is the responsibility of the user of the product to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state, and local laws.

Disposal Considerations: Place used, contaminated, or excess material into disposable containers and dispose of in a manner consistent with local and state regulations. Contact local environmental or health authorities for approved disposal of this material. Most used oil is reclaimed or incinerated.

SECTION 14 TRANSPORT INFORMATION

U.S. DOT Bulk Shipping Description: Does not apply to bulk oil shipping.

U.S. DOT Non-Bulk Shipping Description: Does not apply to non-bulk oil shipping.

U.S. DOT Identification Number: Not applicable.

U.S. DOT Hazard Classification: Not applicable.

Other: See 49 CFR for additional requirements for descriptions, allowed modes of transport, and packaging. For more information concerning spills during transport, consult latest DOT Emergency Response Guidebook for Hazardous Materials Incidents, DOT P 5800.3.

SECTION 15 REGULATORY INFORMATION

Clean Water Act/Oil Pollution Act: Under Section 311 of the Clean Water Act (40 CFR 110) and the Oil Pollution Control Act of 1990, this material is considered an oil. Any spills or discharges that produce a visible sheen or film on surface of water, or in waterways, ditches, or sewers leading to surface water must be reported. Contact the National Response Center at 800-424-8802.

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EPAHO104001569

Unimark Oil Company Material Safety Data Sheet

SECTION 15 REGULATORY INFORMATION (continued)

TSCA: All components of this material are listed in the U.S. TSCA Inventory.
Other TSCA: Not applicable.
SARA Title III: Section 302/304 Extremely Hazardous Substances: None.
Section 311, 312 Hazard Categorization:

Acute (immediate health effects):	Yes.
Chronic (delayed health effects):	No.
Fire (hazard):	No.
Reactivity (hazard):	No.
Pressure (sudden release hazard):	No.

Section 313 Toxic Chemicals:
Zinc <0.1%

CERCLA: For stationary sources - reportable quantity: Not determined.
Due to: Not applicable.
For moving sources - reportable quantity: Not determined.
Due to: Not applicable.
Recommend contacting the local authorities in the event of any type of spill to determine local reporting requirements and also to aid in the cleanup.
California Prop. 65: Not applicable.

SECTION 16 OTHER INFORMATION

	NFPA 704	NPCA-HMIS	KEY
HEALTH:	1	1	0 = Minimal
FIRE:	1	1	1 = Slight
REACTIVITY:	0	0	2 = Moderate
SPECIFIC HAZARD:	NONE	N/A	3 = Serious
PROTECTION INDEX:	N/A	B	4 = Severe

Precautionary Labels: WARNING
- NONE REQUIRED

This product may be formulated in part with components purchased from other companies. In many instances, especially when proprietary or trade secret materials are used, Unimark Oil Company must rely upon information provided by those materials manufacturers or distributors.

Prepared by: Anne Searle
Creation Date: 15 February 2001
Print Date: 14 February 2001
File: U2007R&O

INFORMATION PROVIDED IN THIS MSDS IS CONSIDERED ACCURATE AND RELIABLE BASED ON INFORMATION ISSUED FROM INTERNAL AND OUTSIDE SOURCES TO THE BEST OF UNIMARK OIL COMPANY'S KNOWLEDGE.. HOWEVER, UNIMARK OIL COMPANY MAKES NO REPRESENTATIONS, GUARANTEES OR WARRANTIES, EXPRESSED OR IMPLIED, OF MERCHANTABILITY OR FITNESS FOR THE PARTICULAR PURPOSE, REGARDING THE ACCURACY OF SUCH INFORMATION OR THE RESULT TO BE OBTAINED FROM THE USE THEREOF, OR AS TO THE SUFFICIENCY OF INFORMATION HEREIN PRESENTED. UNIMARK OIL COMPANY ASSUMES NO RESPONSIBILITY FOR INJURY TO RECIPIENT OR TO THIRD PERSONS OR FOR ANY DAMAGE TO ANY PROPERTY AND RECIPIENT ASSUMES ALL SUCH RISKS.

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3205
Brennitag

EPAHQ1040015 71

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/12/2009**

Dear **Dave Allen**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3205

Expiration Date 3/12/2011

Generator: Brenntag
Address: 14826 Hooper Road
Houston, TX 77047

Waste Information

Name of Waste: Sodium Hydroxide Line Flush
TCEQ Waste Code #: PRODUCT
Container Type:
Detailed Description of Process Generating Waste:
Unused material utilized to flush out transfer piping prior to filling product containers.
Color: clear to amber **Odor:** slight ammonia **pH:** 14
Physical State:
Incompatibilities: Acid
Safety Related Data/Special Handling:
Level C

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

GB JR

#3205

JH 32912

CES Environmental Services, Inc.

☒ **CES Environmental Services – Houston Facility**
4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

☐ **CES Environmental Services – Port Arthur Facility**
2420 S. Gulfway Drive, Port Arthur, TX 77641
Phone: (713) 676-1460 Fax: (713) 676-1676
U.S. EPA ID No: TXR000079307 ISWR No: 88585

SECTION 1: Material Producer Information

Company: Brenntag Southwest, Inc.
Address: 14826 Hooper Road
City, State, Zip: Houston, TX 77047
Contact: Dave Allen **Title:** Facility Manager
Phone No: 713-433-6771 **Fax No:** 713-433-8572
24/hr Phone: CES 713-676-1460
U.S. EPA I.D. No: TXD062128004
State I.D. 30205 **SIC Code:**

SECTION 2: Billing Information – ☒ Same as Above

Company:
Address:
City, State, Zip:
Contact: **Title:**
Phone No: **Fax No:**

SECTION 3: General Description of the Material / Product

Name of Material / Product: Sodium Hydroxide Line Flush
Detailed Description of Process Generating or Producing the Material / Product: Unused material utilized to flush out tranfer piping prior to filling product containers

Physical State: ☒ **Liquid** ☐ **Sludge** ☐ **Powder** ☐ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: Clear to amber **Odor:** occassional ammonia

Specific Gravity (water=1): 1.084 **Density:** 9 lbs/gal

Does this material contain any total phenolic compounds? ☐ **Yes** ☒ **No**

Does this material contain any para substituted phenolic compounds? ☐ **Yes** ☒ **No**

Layers: ☒ **Single-phase** ☐ **Multi-phase**

Container Type: ☐ **Drum** ☒ **Tote** ☐ **Truck** ☐ **Other (explain)**
Container Size: 300

Frequency: ☐ **Weekly** ☐ **Monthly** ☒ **Quarterly** ☐ **Yearly**
Number of Units (containers): 3-5 **Other:**

Product

Proper U.S. DOT Shipping Name: Corrosive liquid, basic, inorganic, n.o.s., 8, UN3266, PG-III

Class: 8 **UN/NA:** UN 3266 **PG:** PG-III **RQ:** 1000

Flash Point	pH	N/A	N/A	Solids
NA	14			<2%

Oil&Grease	TOC	Zinc	Copper	Nickel
<1500mg/l	<1500mg/l	0mg/l	0mg/l	0mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The material / product consists of the following materials	Concentration Ranges are acceptable	Units or %
Sodium Hydroxide	5-15	%
Ammonium Hydroxide	0-1	%
Solids as dirt	0-1	%
Water	95-85	%

SECTION 5: Safety Related Data

If the handling of this material / product requires the use of special protective equipment, please explain.
Level C

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.
CES Evaluation Report 09-034

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
acid

SECTION 8: Material Producer's Certification

The information contained herein is based on ☒ generator knowledge and/or ☒ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature Jenny Rust for Dave Allen **Date:** 3-12-09

Printed Name/Title: _____

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Technical Manager: [signature] Date: 3-12-09 Approved Rejected Approval Number: _____	

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pricing (including freight):**

$100.00 per tote; $50.00 per drum, Transportation $250.00 trip plus FSC

2. **Contamination Limits (maximum limit before surcharges apply):**

none

3. **Surcharge Pricing:**

none

4. **Special Testing Requirements:**

Test for percent NaOH

5. **Treatment and Handling Protocol:**

Use at CES as a neutralizer in the waste water plant or sent to PACES for NaSH production

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

EPAHO104001575

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

7. **Tests for Product Recovered/Recycled (if applicable):**

NA

8. **Management for Product Recovered/Recycled (if applicable);**

See Number 5

3206

Ivy Steel and Wire

EPAHO104001577

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/12/2009**

Dear **Poppy Zapata or Sergio**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3206

Expiration Date 3/12/2011

Generator: Ivy Steel and Wire
Address: 1520 Lathrop Drive
Houston, TX 77220

Waste Information

Name of Waste: Ignitron Tubes containing Mercury (Mercury containing Articl
TCEQ Waste Code #: UNIV319H
Container Type:
Detailed Description of Process Generating Waste:
Out Dated no longer used equipment
Color: Grey Casing with slive **Odor:** none **pH:** 5-7
Physical State:
Incompatibilities: Oxidizers
Safety Related Data/Special Handling:
Level C

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

Production waste.

#82921

#3204

GB JR Universal

To: Gary or Jenny From Poppy Zapata 4 pages. 3/12/09

Pr

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility 4904 Griggs Road, Houston, TX 77021 Phone (713) 676-1460 Fax: (713) 676-1676 U.S. EPA ID Number: TXD008950461 ISWR Number: 30900 TCEQ Industrial Solid Waste Permit Number: 30948	☐ CES Environmental Services 2420 S. Gulfway Dr., Por Phone (713) 676-1460 Fax: (713) 676-1460 U.S. EPA ID Number: TXR000079307 ISWR Number: 88585

SECTION 1: Generator Information

Company: Ivy Steel and Wire
Address: 1520 Lathrop
City: Houston **State:** TX **Zip:** 77220
Contact: Poppy Zapata **Title:** Manager
Phone Number: 281-227-2300 **Fax Number:**
24/hr Phone Number: CES-713-676-1460
US EPA ID No: CESQG
State ID No: CESQG **SIC Code:**

SECTION 2: Billing Information - ☐ **Same as Above**

Company: Ivy Steel and Wire
Address: 12800 Aldine Westfield
City: Houston **State:** TX **Zip:** 77039
Contact: Poppy Zapata **Title:** Manager
Phone Number: Cell: 832-729-1241 **Fax Number:**

SECTION 3: General Description of the Waste

Name of Waste: Ignitron Tubes Containing Mercury (Mercury Containing Articles)
Detailed Description of Process Generating Waste:

Out Dated no longer used equipment

Physical State: ☑ Liquid ☐ Sludge ☐ Powder ☑ Solid ☐ Filter Cake ☐ Combination

Color: Grey Casing with silver bead of Hg **Odor:** none

Specific Gravity (water=1): 1.3 **Density:** 11 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No

Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☐ Single-phase ☑ Multi-phase

Container Type: ☑ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☐ Monthly ☐ Yearly ☑ One-Time
Quantity: 2 drums

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☑ Yes ☐ No
If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011
Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)
D009

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: UNIV319H (Universal Waste)

Proper US DOT Shipping Name: RQ, Mercury contained in manufactured articles, 8, UN2809, PG-III
Class: 8 **UN/NA:** UN 2809 **PG:** PG-III **RQ:** 1

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
NA		neutral		0	mg/l	0	mg/l	99.9	%
Oil & Grease		**TOC**		**Zinc**		**Copper**		**Nickel**	
<1500	mg/l	<1500	mg/l	0	mg/l	0	mg/l	0	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Metal Casing	99.9	%
Elemental Mercury	.1	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Level C

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. none

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

oxidizers

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	X
TCLP Volatiles:	X
TCLP Semi-Volatiles:	X
Reactivity:	X
Corrosivity:	X
Ignitability:	X

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Pertaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☐ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory : Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory : Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory*: *Subpart C

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** 3/12/09

Printed Name/Title: Refugio Zapata III

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: _____
Date: 3-12-09 ☑ Approved ☐ Rejected
Approval Number: _____

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$25.00 per pound including container

2. Contamination Limit (maximum limit before surchages apply):

none

3. Surcharge Pricing:

none

4. Special Testing Requirements:

none

5. Treatment and Handling Protocol:

Outbound to Environmental Light Recyclers on regularly scheduled pick-up. Must weigh each drum upon receipt and indicate weight on in-bound report.

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

NA

8. Management for Product Recovered/Recycled (if applicable)

NA

3207
Grimes Industrial

EPAHO104001585

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/12/2009**

Dear **Jody Grimes**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3207

Expiration Date 3/12/2011

Generator: Grimes Industrial
Address: 2828 Delafield Street
Houston, TX 77023

Waste Information

Name of Waste: Oily Absorbent
TCEQ Waste Code #: CESQ4891
Container Type:
Detailed Description of Process Generating Waste:
absorbent used to clean up hydraulic oil at a streuctural and industrial sheet metal fabrication shop
Color: dark **Odor:** hydrocarbon **pH:** na
Physical State:
Incompatibilities: strong oxidizers
Safety Related Data/Special Handling:
standard

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

DC/mm

✓

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility 4904 Griggs Road, Houston, TX 77021 Phone (713) 676-1460 Fax: (713) 676-1460 U.S. EPA ID Number: TXD008950461 ISWR Number: 30900 TCEQ Industrial Solid Waste Permit Number: 30948	☐ CES Environmental Services - Port Arthur Facility 2420 S. Gulfway Dr., Port Arthur, TX 77641 Phone (713) 676-1460 Fax: (713) 676-1460 U.S. EPA ID Number: TXR000079307 ISWR Number: 88585

05

SECTION 1: Generator Information

Company: Grimes Industrial
Address: 2828 Delafield Street
City: Houston **State:** TX **Zip:** 77023`
Contact: Jody Grimes **Title:**
Phone Number: 713-921-0000 **Fax Number:** 913-921-0005
24/hr Phone Number: 832-425-6482
US EPA ID No: TXCESQG
State ID No: CESQG **SIC Code:** NA

SECTION 2: Billing Information - ☐ **Same as Above**

Company:
Address:
City: **State:** **Zip:**
Contact: **Title:**
Phone Number: **Fax Number:**

SECTION 3: General Description of the Waste

Name of Waste: Oily Absorbent
Detailed Description of Process Generating Waste:

Absorbent used to clean up hydrualic oil at a structural and industrial sheet metal fabrication shop

Physical State: ☐ **Liquid** ☐ **Sludge** ☐ **Powder**
☑ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: dark **Odor:** hydrocarbon

Specific Gravity (water=1): 1.2 **Density:** 8.5 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ **Single-phase** ☐ **Multi-phase**

Container Type: ☑ **Drum** ☐ **Tote** ☐ **Truck** ☐ **Other (explain)**

Frequency: ☐ **Weekly** ☐ **Monthly** ☑ **Yearly** ☐ **One-Time**
Quantity: 4

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: CESQ4891

Proper US DOT Shipping Name: Non RCRA Non DOT Regulated Material

Class: NA **UN/NA:** NA **PG :** NA **RQ:** NA

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
NA		NA		NA	mg/l	NA	mg/l	100	%
Oil & Grease		**TOC**		**Zinc**		**Copper**		**Nickel**	
>1500	mg/l	NA	mg/l	NA	mg/l	NA	mg/l	NA	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Absorbent (clay)	95-100	%
Hydraulic oil	0-5	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Standard

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. MSDS

SECTION 7: Incompatibilities

Please list ALL *incompatibilities (if any)*:

None known

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	X
TCLP Volatiles:	X
TCLP Semi-Volatiles:	X
Reactivity:	X
Corrosivity:	X
Ignitability:	X

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory: Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory **: *Subpart C***

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☐ generator knowledge and/or ☐ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** 3/10/09

Printed Name/Title: Jody Grimes

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: _____
Date: 3-11-09 ☑ Approved ☐ Rejected
Approval Number: 3207

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$60.00/drum or $30.00/5 gallon bucket plus freight

2. Contamination Limit (maximum limit before surchages apply):

NA

3. Surcharge Pricing:

NA

4. Special Testing Requirements:

NA

5. Treatment and Handling Protocol:

Put in class 1 solids box

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

NA

8. Management for Product Recovered/Recycled (if applicable)

NA

Unimark Oil Company Material Safety Data Sheet

UNIMARK OIL COMPANY
484 E. 6TH ST.
SMACKOVER, AR 71762

Information: 870 864-6275
Emergency: 870-881-8700, Ext. 1163
Fax: 870 864-8656

SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product: **NAPA QUALITY R&O & AW HYDRAULIC OILS AW,32,46,68, 85-101,85-105,85-155, 85-705,85-755, 85-805 85-855, 85-905, 85-955**

CAS Registry Number: Not applicable for mixtures.
Synonyms: MVI Hydraulic Fluids, AW Hydraulic Oils, R&O Hydraulic Oils
Item Number:
Generic/Chemical Name: Petroleum hydrocarbon fluid.
Product Type: Anti-wear , Rust and Oxidation Inhibited Hydraulic Oil
Preparation/Revision Date: 8-15-02

SECTION 2 COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENTS	CAS #	%	ACGIH TWA	OSHA PEL	OSHA STEL	SKIN
Severely hydrotreated naphthenic mineral oil	Mixture	90-100	5 mg/m³ (oil mist)	5 mg/m³ (oil mist)	10 mg/m³ (oil mist)	NO
Paraffinic base oil	Mixture	<10	5 mg/m³ (oil mist)	5 mg/m³ (oil mist)	10 mg/m³ (oil mist)	NO
Zinc Dialkyl Dithiophosphate	68649-42-3	<0.5	5 mg/m³ (oil mist)	5 mg/m³ (oil mist)	10 mg/m³ (oil mist)	NO

SECTION 3 HAZARDS IDENTIFICATION

WARNING: - NONE REQUIRED

Eye Contact: This product is not expected to cause eye irritation..
Skin Contact: Avoid prolonged skin contact. This product is not considered a skin irritant. This product may cause skin sensitization and allergic reaction in some individuals where prolonged or repeated contact may result in dermatitis (dryness, chapping and reddening of skin).
Inhalation: Overexposure by inhalation of hot material may cause nonspecific discomfort, such as nausea, headache, or weakness.
Ingestion: Do not ingest. Due to the concentration of oil ingestion is expected to be non-toxic unless lung aspiration occurs. Aspiration may lead to chemical pneumonitis, which is characterized by pulmonary edema and hemorrhage and may be fatal. Signs of lung involvement include increased respiratory rate, increased heart rate, and a bluish discoloration of the skin. Coughing, choking, and gagging are often noted at the time of aspiration. Gastrointestinal discomfort may develop, followed by vomiting with a further risk of aspiration. This product has laxative properties and may result in abdominal cramps and diarrhea.

SECTION 4 FIRST AID MEASURES

Eye Contact: Flush eyes with large amounts of water and continue flushing until irritation subsides. If irritation persists call a physician. If material is hot, treat for thermal burns and take victim to hospital immediately.

Skin Contact: Remove contaminated clothing. Wash contaminated area thoroughly with soap and water. If redness or irritation occurs, seek medical attention. If material is hot, submerge injured area in cold water. If victim is severely burned, remove to a hospital immediately. Wash contaminated clothing before reuse.

Inhalation: If overcome by inhalation of hot vapors, remove to fresh air. Use oxygen if there is difficulty breathing or artificial respiration if breathing has stopped. Do not leave victim unattended. Seek immediate medical attention if necessary.

Oral Contact: DO NOT INDUCE VOMITING. Do not induce vomiting due to aspiration hazard. Immediately give 2 glasses of water. Never give anything by mouth to an unconscious person. If vomiting occurs lower head below knees to avoid aspiration. Seek immediate medical attention.

SECTION 5 FIRE FIGHTING MEASURES

Flash Point: 182°C (360°F) by Cleveland Open Cup, ASTM D 92.

Upper Flammable Limit: Not determined.

Lower Flammable Limit: Not Determined.

Extinguishing Media: Use dry chemical, foam, water fog or carbon dioxide.

Special Fire fighting Procedures: Water may be ineffective but can be used to cool containers exposed to heat or flame. Caution should be exercised when using water or foam as frothing and splattering may occur, especially if sprayed into containers of hot, burning liquid.

Unusual Fire & Explosion Hazards: Dense smoke may be generated while burning. Toxic fumes, gases or vapors may evolve on burning. Heavy flammable vapors may settle along ground level and low spots to create an invisible fire hazard. The vapors may extend to sources of ignition and flash back.

Byproducts of Combustion: Oxides of C, S, and N.

Autoignition Temperature: Not determined.

Explosion Data: Not determined. Care should always be exercised in dust/mist areas.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Spill Control Procedures (Land): Immediately turn off or isolate any source of ignition (pilot lights, electrical equipment, flames, and heaters). Evacuate area and ventilate. Personnel wearing proper protective equipment should contain spill immediately with inert materials (sand, earth, chemical spill pads of cotton) by forming dikes. Dikes should be placed to contain spill in a manner that will prevent material from entering sewers and waterways. Large spill, once contained, may be picked up using explosion proof, non-sparking vacuum pumps, shovels, or buckets, and disposed of in suitable containers for disposal. If a large spill occurs notify appropriate authorities.

Spill Control Procedures (Water): Remove from surface by skimming or with suitable adsorbents. If a large spill occurs notify appropriate authorities.

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EPAHO104001594

SECTION 6 ACCIDENTAL RELEASE MEASURES (continued)

Waste Disposal Method: All disposals must comply with federal, state, and local regulations. The material, if spilled or discarded may be a regulated waste. Refer to state and local regulations. Department of Transportation regulations may apply for transporting this material when spilled. See Section 14.

CAUTION - If spilled material is cleaned up using a regulated solvent, the resulting waste mixture may be regulated.

SECTION 7 HANDLING AND STORAGE

Handling Procedures: Keep containers closed when not in use. Do not transfer to unmarked containers. Fire extinguishers should be kept readily available. See NFPA 30 and OSHA 1910.106 -- Flammable and Combustible Liquids. Empty containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld, or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.

Storage Procedures: Store containers away from heat, sparks, open flame, or oxidizing materials.

Additional Information: No additional information.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal Protection: Applicable mainly to persons in repeated contact situations such as packaging of product, service/maintenance, and cleanup/spill control personnel.

Respiratory Protection: None required if airborne concentrations are maintained below threshold limits listed on page 1. Otherwise a respiratory protection program meeting OSHA 1910.134 and ANSI Z88.2 requirements must be followed. Where misting may occur, wear an MSHA/NIOSH approved (or equivalent) half-mask for dust/mist air purifying respirator.

Eye Protection: Eye protection is always recommended. If material is handled such that it could be splashed into the eyes, wear safety glasses with side shields or vented/splash proof goggles (ANSI Z87.1 or approved equivalent).

Hand Protection: Impervious gloves such as neoprene or nitrile rubber to avoid skin sensitization and absorption.

Other Protection: Use of an apron and over-boots of chemically impervious materials such as neoprene or nitrile rubber is recommended to avoid skin sensitization. If handling hot material use insulated protective equipment. Launder soiled clothes. Properly dispose of contaminated leather articles and other materials, which cannot be decontaminated.

Local Control Measures: Use adequate ventilation when working with material in an enclosed area. Mechanical methods such as fume hoods or area fans may be used to reduce localized vapor/mist areas. If vapor or mist is generated when the material is heated or handled, adequate ventilation in accordance with good engineering practice must be provided to maintain concentrations below the specified exposure. Eyewash stations and showers should be available in areas where this material is used and stored.

Other: Consumption of food and drink should be avoided in work areas where product is present. Always wash hands and face with soap and water before eating, drinking, or smoking.

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SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Vapor Pressure:	Negligible at STP (Standard Temperature and Pressure, 25°C at 1 ATM).
API Gravity:	22.5° at 15.6°C (60°F) by ASTM D 1298
Density:	7.65 lb./gal at 15.6°C (60°F) by ASTM D 1298
Specific Gravity:	0.919 at 15.6°C (60°F) by ASTM D 1298
Solubility:	Negligible in water, soluble in hydrocarbon solvents.
Percent Volatile:	Negligible at STP.
Vapor Density, Air = 1:	>1 at STP
Evaporation Rate, n-Butyl Acetate = 1:	Negligible at STP.
Odor:	Mild petroleum hydrocarbon odor.
Appearance:	Amber to yellow, clear fluid.
Viscosity:	5.7 cSt at 100°C (212°F) by ASTM D 445. 47.4 cSt at 40°C (104°F) by ASTM D 445.
Boiling Point:	Not determined. Expected to be >260°C (500°F).
Pour Point:	-34°C (-6°F) by ASTM D 97.
Molecular Weight:	Not determined.

SECTION 10 STABILITY AND REACTIVITY

Stability:	Material is stable at room temperature and pressure.
Conditions To Avoid:	Avoid high temperatures and product contamination.
Incompatibility With Other Materials:	Avoid contact with acids and oxidizing materials.
Hazardous Decomposition Products:	Smoke, carbon monoxide and dioxide, and other aldehydes of incomplete combustion. Oxides of Carbon, S N. Hydrogen sulfide and alkyl mercaptans and other sulfides may be released.
Hazardous Polymerization:	Will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

Oral Toxicity:	Not determined.
Dermal Toxicity:	Not determined.
Inhalation Toxicity:	On rare occasions, prolonged and repeated exposure to oil mist poses a risk of pulmonary disease such as chronic lung inflammation. This condition is usually asymptotic as a result of repeated small aspirations. Shortness of breath and cough are the most common symptoms. Based on data from similar materials.
Dermal Sensitization:	Prolonged or repeated contact may make skin more sensitive to other skin sensitizers. Based on data from similar materials.
Chronic Toxicity:	Not determined.
Carcinogenicity:	Not determined.
Mutagenicity:	Not determined.
Reproductive Toxicity:	Not determined.

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SECTION 11 TOXICOLOGICAL INFORMATION (continued)

Teratogenicity: Not determined.

Other: This product contains petroleum base oils which may be refined by various processes including severe solvent extraction, severe hydrocracking, or severe hydrotreating. None of the oils require a cancer warning under the OSHA Hazard Communication Standard (29 CFR 1910.1200). These oils have not been listed in the National Toxicology Program (NTP) Annual Report nor have they been classified by the International Agency for Research on Cancer (IARC) as; carcinogenic to humans (Group 1), probably carcinogenic to humans (Group 2A), or possibly carcinogenic to humans (Group 2B).

SECTION 12 ECOLOGICAL INFORMATION

Environmental Toxicity: This material may be toxic to aquatic organisms and should be kept out of sewage and drainage systems and all bodies of water.

Environmental Fate: No data available.

SECTION 13 DISPOSAL CONSIDERATIONS

Waste Disposal: Under RCRA it is the responsibility of the user of the product to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state, and local laws.

Disposal Considerations: Place used, contaminated, or excess material into disposable containers and dispose of in a manner consistent with local and state regulations. Contact local environmental or health authorities for approved disposal of this material. Most used oil is reclaimed or incinerated.

SECTION 14 TRANSPORT INFORMATION

U.S. DOT Bulk Shipping Description: Does not apply to bulk oil shipping.

U.S. DOT Non-Bulk Shipping Description: Does not apply to non-bulk oil shipping.

U.S. DOT Identification Number: Not applicable.

U.S. DOT Hazard Classification: Not applicable.

Other: See 49 CFR for additional requirements for descriptions, allowed modes of transport, and packaging. For more information concerning spills during transport, consult latest DOT Emergency Response Guidebook for Hazardous Materials Incidents, DOT P 5800.3.

SECTION 15 REGULATORY INFORMATION

Clean Water Act/Oil Pollution Act: Under Section 311 of the Clean Water Act (40 CFR 110) and the Oil Pollution Control Act of 1990, this material is considered an oil. Any spills or discharges that produce a visible sheen or film on surface of water, or in waterways, ditches, or sewers leading to surface water must be reported. Contact the National Response Center at 800-424-8802.

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EPAHO104001597

Unimark Oil Company Material Safety Data Sheet

SECTION 15 REGULATORY INFORMATION (continued)

TSCA:	All components of this material are listed in the U.S. TSCA Inventory.
Other TSCA:	Not applicable.
SARA Title III:	Section 302/304 Extremely Hazardous Substances: None.
	Section 311, 312 Hazard Categorization:
	Acute (immediate health effects): Yes.
	Chronic (delayed health effects): No.
	Fire (hazard): No.
	Reactivity (hazard): No.
	Pressure (sudden release hazard): No.
	Section 313 Toxic Chemicals:
	Zinc <0.1%
CERCLA:	For stationary sources - reportable quantity: Not determined.
	Due to: Not applicable.
	For moving sources - reportable quantity: Not determined.
	Due to: Not applicable.
	Recommend contacting the local authorities in the event of any type of spill to determine local reporting requirements and also to aid in the cleanup.
California Prop. 65:	Not applicable.

SECTION 16 OTHER INFORMATION

	NFPA 704	NPCA-HMIS	KEY
HEALTH:	1	1	0 = Minimal
FIRE:	1	1	1 = Slight
REACTIVITY:	0	0	2 = Moderate
SPECIFIC HAZARD:	NONE	N/A	3 = Serious
PROTECTION INDEX:	N/A	B	4 = Severe

Precautionary Labels: WARNING
- NONE REQUIRED

This product may be formulated in part with components purchased from other companies. In many instances, especially when proprietary or trade secret materials are used, Unimark Oil Company must rely upon information provided by those materials manufacturers or distributors.

Prepared by:	Anne Searle
Creation Date:	15 February 2001
Print Date:	14 February 2001
File:	U2007R&O

INFORMATION PROVIDED IN THIS MSDS IS CONSIDERED ACCURATE AND RELIABLE BASED ON INFORMATION ISSUED FROM INTERNAL AND OUTSIDE SOURCES TO THE BEST OF UNIMARK OIL COMPANY'S KNOWLEDGE.. HOWEVER, UNIMARK OIL COMPANY MAKES NO REPRESENTATIONS, GUARANTEES OR WARRANTIES, EXPRESSED OR IMPLIED, OF MERCHANTABILITY OR FITNESS FOR THE PARTICULAR PURPOSE, REGARDING THE ACCURACY OF SUCH INFORMATION OR THE RESULT TO BE OBTAINED FROM THE USE THEREOF, OR AS TO THE SUFFICIENCY OF INFORMATION HEREIN PRESENTED. UNIMARK OIL COMPANY ASSUMES NO RESPONSIBILITY FOR INJURY TO RECIPIENT OR TO THIRD PERSONS OR FOR ANY DAMAGE TO ANY PROPERTY AND RECIPIENT ASSUMES ALL SUCH RISKS.

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3208
SOUPUS Products

EPAHO104001599

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/12/2009**

Dear **Shell Contect-Cell 713.553.3698**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3208

Expiration Date 3/12/2011

Generator: SOPUS Products (Shell Lub. Plant)
Address: 780 Clinton Drive
Galenda Park, TX 77547

Waste Information

Name of Waste: Antifreeze and water
TCEQ Waste Code #: 02671011
Container Type:
Detailed Description of Process Generating Waste:
coolant from equipment chanfes
Color: yellowish / green **Odor:** glycol like **pH:** neutral
Physical State:
Incompatibilities: Strong oxidizers, strong acids and bases
Safety Related Data/Special Handling:
Standard PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

OK JB/AL

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility 4904 Griggs Road, Houston, TX 77021 Phone (713) 676-1460 Fax: (713) 676-1676 U.S. EPA ID Number: TXD008950461 ISWR Number: 30900 TCEQ Industrial Solid Waste Permit Number: 30948	☐ CES Environmental Services - Port Arthur Facility 2420 S. Gulfway Dr., Port Arthur, TX 77641 Phone (713) 676-1460 Fax: (713) 676-1460 U.S. EPA ID Number: TXR000079307 ISWR Number: 88585

SECTION 1: Generator Information

Company: SOPUS Products
Address: 780 Clinton Drive
City: Galena Park **State:** TX **Zip:** 77547
Contact: Brenda Clark **Title:** Regional Environmental Engineer
Phone Number: 713.546.6923 **Fax Number:** 713.546.8505
24/hr Phone Number: 713.725.5535
US EPA ID No: TXD150364289
State ID No: 39781 **SIC Code:** na

SECTION 2: Billing Information - ☑ **Same as Above**

Company:
Address:
City: **State:** **Zip:**
Contact: **Title:**
Phone Number: **Fax Number:**

SECTION 3: General Description of the Waste

Name of Waste: antifreeze and water
Detailed Description of Process Generating Waste:

Coolant from equipment changes

Physical State: ☑ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color: yellowish/ green **Odor:** glycol like

Specific Gravity (water=1): .8-1.0 **Density:** 8 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ Single-phase ☐ Multi-phase

Container Type: ☑ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Frequency: ☑ Weekly ☐ Monthly ☐ Yearly ☐ One-Time
Quantity:

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No
If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011
Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: 02671011

Proper US DOT Shipping Name: Non RCRA Non DOT regulated material
Class: na **UN/NA:** na **PG:** na **RQ:** na

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>150		neutral		0	mg/l	0	mg/l	2	%
Oil & Grease		**TOC**		**Zinc**		**Copper**		**Nickel**	
>1500	mg/l	5000	mg/l	0	mg/l	0	mg/l	0	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Water	90	%
ethylene glycol	10	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Standard

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. None

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

strong oxidezers, strong acids and bases.

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	na
TCLP Volatiles:	na
TCLP Semi-Volatiles:	na
Reactivity:	na
Corrosivity:	na
Ignitability:	na

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory*: *Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory*: *Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

***Organics Subcategory*: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Brenda L. Clark **Date:** 3/6/2009

Printed Name/Title: Brenda L. Clark / Regional Environmental Engineer

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: [illegible]
Date: 3-12-09 ☑ Approved ☐ Rejected
Approval Number: 3205

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$35 drum

2. Contamination Limit (maximum limit before surchages apply):

3. Surcharge Pricing:

4. Special Testing Requirements:

% glycol; TOC, pH, % solids

5. Treatment and Handling Protocol:

glycol recycling; if cannot be recycled, send to system 1

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

ethylene glycol

8. Management for Product Recovered/Recycled (if applicable)

glycol Recycling

3209
Tenaris

EPAHO104001607

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/12/2009**

Dear **Luke Bibler**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3209

Expiration Date 3/12/2011

Generator: Tenaris (Conroe)
Address: 699 FM 3083
Conroe, TX 77301

Waste Information

Name of Waste: Fluorscent Bulbs
TCEQ Waste Code #: UNIV
Container Type: boxes
Detailed Description of Process Generating Waste:
used fluorescent bulbs
Color: varies **Odor:** none **pH:** na
Physical State:
Incompatibilities: none known
Safety Related Data/Special Handling:
level D

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

DC/MM

CES Environmental Services, Inc.

4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit Number: 30948
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

Recycle

SECTION 1: Generator Information

Company: Tenaris Conroe
Address: 699 FM 3083
City: Conroe **State:** TX **Zip:** 77301
Contact: Saima Baig **Title:** Environmental
Phone Number: 936-525-3178 **Fax Number:** 936-539-2504
24/hr Phone Number: 832-275-0935
US EPA ID No: TXD942559080
State ID No: 31678 **SIC Code:** NA

SECTION 2: Billing Information - ☑ **Same as Above**

Company: Tenaris
Address: 699 FM 3083
City: Conroe **State:** Tx **Zip:** 77301
Contact: Saima Baig **Title:** Environmental
Phone Number: 936-525-3178 **Fax Number:** 936-539-2504

SECTION 3: General Description of the Waste

Name of Waste: Flourescent Bulbs
Detailed Description of Process Generating Waste:

used flourescent bulbs

Physical State: ☐ Liquid ☐ Sludge ☐ Powder
☑ Solid ☐ Filter Cake ☐ Combination

Color: varies **Odor:** none

Specific Gravity (water=1): 1.5 **Density:** 12 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ **Single-phase** ☐ **Multi-phase**

Container Type: ☐ **Drum** ☐ **Tote** ☐ **Truck** ☑ **Other (explain)**

Frequency: ☐ **Weekly** ☑ **Monthly** ☐ **Yearly** ☐ **One-Time**
Quantity: 5

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: Universal Waste

Proper US DOT Shipping Name: Environmentally Hazarous Substance, soild (fluorescent bulbs)

Class: 9 **UN/NA:** UN3077 **PG :** III **RQ:** na

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
NA	NA	NA mg/l	NA mg/l	100 %

Oil & Grease	TOC	Zinc	Copper	Nickel
NA mg/l	NA mg/l	NA mg/l	NA mg/l	NA mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Fluorescent Bulbs	100	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

level D

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. none

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

none

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	x
TCLP Volatiles:	x
TCLP Semi-Volatiles:	x
Reactivity:	x
Corrosivity:	x
Ignitability:	x

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory: Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

***Organics Subcategory*: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Saima Baig **Date:** 3/11/2009

Printed Name/Title: Saima Baig / Environmental Expert

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: [illegible]
Date: 3-11-09 ☑ Approved ☐ Rejected
Approval Number: HOU-3209

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$1.25 each for 4ft; $1.50 each for 5ft or greater, plus freight

2. Contamination Limit (maximum limit before surchages apply):

NA

3. Surcharge Pricing:

NA

4. Special Testing Requirements:

NA

5. Treatment and Handling Protocol:

RECYCLE with Universal Waste - COUNT THE LIGHTBULBS TO CONFIRM COUNT IS CORRECT ON BOL

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

NA

8. Management for Product Recovered/Recycled (if applicable)

NA

3210
Shawcor Pipe

EPAHO104001615

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/12/2009**

Dear **Rick Cheatheam**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3210

Expiration Date 3/12/2011

Generator: Shawcor Pipe Protection
Address: 4501 Knapp Road
Pearland, TX 77581

Waste Information

Name of Waste: Waste Filter Cake Solids
TCEQ Waste Code #: 00693912
Container Type:
Detailed Description of Process Generating Waste:
Filter cake solids from filter press of Non-hazardous waste water treatment process
Color: varies **Odor:** none **pH:** neutral
Physical State:
Incompatibilities: none known
Safety Related Data/Special Handling:
level D PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

CES Environmental Services, Inc.

15 DB/MM
Analytical for TCLP volatiles, semivolatiles, 11 metals, RCI

☒ **CES Environmental Services – Houston Facility**
4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

☒ **CES Environmental Services – Port Arthur Facility**
2420 S. Gulfway Drive, Port Arthur, TX 77641
Phone: (713) 676-1460 Fax: (713) 676-1676
U.S. EPA ID No: TXR000079307 ISWR No: 88585

SECTION 1: Material Producer Information

Company:	Shawcor Pipe Protection, LLC		
Address:	4501 Knapp Rd		
City, State, Zip:	Pearland, TX 77581		
Contact:	Rick Cheateam	**Title:**	HSE Supervisor
Phone No:	281-997-5608	**Fax No:**	281-412-5874
24/hr Phone:	713-992-8547		
U.S. EPA I.D. No:	TXT490013562		
State I.D.	32925	**SIC Code:**	na

SECTION 2: Billing Information – ☒ Same as Above

Company:			
Address:			
City, State, Zip:			
Contact:		**Title:**	
Phone No:		**Fax No:**	

SECTION 3: General Description of the Material / Product

Name of Material / Product: Waste Filter Cake Solids
Detailed Description of Process Generating or Producing the Material / Product: Filter cake solids from filterpress of non-hazardous waste water treatment process

Physical State: ☐ **Liquid** ☐ **Sludge** ☐ **Powder**
☒ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: Varies **Odor:** None

Specific Gravity (water=1): 1-2 **Density:** 9 lbs/gal

Does this material contain any total phenolic compounds? ☐ **Yes** ☒ **No**

Does this material contain any para substituted phenolic compounds? ☐ **Yes** ☒ **No**

Layers: ☒ **Single-phase** ☐ **Multi-phase**

Container Type:	☒ **Drum**	☐ **Tote**	☐ **Truck**	☐ **Other (explain)**
Container Size:	55 gal			

Frequency: ☐ **Weekly** ☐ **Monthly** ☒ **Quarterly** ☐ **Yearly**
Number of Units (containers): 1-90 **Other:** ____

00603912
Proper U.S. DOT Shipping Name: Non-RCRA, Non DOT Regulated Waste Filter Cake

Class: Na **UN/NA:** Na **PG:** Na **RQ:** Na

Flash Point Na	**pH** Na	**N/A**	**N/A**	**Solids** 100%
Oil&Grease 0mg/l	**TOC** Namg/l	**Zinc** Namg/l	**Copper** Namg/l	**Nickel** Namg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATION	Units
The material / product consists of the following materials	**Ranges are acceptable**	**or %**
Filter Cake Solids	100	%

SECTION 5: Safety Related Data

If the handling of this material / product requires the use of special protective equipment, please explain.
Level D PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.
Analysis

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
None

SECTION 8: Material Producer's Certification

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Richard A Cheatheam **Date:** 2/17/09

Printed Name/Title: RICHARD A CHEATHEAM, HSE SUPERVISOR

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Technical Manager: [signature]	
Date: 3-12-09 (Approved) Rejected	
Approval Number: HOU-3210	

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pricing (including freight):**

$30/dm, Trans $275/load

2. **Contamination Limits (maximum limit before surcharges apply):**

Non conforming to profile

3. **Surcharge Pricing:**

None

4. **Special Testing Requirements:**

None-Confirm the drums are compliant with profile

5. **Treatment and Handling Protocol:**

Class 2 Solids for Landfill

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

EPAHO104001619

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

7. **Tests for Product Recovered/Recycled (if applicable):**

None

8. **Management for Product Recovered/Recycled (if applicable):**

None

LABORATORY TEST RESULTS

Job ID : 09010152

Date 1/13/2009

Client Name: Shawcor Pipe Protection

Attn: Rick Cheatheam

Project Name: Waste Characterization -Paint Powder / Sludge / Filter

Client Sample ID: Acid W/W Filter Cake

Date Collected: 01/08/09

Time Collected: 12:30

Other Information:

Job Sample ID: 09010152.01

Sample Matrix Sludge

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 1010	Ignitability (Flash Point)								
	Ignitability	>150	°F	1				01/13/09 08:00	SG
SW-846 6010C	TCLP Metals								
	Antimony	BRL	mg/L	1	0.1	1		01/09/09 19:56	PGm
	Arsenic	BRL	mg/L	1	0.04	1.8		01/09/09 19:56	PGm
	Barium	BRL	mg/L	1	0.04	100.0		01/09/09 19:56	PGm
	Beryllium	BRL	mg/L	1	0.04	0.08		01/09/09 19:56	PGm
	Cadmium	BRL	mg/L	1	0.04	0.5		01/09/09 19:56	PGm
	Chromium	BRL	mg/L	1	0.04	5.0		01/09/09 19:56	PGm
	Lead	BRL	mg/L	1	0.04	1.5		01/09/09 19:56	PGm
	Nickel	0.117	mg/L	1	0.04	70		01/09/09 19:56	PGm
	Selenium	BRL	mg/L	1	0.1	1.0		01/09/09 19:56	PGm
	Silver	BRL	mg/L	1	0.04	5.0		01/09/09 19:56	PGm
SW-846 7.3	Reactive Cyanide								
	Reactive Cyanide	BRL	mg/Kg	1	25			01/13/09 09:30	KS
SW-846 7.3	Reactive Sulfide								
	Reactive Sulfide	BRL	mg/Kg	1	25			01/13/09 09:00	KS
SW-846 7470A	TCLP Metals, Mercury								
	Mercury	BRL	mg/L	1	0.0005	0.2		01/09/09 13:55	TK
SW-846 9045D	Corrosivity, pH								
	pH	7.17	s.u.					01/09/09 08:30	RK
TX 1005	Total Petroleum Hydrocarbons								
	C6-C12	BRL	mg/Kg	1	14.7			01/10/09 00:31	WS
	>C12-C28	49.6	mg/Kg	1	18.4			01/10/09 00:31	WS
	>C28-C35	41.5	mg/Kg	1	19.1			01/10/09 00:31	WS
	Total C6-C35	91.1	mg/Kg	1				01/10/09 00:31	WS
	1-Chlorooctane(surr)	109	%	1	50-149			01/10/09 00:31	WS
	Chlorooctadecane(surr)	126	%	1	50-149			01/10/09 00:31	WS

EPAHO104001621

QUALITY CONTROL CERTIFICATE

Job ID : 09010152 **Date :** 1/13/2009

Analysis : **TCLP Metals, Mercury** **Method :** **SW-846 7470A** **Reporting Units :** **mg/L**

QC Batch ID : Qb09010929 **Created Date :** 01/09/09 **Created By :** Tkhuc

Samples in This QC Batch : 09010152.01,02,03

Digestion :	PB09010924	**Prep Method :**	SW-846 7470A	**Prep Date :**	01/09/09 12:30	**Prep By :**	Tkhuc
TCLP Prep :	PB09010906	**Prep Method :**	SW-846 1311	**Prep Date :**	01/08/09 16:00	**Prep By :**	Ksudha

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Mercury	7439-97-6	BRL	mg/L	1	0.0005		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Mercury	0.005	0.0053	107	0.005	0.0057	113	6.2	35	71-143	

QC Type: MS and MSD
QC Sample ID: 09010117.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Mercury	BRL	0.005	0.0054	107	0.005	0.0053	105	1.9	35	61-175	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 09010152 **Date :** 1/13/2009

Analysis : **TCLP Metals** **Method :** **SW-846 6010C** **Reporting Units :** **mg/L**

QC Batch ID : Qb09010936 **Created Date :** 01/09/09 **Created By :** Pguirguis

Samples in This QC Batch : 09010152.01,02,03

Digestion :	PB09010925	**Prep Method :**	SW-846 3010A	**Prep Date :**	01/09/09 12:00	**Prep By :**	Pguirguis
TCLP Prep :	PB09010906	**Prep Method :**	SW-846 1311	**Prep Date :**	01/08/09 16:00	**Prep By :**	Ksudha

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Antimony	7440-36-0	BRL	mg/L	1	0.1		
Arsenic	7440-38-2	BRL	mg/L	1	0.04		
Barium	7440-39-3	BRL	mg/L	1	0.04		
Beryllium	7440-41-7	BRL	mg/L	1	0.04		
Cadmium	7440-43-9	BRL	mg/L	1	0.04		
Chromium	7440-47-3	BRL	mg/L	1	0.04		
Lead	7439-92-1	BRL	mg/L	1	0.04		
Nickel	7440-02-0	BRL	mg/L	1	0.04		
Selenium	7782-49-2	BRL	mg/L	1	0.1		
Silver	7440-22-4	BRL	mg/L	1	0.04		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Antimony	2	2.07	104	2	2.08	104	0.5	20	80-120	
Arsenic	2	2.16	108	2	2.16	108	0	20	80-120	
Barium	2	1.95	97.5	2	1.96	98	0.5	20	80-120	
Beryllium	2	1.96	98	2	1.98	99	1	20	80-120	
Cadmium	2	2.04	102	2	2.09	105	2.4	20	80-120	
Chromium	2	1.96	98	2	1.97	98.5	0.5	20	80-120	
Lead	2	2.04	102	2	2.05	103	0.5	20	80-120	
Nickel	2	1.98	99	2	1.99	99.5	0.5	20	80-120	
Selenium	2	2.09	105	2	2.08	104	0.5	20	80-120	
Silver	2	2.06	103	2	2.03	102	1.5	20	80-120	

QC Type: MS and MSD
QC Sample ID: 09010152.03

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Antimony	BRL	2	2.07	102						70-130	
Arsenic	BRL	2	2.15	108						45-138	
Barium	0.222	2	2.05	91.4						39-135	
Beryllium	BRL	2	1.95	97.5						70-130	
Cadmium	BRL	2	1.95	97.4						56-125	
Chromium	BRL	2	1.91	95.3						52-125	
Lead	BRL	2	1.92	96						55-125	

Refer to the Definition page for terms.

EPAHO104001623

QUALITY CONTROL CERTIFICATE

Job ID : 09010152 **Date :** 1/13/2009

Analysis : TCLP Metals **Method : SW-846 6010C** **Reporting Units : mg/L**

QC Batch ID : Qb09010936 **Created Date :** 01/09/09 **Created By :** Pguirguis

Samples in This QC Batch : 09010152.01,02,03

QC Type: MS and MSD
QC Sample ID: 09010152.03

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Nickel	BRL	2	1.88	93.8						70-130	
Selenium	BRL	2	2.07	103						18-137	
Silver	BRL	2	2.07	104						26-148	

Refer to the Definition page for terms.

EPAHO104001624

QUALITY CONTROL CERTIFICATE

Job ID : 09010152 **Date :** 1/13/2009

Analysis : **Total Petroleum Hydrocarbons** **Method :** **TX 1005** **Reporting Units :** **mg/Kg**

QC Batch ID : Qb09011220 **Created Date :** 01/12/09 **Created By :** Dshen

Samples in This QC Batch : 09010152.01,02,03

Sample Preparation : PB09011220 **Prep Method :** TX 1005 **Prep Date :** 01/09/09 15:40 **Prep By :** Dshen

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
C6-C12		BRL	mg/Kg	1	14.7		
>C12-C28		BRL	mg/Kg	1	18.4		
>C28-C35		BRL	mg/Kg	1	19.1		
Total C6-C35		BRL	mg/Kg	1			

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
C6-C12	500	560	112	500	583	117	4	20	75-125	
>C12-C28	500	619	124	500	619	124	0	20	75-125	
>C28-C35	500	495	99	500	501	100	1.2	20	75-125	

QC Type: MS and MSD
QC Sample ID: 09010199.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
C6-C12	BRL	500	580	115						75-125	
>C12-C28	BRL	500	624	123						75-125	
>C28-C35	BRL	500	521	104						75-125	

Refer to the Definition page for terms.

EPAHO104001625

QUALITY CONTROL CERTIFICATE

Job ID : 09010152 **Date :** 1/13/2009

Analysis : **Ignitability (Flash Point)** **Method :** **SW-846 1010** **Reporting Units :** **°F**

QC Batch ID : Qb09011306 **Created Date :** 01/13/09 **Created By :** Sgarcia

Samples in This QC Batch : 09010152.01,02,03

QC Type: Duplicate

QC Sample ID: 09010204.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit		Qual
Ignitability	>150	>150	°F		20		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Ignitability	83	85	102	83	86	104	1.2	20	75-125	

Refer to the Definition page for terms.

EPAHO104001626

QUALITY CONTROL CERTIFICATE

Job ID : 09010152 **Date :** 1/13/2009

Analysis : **Reactive Sulfide** **Method :** **SW-846 7.3** **Reporting Units :** **mg/Kg**

QC Batch ID : Qb09011316 **Created Date :** 01/13/09 **Created By :** Ksudha

Samples in This QC Batch : 09010152.01,02,03

Sample Preparation : PB09011310 **Prep Method :** SW-846 7.3 **Prep Date :** 01/12/09 14:00 **Prep By :** Ksudha

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Reactive Sulfide		BRL	mg/Kg	1	25		

QC Type: Duplicate

QC Sample ID: 09010126.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit		Qual
Reactive Sulfide	BRL	BRL	mg/Kg		20		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Reactive Sulfide	900	720	80	900	680	75.6	5.7	20	40-120	

Refer to the Definition page for terms.

EPAHO104001627

QUALITY CONTROL CERTIFICATE

Job ID : 09010152 **Date :** 1/13/2009

Analysis : **Reactive Cyanide** **Method :** **SW-846 7.3** **Reporting Units :** **mg/Kg**

QC Batch ID : Qb09011318 **Created Date :** 01/13/09 **Created By :** Ksudha

Samples in This QC Batch : 09010152.01,02,03

Sample Preparation : PB09011312 **Prep Method :** SW-846 7.3 **Prep Date :** 01/12/09 14:00 **Prep By :** Ksudha

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Reactive Cyanide		BRL	mg/Kg	1	25		

QC Type: Duplicate

QC Sample ID: 09010126.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit		Qual
Reactive Cyanide	BRL	BRL	mg/Kg		20		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Reactive Cyanide	5.0	2.12	42.4	5..0	2.20		3.7	20	40-120	

Refer to the Definition page for terms.

EPAHO104001628

A & B Labs *Chain of Custody*

The Chain of Custody is a Legal Document

Page _____ of _____

10100 East Fwy (I-10) Ste. 100
Houston, TX 77029
713-453-6060
1-877-478-6060 Toll Free
713-453-6091 Fax
ablabs.com

A&B JOB ID # 09010152

5. Project #

1. REPORT TO:
Company: SHAWCOR PIPE PROTECTION
Address: 1122 N. MAIN ST
PEARLAND, TX 77581
Contact: RICK CHEATHEAM
Phone: 281-485-8321
Fax: ☐
E-mail: ☐ rcheatheam@brederoshaw.shawcor.com

2. INVOICE TO:
Company: SAME
Address:
Contact:
Phone:
Fax: ☐
E-mail: ☐

3. PO # PL61-00131-09

4. Turnaround Time (Business Days)
☐ 1 Day* ☐ Other
☐ 2 Days*
☒ 3 Days* *Surcharge applies
☐ 7 Days - Standard

6. Project Name/Location
WASTE CHARACTERIZATION - PAINT POWDER/SLUDGE/FILTER

7. Reporting Requirement:
☐ TRRP Limits only ☐ TRRP Rpt. Package ☐ See Attached ☐ Standard Level II

8. Sampler's Name & Company (PLEASE PRINT): RICK CHEATHEAM/SHAWCOR PIPE PROTECTION
Sampler's Signature & Date: Rick Cheatheam 1/8/08

LAB USE ONLY	9. Sample ID and Description	10. Sampling Date	Time	11. Comp.	Grab	12. Matrix: Water	Soil	Sludge	Oil	Air	Other	13. No. of Containers	RCRA 11 (TCLP)	TPH	RCI	18. REMARKS
01A-B	ACID W/N FILTER CAKE	1/8/08	12:30	~~X~~	X			X				2				
02A-E	ACID W/N TANK SLUDGE	1/~~7~~8/08	8:30		X			X				5				
03A-C	PAINT POWDER RECLAIM	1/8/08	8:00		X						X	3				

14. Containers* P/O P/O P/O
15. Preservatives** N/A N/A N/A
16. PH-Lab Only
17. Analyses/Methods

19. RELINQUISHED BY	DATE	TIME
1 Rick Cheatheam	1/8/08	3:09
2 [signature]	1/9/08	15:40
3		

20. RECEIVED BY [signature] DATE 1/8/08 TIME 15:09

21. RECEIVED BY LABORATORY

22. KNOWN HAZARDS/COMMENTS

Temperature: 22.0 °C.

Intact: Y or N Initials [illegible]

A&B cannot accept verbal changes
Please FAX written changes to 713-453-6091

Samples will be disposed of after 30 days
A&B reserves the right to return samples

*Containers: VOA - 40 ml vial A/G - Amber/Glass 1 Liter
4 oz/8 oz - glass wide mouth P/O - Plastic/other _____

**Preservatives: C - Cool H - HCl N - HNO_3 S - H_2SO_4
OH - NaOH T - $Na_2S_2O_3$ X - Other _____

METHOD OF SHIPMENT

BILL OF LADING/TRACKING #

LAB USE ONLY SAMPLING _____ RENTAL _____ P/U _____

EPAHO104001629

Sample Condition Checklist

Date : **01/13/09**

A&B JobID :	**09010152**	Date Received :	**01/08/2009**	Time Received :	**3:09PM**
Client Name :	**Shawcor Pipe Protection**				
Temperature :	**22.0°C**	Sample pH :	**N/A**		

	Check Points	Yes	No
1.	**Cooler seal present and signed.**	N/A	
2.	**Sample(s) in a cooler.**	X	
3.	**If yes, ice in cooler.**		X
4.	**Sample(s) received with chain-of-custody.**	X	
5.	**C-O-C signed and dated.**	X	
6.	**Sample(s) received with signed sample custody seal.**	N/A	
7.	**Sample containers arrived intact. (If no comment).**	X	
8.	**Matrix :** Water ☐ Soil ☐ Liquid ☐ Sludge ☑ Solid ☐ Cassette ☐ Tube ☐ Bulk ☐ Badge ☐ Food ☐ Other ☑		
9.	**Sample(s) were received in appropriate container(s).**	X	
10.	**Sample(s) were received with proper preservative**		
11.	**All samples were logged or labeled.**	X	
12.	**Sample ID labels match C-O-C ID's**	X	
13.	**Bottle count on C-O-C matches bottles found.**	X	
14.	**Sample volume is sufficient for analyses requested.**	X	
15.	**Samples were received within the hold time.**	X	
16.	**VOA vials completely filled.**	N/A	
17.	**Sample accepted.**	X	

Comments : Include actions taken to resolve discrepancies/problem:

Other matrix=product. The analyses were listed but not marked for each sample. The samples were logged in for all listed analyses per phone conversation and requested pricing quote. 1/9/09 SGC

Received by : Dwright

Check in by/date : DWarner / 01/08/2009

3211
Port of Hou – Vernon Bailey

EPAHO104001631

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/12/2009**

Dear **Roxana Herrera**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3211

Expiration Date 3/12/2011

Generator: Port of Houston Authority - Vernon Bailey
Address: 1604 Clinton Dr.
Galena Park, TX 77029

Waste Information

Name of Waste: Diesel Water Mixture
TCEQ Waste Code #:
Container Type:
Detailed Description of Process Generating Waste:
Water mixed in with diesel in a fuel tank
Color: pink **Odor:** mild **pH:** 5-7
Physical State:
Incompatibilities: OXIDIZERS
Safety Related Data/Special Handling:
FLAMMABLE PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

CES Environmental Services, Inc.

4904 Griggs Road Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

GB
JR
Recycle
#3211

SECTION 1: Generator Information

Company : Port of Houston Authority - Vernon Bailey
Address : 1604 Clinton Dr. 1604 Clinton Dr.
City, State, Zip : Galena Park TX 77029
Contact : Ed Scott **Title :**
Phone No : (713) 471-9050 **Fax :**
24 / HR Phone :
U.S EPA I.D No :
State I.D : **SIC Code**

SECTION 2: Billing Information

Company : Port of Houston Authority
Address : P.O. Box 2562
City, State, Zip : Houston TX 77029-4327
Contact : Roxana Herrera **Title :**
Phone No : (713) 670-2814 **Fax :** (713) 670-2427

SECTION 3: General Description of the Waste

Name of Waste : Diesel water mixture

Detailed Description of the Process Generating Waste:

Water mixed in with diesel in a fuel tank

Physical State : ☑ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color : pink **Odor :** mild

Specific Gravity (Water=1) : .74-.8 **Density :** 6.1-6.6 lbs / gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834	2835	2836	2841	2842	2843	2844	2851
2861	2865	2869	2873	2874	2876	2879	2891	2892	2893	2896	2899	2911	3312	4953	4959	9511

Layers : ☐ Single-Phas ☑ Multi-Phase

Container Type : ☐ Drum ☐ Tote ☑ Truck ☐ Other (explain)

Container Size : 5000

Number Of Units : 1

Is this a USEPA "Hazardous Waste" per 40 CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", is it: ☐ D001 ☐ D002 ☐ D003

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristics for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code No : Recycle

Proper U.S. State Waste Code No : UN1993, Flammable Liquids, n.o.s. (diesel), 3, PG II

Class : 3 UN/NA : 1993 PG : II RQ : na

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
140-200	na	0 mg/l	0 mg/l	5 %
Oil and Grease	**TOC**	**Zinc**	**Copper**	**Nickel**
na mg/l	na mg/l	na mg/l	na mg/l	na mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	Concentration	Units
The material / product consists of the following materials	Ranges are acceptable	or %
diesel	5-95	%
water	5-95	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

std

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.

none

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):

oxidizers

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generators knowledge

TCLP Metals : x

TCLP Volatilies : x

TCLP Semi-Volatiles : x

Reactivity : x

Corrosivity : x

Ignitability : x

SECTION 9: Waste Receipt Classification Under 40 CFR 437

Is this material a wastewater or wastewater sludge ? ☐ YES ☑ NO

If 'YES', complete this section

PLEASE CHECK THE APPROPRIATE BOX: IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE

Matals Subcategory: ***Subpart A***

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phospha
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: ***Subpart B***

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation wastes
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory ***Subpart C***

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bering wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesive and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations

☐ Tank clean-out from organic, non-petroleum sources

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

☐ Metals Subcatego

☐ Oils Subcatego

☐ Organics Subcategory

SECTION 10: Additional Instruction

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data. I hereby cerity that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature : [signature] **Date :** 3/11/09 ~~7/23/2008~~

Printed Name / Title : R. Herrera /

CES USE ONLY (DO NOT WRITE IN THIS SPACE) **Process Facility Information :**

Compliance Officer : Prabhakar Thangudu

Date : 3-12-09 ~~7/23/2008~~ **Status :** Approved Rejected

Approval Number : ~~HOU 2001~~

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

Pay .30/gallon Diesel

2. Contamination Limit (maximum limit before surchages apply):

3. Surcharge Pricing:

surcharge for solids, TDS per std rate sheet

4. Special Testing Requirements:

check H_2O phase for PH, Tox, Phenols, solids

5. Treatment and Handling Protocol:

water to W/W TP. Top organic phase to black oil

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

3212
Trelleborg

EPAHO104001639

7E
8-4-09
T-35
LAB

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/13/2009**

Dear **Jamie Stieffel**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3212

Expiration Date 3/13/2011

Generator: Trelleborg CRP, Inc
Address: 1902 Rankin Rd
Houston, TX 77073

Waste Information

Name of Waste: Non-RCRA Waste Sludge
TCEQ Waste Code #: 15382051
Container Type:
Detailed Description of Process Generating Waste:
wastewater and sludge from a floor drain at a chemical storage (right drain only)
Color: vaires **Odor:** mild **pH:** 5-9
Physical State:
Incompatibilities: none
Safety Related Data/Special Handling:
level D

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

DB/MM

OSL

CES Environmental Services, Inc.

☐ **CES Environmental Services – Houston Facility**
4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

☒ **CES Environmental Services – Port Arthur Facility**
2420 S. Gulfway Drive, Port Arthur, TX 77641
Phone: (713) 676-1460 Fax: (713) 676-1676
U.S. EPA ID No: TXR000079307 ISWR No: 88585

SECTION 1: Material Producer Information

Company:	Trelleborg CRP, Inc.		
Address:	1902 Rankin Rd		
City, State, Zip:	Houston, TX 77073		
Contact:	Dennis Boone	**Title:**	
Phone No:	281-774-2653	**Fax No:**	281-774-2626
24/hr Phone:	281-774-2653		
U.S. EPA I.D. No:	TXD981909823		
State I.D.	74049	**SIC Code:**	

SECTION 2: Billing Information – ☐ Same as Above

Company:	Pollution Control Industries		
Address:	4343 Kennedy Ave		
City, State, Zip:	East Chicago, IN 46312		
Contact:	Drew Hurst	**Title:**	Account Manager
Phone No:	281-253-7396	**Fax No:**	

SECTION 3: General Description of the Material / Product

Name of Material / Product: Non-RCRA Waste Sludge
Detailed Description of Process Generating or Producing the Material / Product: Waste water and sludge from a floor drain at a around chemical storage (see analysis). Right Drain Only

Physical State: ☒ **Liquid** ☒ **Sludge** ☐ **Powder** ☐ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: Varies **Odor:** Mild

Specific Gravity (water=1): 1 **Density:** 8-8.5 lbs/gal

Does this material contain any total phenolic compounds? ☐ **Yes** ☒ **No**

Does this material contain any para substituted phenolic compounds? ☐ **Yes** ☒ **No**

Layers: ☒ **Single-phase** ☐ **Multi-phase**

Container Type: ☐ **Drum** ☐ **Tote** ☒ **Truck** ☐ **Other (explain)**
Container Size: ____ ____ 1000 ____

Frequency: ☐ **Weekly** ☒ **Monthly** ☐ **Quarterly** ☐ **Yearly**
Number of Units (containers): 1 **Other:** ____

15382051

Proper U.S. DOT Shipping Name: Non RCRA, Non DOT Regulated Waste Sludge

Class: Na **UN/NA:** Na **PG:** Na **RQ:** Na

Flash Point	pH	N/A	N/A	Solids
>200	5-9			5-35%

Oil&Grease	TOC	Zinc	Copper	Nickel
Nmg/l	Testmg/l	Testmg/l	Testmg/l	Testmg/l

SECTION 4: Physical and Chemical Data

[redacted]	[redacted]	[redacted]
The material / product consists of the following materials	Ranges are acceptable	or %
Water	62-94	%
Mud Dirt, Dust, Trash, Floor Debris etc.	5-35	%
Misc. Non-Hazardous Chemicals	1-3	%

SECTION 5: Safety Related Data

If the handling of this material / product requires the use of special protective equipment, please explain.
Level D PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.
TCLP Analysis

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
None

SECTION 8: Material Producer's Certification

The information contained herein is based on ☐ generator knowledge and/or ☒ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Dennis K. Boone Date: March 2, 2009

Printed Name/Title: DENNIS K. BOONE - HSE MANAGER

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Technical Manager: _____	
Date: _____ Approved Rejected	
Approval Number: _____	

03/06/2009 16:44 2817742626 KAN FAX2

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pricing (including freight):**

.40/gal disposal, Trans (Air Machine) @ $110/hr-4 hr min, Field Service Tech @ $30/hr, FSC (Current 2/09 is 10.5%) Compliance Fee (1% of invoice) Energy fee (.6% as of 2/09)

2. **Contamination Limits (maximum limit before surcharges apply):**

PH <2 or >12.5
Phenol over discharge perameters

3. **Surcharge Pricing:**

None-Call Sales rep Dan Bowman 713-854-6150

4. **Special Testing Requirements:**

5. **Treatment and Handling Protocol:**

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

EPAHO104001644

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

7. **Tests for Product Recovered/Recycled (if applicable):**

8. **Management for Product Recovered/Recycled (if applicable);**

Client: Trelleborg CRP Inc

Job Number: 600-6486-1

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
2-Fluorophenol	31	34	21 - 100
2-Fluorobiphenyl	93	91	43 - 116
2,4,6-Tribromophenol	76	75	10 - 123
Terphenyl-d14	103	56	33 - 141

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Trelleborg CRP Inc

Job Number: 600-6486-1

Method Blank - Batch: 600-9601

Method: 8082
Preparation: 3510C

Lab Sample ID: MB 600-9601/1-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 01/31/2009 2226
Date Prepared: 01/29/2009 1641

Analysis Batch: 600-9732
Prep Batch: 600-9601
Units: ug/L

Instrument ID: ECD-04
Lab File ID: A013009_036.d
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 10 mL
Injection Volume: 1.0 uL
Column ID: PRIMARY

Analyte	Result	Qual	RL
PCB-1016	ND		0.50
PCB-1221	ND		0.50
PCB-1232	ND		0.50
PCB-1242	ND		0.50
PCB-1248	ND		0.50
PCB-1254	ND		0.50
PCB-1260	ND		0.50
Polychlorinated biphenyls, Total	ND		0.50

Surrogate	% Rec	Acceptance Limits
Tetrachloro-m-xylene	89	48 - 141
DCB Decachlorobiphenyl	88	36 - 123

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Trelleborg CRP Inc

Job Number: 600-6486-1

Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 600-9601

Method: 8082
Preparation: 3510C

LCS Lab Sample ID:	LCS 600-9601/4-A	Analysis Batch: 600-9732	Instrument ID: ECD-04
Client Matrix:	Water	Prep Batch: 600-9601	Lab File ID: B013009_037.d
Dilution:	1.0	Units: ug/L	Initial Weight/Volume: 1000 mL
Date Analyzed:	01/31/2009 2251		Final Weight/Volume: 10 mL
Date Prepared:	01/29/2009 1641		Injection Volume: 1.0 uL
			Column ID: PRIMARY

LCSD Lab Sample ID:	LCSD 600-9601/5-A	Analysis Batch: 600-9732	Instrument ID: ECD-04
Client Matrix:	Water	Prep Batch: 600-9601	Lab File ID: B013009_038.d
Dilution:	1.0	Units: ug/L	Initial Weight/Volume: 1000 mL
Date Analyzed:	01/31/2009 2315		Final Weight/Volume: 10 mL
Date Prepared:	01/29/2009 1641		Injection Volume: 1.0 uL
			Column ID: PRIMARY

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
PCB-1016	93	98	53 - 119	5	20		
PCB-1260	97	98	22 - 144	1	20		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
Tetrachloro-m-xylene	82	85	48 - 141
DCB Decachlorobiphenyl	78	72	36 - 123

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Trelleborg CRP Inc

Job Number: 600-6486-1

Method Blank - Batch: 600-9409

Method: TX 1005
Preparation: TX_1005_W_Prep

Lab Sample ID:	MB 600-9409/1-A	Analysis Batch:	600-9477	Instrument ID:	FID-07
Client Matrix:	Water	Prep Batch:	600-9409	Lab File ID:	A012709_005.d
Dilution:	1.0	Units:	mg/L	Initial Weight/Volume:	30.00 mL
Date Analyzed:	01/27/2009 1210			Final Weight/Volume:	3.00 mL
Date Prepared:	01/27/2009 0854			Injection Volume:	2 uL

Analyte	Result	Qual	RL
C6-C12	ND		5.0
>C12-C28	ND		5.0
>C28-C35	ND		5.0
C6-C35	ND		5.0

Surrogate	% Rec	Acceptance Limits
o-Terphenyl	112	70 - 130

Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 600-9409

Method: TX 1005
Preparation: TX_1005_W_Prep

LCS Lab Sample ID:	LCS 600-9409/2-A	Analysis Batch:	600-9477	Instrument ID:	FID-07
Client Matrix:	Water	Prep Batch:	600-9409	Lab File ID:	A012709_006.d
Dilution:	1.0	Units:	mg/L	Initial Weight/Volume:	30.00 mL
Date Analyzed:	01/27/2009 1245			Final Weight/Volume:	3.00 mL
Date Prepared:	01/27/2009 0854			Injection Volume:	2 uL

LCSD Lab Sample ID:	LCSD 600-9409/3-A	Analysis Batch:	600-9477	Instrument ID:	FID-07
Client Matrix:	Water	Prep Batch:	600-9409	Lab File ID:	A012709_007.d
Dilution:	1.0	Units:	mg/L	Initial Weight/Volume:	30.00 mL
Date Analyzed:	01/27/2009 1320			Final Weight/Volume:	3.00 mL
Date Prepared:	01/27/2009 0854			Injection Volume:	2 uL

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
C6-C12	109	103	75 - 125	5	20		
>C12-C28	113	108	75 - 125	4	20		
C6-C35	111	106	75 - 125	5	20		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
o-Terphenyl	116	112	70 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Trelleborg CRP Inc

Job Number: 600-6486-1

Method Blank - Batch: 600-9748

Method: 6010B
Preparation: 3010A

Lab Sample ID: MB 600-9748/1-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 02/03/2009 1045
Date Prepared: 02/02/2009 1625

Analysis Batch: 600-9769
Prep Batch: 600-9748
Units: mg/L

Instrument ID: TJA ICP 61E
Lab File ID: J020309
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL
Ag	ND		0.010
As	ND		0.020
Ba	ND		0.020
Be	ND		0.0050
Cd	ND		0.0050
Cr	ND		0.010
Ni	ND		0.010
Pb	ND		0.010
Sb	ND		0.050
Se	ND		0.040

Lab Control Spike - Batch: 600-9748

Method: 6010B
Preparation: 3010A

Lab Sample ID: LCS 600-9748/2-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 02/03/2009 1049
Date Prepared: 02/02/2009 1625

Analysis Batch: 600-9769
Prep Batch: 600-9748
Units: mg/L

Instrument ID: TJA ICP 61E
Lab File ID: J020309
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Ag	0.500	0.489	98	80 - 120	
As	1.00	1.00	100	80 - 120	
Ba	1.00	1.03	103	80 - 120	
Be	0.500	0.491	98	80 - 120	
Cd	0.500	0.493	99	80 - 120	
Cr	1.00	0.965	96	80 - 120	
Ni	1.00	0.983	98	80 - 120	
Pb	1.00	0.993	99	80 - 120	
Sb	1.00	1.00	100	80 - 120	
Se	1.00	1.01	101	80 - 120	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Trelleborg CRP Inc

Job Number: 600-6486-1

Method Blank - Batch: 600-9410

Method: 7470A
Preparation: 7470A

Lab Sample ID: MB 600-9410/7-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 01/27/2009 1343
Date Prepared: 01/27/2009 1010

Analysis Batch: 600-9444
Prep Batch: 600-9410
Units: ug/L

Instrument ID: Perkin Elmer FIMS-100
Lab File ID: N/A
Initial Weight/Volume: 40 mL
Final Weight/Volume: 40 mL

Analyte	Result	Qual	RL
Mercury	ND		0.20

TCLP SPLPE Leachate Blank - Batch: 600-9410

Method: 7470A
Preparation: 7470A

Lab Sample ID: LB 600-9402/1-B
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 01/27/2009 1356
Date Prepared: 01/27/2009 1010
Date Leached: 01/26/2009 1420

Analysis Batch: 600-9444
Prep Batch: 600-9410
Units: ug/L
Leachate Batch: 600-9402

Instrument ID: Perkin Elmer FIMS-100
Lab File ID: N/A
Initial Weight/Volume: 40 mL
Final Weight/Volume: 40 mL

Analyte	Result	Qual	RL
Mercury	ND		0.20

Lab Control Spike - Batch: 600-9410

Method: 7470A
Preparation: 7470A

Lab Sample ID: LCS 600-9410/8-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 01/27/2009 1345
Date Prepared: 01/27/2009 1010

Analysis Batch: 600-9444
Prep Batch: 600-9410
Units: ug/L

Instrument ID: Perkin Elmer FIMS-100
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	3.00	2.94	98	80 - 120	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Trelleborg CRP Inc

Job Number: 600-6486-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 600-9410

Method: 7470A
Preparation: 7470A

MS Lab Sample ID:	600-6486-1	Analysis Batch: 600-9444	Instrument ID: Perkin Elmer FIMS-100
Client Matrix:	Water	Prep Batch: 600-9410	Lab File ID: N/A
Dilution:	1.0		Initial Weight/Volume: 40 mL
Date Analyzed:	01/27/2009 1350		Final Weight/Volume: 40 mL
Date Prepared:	01/27/2009 1010		

MSD Lab Sample ID:	600-6486-1	Analysis Batch: 600-9444	Instrument ID: Perkin Elmer FIMS-100
Client Matrix:	Water	Prep Batch: 600-9410	Lab File ID: N/A
Dilution:	1.0		Initial Weight/Volume: 40 mL
Date Analyzed:	01/27/2009 1352		Final Weight/Volume: 40 mL
Date Prepared:	01/27/2009 1010		

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Mercury	20	45	75 - 125	77	20	F	F

Duplicate - Batch: 600-9410

Method: 7470A
Preparation: 7470A

Lab Sample ID:	600-6486-1	Analysis Batch: 600-9444	Instrument ID: Perkin Elmer FIMS-100
Client Matrix:	Water	Prep Batch: 600-9410	Lab File ID: N/A
Dilution:	1.0	Units: ug/L	Initial Weight/Volume: 40 mL
Date Analyzed:	01/27/2009 1348		Final Weight/Volume: 40 mL
Date Prepared:	01/27/2009 1010		

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Mercury	ND	ND	NC	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

10. SAMPLES

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

Loc: 600
6486
#1
600-6486-A-1

TestAmerica

Client Information	Sampler:	Lab PM: Allen, Jodi L	Carrier:
Client Contact: Mr. Lee Gunter	Phone:	E-Mail: jodi.allen@testamericainc.com	
Company: Trelleborg CRP Inc			
Address: 1902 Rankin Road	Due Date Requested:		
City: Houston	TAT Requested (days): 10 DAYS		
State, Zip: TX, 77073			
Phone: 281-774-2600 Ext 268	PO #: Purchase Order Requested 37691		
Email: lee.gunter@trelleborg.com	WO #:		
Project Name:	Project #: 60000613		
Site:	SSOW#:		

COC No: 600-1906.1
Page: Page 1 of 1
Job #:

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B - RCRA 11 List	TX_1005 - TPH	8260B - VOC TCL List	8082 -PCB's	8270C - SVOC TCL LIST	7470 - Mercury								Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	D	A	A	N	N	D								X	
Left Chemical Drain	1-26-09	9:30am		Water	N	N	X	X	X	X	X	X									

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:		Method of Shipment:	
Relinquished by: Lee Gunter	Date/Time: 1-26-09 9:20am	Company: Trelleborg	Received by:	Date/Time: 01/26/9 2:00	Company: TA
Relinquished by:	Date/Time: 01/26/9 14:42	Company: TA	Received by:	Date/Time: 1-26-09 14:42	Company: TA
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks:

EPAHO104001653

Login Sample Receipt Check List

Client: Trelleborg CRP Inc

Job Number: 600-6486-1

Login Number: 6486
Creator: Trenery, Michael J
List Number: 1

List Source: TestAmerica Houston

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

DATA REPORTING QUALIFIERS

Client: Trelleborg CRP Inc

Job Number: 600-6486-1

Lab Section	Qualifier	Description
GC/MS VOA		
	E	Result exceeded calibration range, secondary dilution required.
GC/MS Semi VOA		
	*	LCS or LCSD exceeds the control limits
	*	RPD of the LCS and LCSD exceeds the control limits
	X	Surrogate exceeds the control limits
GC Semi VOA		
	X	Surrogate exceeds the control limits
Metals		
	F	MS or MSD exceeds the control limits
	F	RPD of the MS and MSD exceeds the control limits

METHOD SUMMARY

Client: Trelleborg CRP Inc

Job Number: 600-6486-1

Description	Lab Location	Method	Preparation Method
Matrix Water			
Volatile Organic Compounds (GC/MS)	TAL HOU	SW846 8260B	
Purge and Trap	TAL HOU		SW846 5030B
Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	TAL HOU	SW846 8270C	
Liquid-Liquid Extraction (Separatory Funnel)	TAL HOU		SW846 3510C
Polychlorinated Biphenyls (PCBs) by Gas Chromatography	TAL HOU	SW846 8082	
Liquid-Liquid Extraction (Separatory Funnel)	TAL HOU		SW846 3510C
Texas - Total Petroleum Hydrocarbon (GC)	TAL HOU	TCEQ TX 1005	
Extraction - Texas Total petroleum Hyrdocarbons	TAL HOU		TCEQ TX_1005_W_Prep
Metals (ICP)	TAL HOU	SW846 6010B	
Preparation, Total Metals	TAL HOU		SW846 3010A
Mercury (CVAA)	TAL HOU	SW846 7470A	
Preparation, Mercury	TAL HOU		SW846 7470A

Lab References:

TAL HOU = TestAmerica Houston

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TCEQ = Texas Commission of Environmental Quality

Comments
No additional comments.

Receipt
All samples were received in good condition within temperature requirements.

GC/MS VOA
No analytical or quality issues were noted.

GC/MS Semi VOA
Method(s) 8270C: A full list spike was utilized for this method. Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for 5 analytes to recover outside criteria for this method when a full list spike is utilized. The LCSD associated with batch 9452 had 4 analytes outside control limits; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

Method(s) 8270C: The %RPD of the laboratory control standard (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 9452 exceeded control limits for the following analytes: 3-Nitroaniline, 4-Chloroaniline, 4-Nitroaniline, Benzidine, Benzo[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Bis(2-ethylhexyl) phthalate, Chrysene,Dibenz(a,h)anthracene, Di-n-octyl phthalate, Indeno[1,2,3-cd]pyrene.

Method(s) 8270C: Surrogate recovery for the following sample was outside control limits: LEFT CHEMICAL DRAIN (600-6486-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No other analytical or quality issues were noted.

GC Semi VOA
Method(s) 8082: Surrogate recovery for the following sample was outside control limits: LEFT CHEMICAL DRAIN (600-6486-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) TX 1005: Due to the level of dilution required for the following sample, surrogate recoveries are not reported: LEFT CHEMICAL DRAIN (600-6486-1).

No other analytical or quality issues were noted.

Metals
No analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

EPAHO104001657

EXECUTIVE SUMMARY - Detections

Client: Trelleborg CRP Inc

Job Number: 600-6486-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
600-6486-1	LEFT CHEMICAL DRAIN					
Acetone		24000000	E	1000000	ug/L	8260B
2-Butanone (MEK)		650000		100000	ug/L	8260B
Toluene		46000		10000	ug/L	8260B
>C12-C28		3300		570	mg/L	TX 1005
>C28-C35		2800		570	mg/L	TX 1005
C6-C35		6500		570	mg/L	TX 1005
As		0.042		0.020	mg/L	6010B
Ba		0.021		0.020	mg/L	6010B
Cr		0.013		0.010	mg/L	6010B
Ni		0.013		0.010	mg/L	6010B

METHOD / ANALYST SUMMARY

Client: Trelleborg CRP Inc

Job Number: 600-6486-1

Method	Analyst	Analyst ID
SW846 8260B	Liu, Zaifang	ZFL
SW846 8270C	Sundquist, Trevor W	TWS
SW846 8082	Patel, Kanisha	KP
TCEQ TX 1005	Maina, Grace W	GWM
SW846 6010B	Patel, Silen R	SRP
SW846 7470A	Lige, Derrick C	DCL

SAMPLE SUMMARY

Client: Trelleborg CRP Inc

Job Number: 600-6486-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
600-6486-1	LEFT CHEMICAL DRAIN	Water	01/26/2009 0920	01/26/2009 1442

QUALITY CONTROL RESULTS

Client: Trelleborg CRP Inc

Job Number: 600-6486-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:600-9497					
LCS 600-9497/1	Lab Control Spike	T	Water	8260B	
MB 600-9497/4	Method Blank	T	Water	8260B	
600-6486-1	LEFT CHEMICAL DRAIN	T	Water	8260B	
Analysis Batch:600-9562					
LCS 600-9562/1	Lab Control Spike	T	Water	8260B	
MB 600-9562/3	Method Blank	T	Water	8260B	
600-6486-1DL	LEFT CHEMICAL DRAIN	T	Water	8260B	
600-6486-1DL2	LEFT CHEMICAL DRAIN	T	Water	8260B	
600-6486-1DL3	LEFT CHEMICAL DRAIN	T	Water	8260B	

Report Basis
T = Total

GC/MS Semi VOA					
Prep Batch: 600-9452					
LCS 600-9452/2-A	Lab Control Spike	T	Water	3510C	
LCSD 600-9452/3-A	Lab Control Spike Duplicate	T	Water	3510C	
MB 600-9452/1-A	Method Blank	T	Water	3510C	
600-6486-1	LEFT CHEMICAL DRAIN	T	Water	3510C	
Analysis Batch:600-9569					
LCS 600-9452/2-A	Lab Control Spike	T	Water	8270C	600-9452
LCSD 600-9452/3-A	Lab Control Spike Duplicate	T	Water	8270C	600-9452
MB 600-9452/1-A	Method Blank	T	Water	8270C	600-9452
Analysis Batch:600-9609					
600-6486-1	LEFT CHEMICAL DRAIN	T	Water	8270C	600-9452

Report Basis
T = Total

Client: Trelleborg CRP Inc

Job Number: 600-6486-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 600-9409					
LCS 600-9409/2-A	Lab Control Spike	T	Water	TX_1005_W_Pre	
LCSD 600-9409/3-A	Lab Control Spike Duplicate	T	Water	TX_1005_W_Pre	
MB 600-9409/1-A	Method Blank	T	Water	TX_1005_W_Pre	
600-6486-1	LEFT CHEMICAL DRAIN	T	Water	TX_1005_W_Pre	
Analysis Batch:600-9477					
LCS 600-9409/2-A	Lab Control Spike	T	Water	TX 1005	600-9409
LCSD 600-9409/3-A	Lab Control Spike Duplicate	T	Water	TX 1005	600-9409
MB 600-9409/1-A	Method Blank	T	Water	TX 1005	600-9409
600-6486-1	LEFT CHEMICAL DRAIN	T	Water	TX 1005	600-9409
Prep Batch: 600-9601					
LCS 600-9601/4-A	Lab Control Spike	T	Water	3510C	
LCSD 600-9601/5-A	Lab Control Spike Duplicate	T	Water	3510C	
MB 600-9601/1-A	Method Blank	T	Water	3510C	
600-6486-1	LEFT CHEMICAL DRAIN	T	Water	3510C	
Analysis Batch:600-9732					
LCS 600-9601/4-A	Lab Control Spike	T	Water	8082	600-9601
LCSD 600-9601/5-A	Lab Control Spike Duplicate	T	Water	8082	600-9601
MB 600-9601/1-A	Method Blank	T	Water	8082	600-9601
600-6486-1	LEFT CHEMICAL DRAIN	T	Water	8082	600-9601

Report Basis
T = Total

Client: Trelleborg CRP Inc

Job Number: 600-6486-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 600-9402					
LB 600-9402/1-B	TCLP SPLPE Leachate Blank	T	Water		
Prep Batch: 600-9410					
LCS 600-9410/8-A	Lab Control Spike	T	Water	7470A	
MB 600-9410/7-A	Method Blank	T	Water	7470A	
LB 600-9402/1-B	TCLP SPLPE Leachate Blank	T	Water	7470A	600-9402
600-6486-1	LEFT CHEMICAL DRAIN	T	Water	7470A	
600-6486-1DU	Duplicate	T	Water	7470A	
600-6486-1MS	Matrix Spike	T	Water	7470A	
600-6486-1MSD	Matrix Spike Duplicate	T	Water	7470A	
Analysis Batch:600-9444					
LCS 600-9410/8-A	Lab Control Spike	T	Water	7470A	600-9410
MB 600-9410/7-A	Method Blank	T	Water	7470A	600-9410
LB 600-9402/1-B	TCLP SPLPE Leachate Blank	T	Water	7470A	600-9410
600-6486-1	LEFT CHEMICAL DRAIN	T	Water	7470A	600-9410
600-6486-1DU	Duplicate	T	Water	7470A	600-9410
600-6486-1MS	Matrix Spike	T	Water	7470A	600-9410
600-6486-1MSD	Matrix Spike Duplicate	T	Water	7470A	600-9410
Prep Batch: 600-9748					
LCS 600-9748/2-A	Lab Control Spike	T	Water	3010A	
MB 600-9748/1-A	Method Blank	T	Water	3010A	
600-6486-1	LEFT CHEMICAL DRAIN	T	Water	3010A	
Analysis Batch:600-9769					
LCS 600-9748/2-A	Lab Control Spike	T	Water	6010B	600-9748
MB 600-9748/1-A	Method Blank	T	Water	6010B	600-9748
600-6486-1	LEFT CHEMICAL DRAIN	T	Water	6010B	600-9748

Report Basis
T = Total

Client: Trelleborg CRP Inc

Job Number: 600-6486-1

Surrogate Recovery Report

8260B Volatile Organic Compounds (GC/MS)

Client Matrix: Water

Lab Sample ID	Client Sample ID	TOL %Rec	DBFM %Rec	BFB %Rec	12DCE %Rec
600-6486-1	LEFT CHEMICAL DRAIN	101	94	104	81
600-6486-1 DL	LEFT CHEMICAL DRAIN DL	108	107	110	103
600-6486-1 DL2	LEFT CHEMICAL DRAIN DL2	110	102	114	98
600-6486-1 DL3	LEFT CHEMICAL DRAIN DL3	111	102	117	104
MB 600-9497/4		104	99	103	86
MB 600-9562/3		110	106	108	102
LCS 600-9497/1		103	102	102	97
LCS 600-9562/1		95	92	93	92

Surrogate	Acceptance Limits
TOL = Toluene-d8 (Surr)	70-130
DBFM = Dibromofluoromethane	70-130
BFB = 4-Bromofluorobenzene	70-130
12DCE = 1,2-Dichloroethane-d4 (Surr)	70-130

Client: Trelleborg CRP Inc

Job Number: 600-6486-1

Surrogate Recovery Report

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Client Matrix: Water

Lab Sample ID	Client Sample ID	PHL %Rec	NBZ %Rec	2FP %Rec	FBP %Rec	TBP %Rec	TPH %Rec
600-6486-1	LEFT CHEMICAL DRAIN	0X	69	0X	77	0X	0X
MB 600-9452/1-A		25	94	40	98	86	68
LCS 600-9452/2-A		23	88	31	93	76	103
LCSD 600-9452/3-A		23	87	34	91	75	56

Surrogate	Acceptance Limits
PHL = Phenol-d6	10-94
NBZ = Nitrobenzene-d5	35-114
2FP = 2-Fluorophenol	21-100
FBP = 2-Fluorobiphenyl	43-116
TBP = 2,4,6-Tribromophenol	10-123
TPH = Terphenyl-d14	33-141

Client: Trelleborg CRP Inc

Job Number: 600-6486-1

Surrogate Recovery Report

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Matrix: Water

Lab Sample ID	Client Sample ID	TCX1 %Rec	DCB1 %Rec
600-6486-1	LEFT CHEMICAL DRAIN	6600X	2700X
MB 600-9601/1-A		89	88
LCS 600-9601/4-A		82	78
LCSD 600-9601/5-A		85	72

Surrogate	Acceptance Limits
TCX = Tetrachloro-m-xylene	48-141
DCB = DCB Decachlorobiphenyl	36-123

Client: Trelleborg CRP Inc

Job Number: 600-6486-1

Surrogate Recovery Report

TX 1005 Texas - Total Petroleum Hydrocarbon (GC)

Client Matrix: Water

Lab Sample ID	Client Sample ID	OTPH %Rec
600-6486-1	LEFT CHEMICAL DRAIN	0X
MB 600-9409/1-A		112
LCS 600-9409/2-A		116
LCSD 600-9409/3-A		112

Surrogate	Acceptance Limits
OTPH = o-Terphenyl	70-130

Client: Trelleborg CRP Inc

Job Number: 600-6486-1

Method Blank - Batch: 600-9497

Method: 8260B
Preparation: 5030B

Lab Sample ID:	MB 600-9497/4	Analysis Batch:	600-9497	Instrument ID:	VOA-III
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	X02705.D
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	5 mL
Date Analyzed:	01/27/2009 1347			Final Weight/Volume:	5 mL
Date Prepared:	01/27/2009 1347				

Analyte	Result	Qual	RL
Acetone	ND		10
Benzene	ND		5.0
Chlorobromomethane	ND		5.0
Bromoform	ND		5.0
Bromomethane	ND		10
2-Butanone (MEK)	ND		10
Carbon disulfide	ND		5.0
Carbon tetrachloride	ND		5.0
Dibromochloromethane	ND		5.0
Chlorobenzene	ND		5.0
Chloroethane	ND		10
Chloroform	ND		5.0
Chloromethane	ND		10
1,1-Dichloroethane	ND		5.0
1,2-Dichloroethane	ND		5.0
1,1-Dichloroethene	ND		5.0
cis-1,2-Dichloroethene	ND		5.0
trans-1,2-Dichloroethene	ND		5.0
1,2-Dichloropropane	ND		5.0
cis-1,3-Dichloropropene	ND		5.0
trans-1,3-Dichloropropene	ND		5.0
Ethylbenzene	ND		5.0
2-Hexanone	ND		10
Methylene Chloride	ND		10
4-Methyl-2-pentanone (MIBK)	ND		10
Styrene	ND		5.0
1,1,2,2-Tetrachloroethane	ND		5.0
Tetrachloroethene	ND		5.0
Toluene	ND		5.0
1,1,1-Trichloroethane	ND		5.0
1,1,2-Trichloroethane	ND		5.0
Trichloroethene	ND		5.0
Vinyl chloride	ND		5.0
o-Xylene	ND		5.0
m-Xylene & p-Xylene	ND		10
Xylenes, Total	ND		5.0

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	104	70 - 130
Dibromofluoromethane	99	70 - 130
4-Bromofluorobenzene	103	70 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Trelleborg CRP Inc

Job Number: 600-6486-1

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	86	70 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Trelleborg CRP Inc

Job Number: 600-6486-1

Lab Control Spike - Batch: 600-9497

Method: 8260B
Preparation: 5030B

Lab Sample ID: LCS 600-9497/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 01/27/2009 1206
Date Prepared: 01/27/2009 1206

Analysis Batch: 600-9497
Prep Batch: N/A
Units: ug/L

Instrument ID: VOA-III
Lab File ID: X02702.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acetone	100	75.2	75	38 - 154	
Benzene	50.0	47.6	95	69 - 124	
Bromoform	50.0	50.2	100	49 - 143	
Bromomethane	50.0	42.4	85	44 - 144	
2-Butanone (MEK)	100	87.5	87	53 - 140	
Carbon disulfide	50.0	38.2	76	47 - 139	
Carbon tetrachloride	50.0	50.0	100	57 - 134	
Dibromochloromethane	50.0	50.8	102	67 - 131	
Chlorobenzene	50.0	50.9	102	70 - 129	
Chloroethane	50.0	40.1	80	53 - 136	
Chloroform	50.0	50.7	101	69 - 128	
Chloromethane	50.0	41.4	83	23 - 162	
1,1-Dichloroethane	50.0	47.2	94	66 - 126	
1,2-Dichloroethane	50.0	47.1	94	65 - 134	
1,1-Dichloroethene	50.0	42.3	85	45 - 136	
cis-1,2-Dichloroethene	50.0	45.3	91	69 - 127	
trans-1,2-Dichloroethene	50.0	45.8	92	65 - 128	
1,2-Dichloropropane	50.0	48.4	97	72 - 125	
cis-1,3-Dichloropropene	50.0	48.4	97	67 - 135	
trans-1,3-Dichloropropene	50.0	54.2	108	66 - 147	
Ethylbenzene	50.0	50.2	100	69 - 128	
2-Hexanone	100	90.6	91	50 - 141	
Methylene Chloride	50.0	41.0	82	62 - 131	
4-Methyl-2-pentanone (MIBK)	100	95.0	95	56 - 145	
Styrene	50.0	50.0	100	68 - 133	
1,1,2,2-Tetrachloroethane	50.0	50.9	102	70 - 130	
Tetrachloroethene	50.0	52.5	105	59 - 134	
Toluene	50.0	49.6	99	70 - 126	
1,1,1-Trichloroethane	50.0	50.5	101	62 - 132	
1,1,2-Trichloroethane	50.0	49.9	100	70 - 130	
Trichloroethene	50.0	50.7	101	68 - 130	
Vinyl chloride	50.0	42.1	84	38 - 153	
o-Xylene	50.0	51.7	103	68 - 134	
m-Xylene & p-Xylene	100	103	103	67 - 132	

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	103	70 - 130
Dibromofluoromethane	102	70 - 130
4-Bromofluorobenzene	102	70 - 130
1,2-Dichloroethane-d4 (Surr)	97	70 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Trelleborg CRP Inc

Job Number: 600-6486-1

Method Blank - Batch: 600-9562

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 600-9562/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 01/28/2009 1311
Date Prepared: 01/28/2009 1311

Analysis Batch: 600-9562
Prep Batch: N/A
Units: ug/L

Instrument ID: VOA-V
Lab File ID: H02805.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result	Qual	RL
Acetone	ND		10
Benzene	ND		5.0
Chlorobromomethane	ND		5.0
Bromoform	ND		5.0
Bromomethane	ND		10
2-Butanone (MEK)	ND		10
Carbon disulfide	ND		5.0
Carbon tetrachloride	ND		5.0
Dibromochloromethane	ND		5.0
Chlorobenzene	ND		5.0
Chloroethane	ND		10
Chloroform	ND		5.0
Chloromethane	ND		10
1,1-Dichloroethane	ND		5.0
1,2-Dichloroethane	ND		5.0
1,1-Dichloroethene	ND		5.0
cis-1,2-Dichloroethene	ND		5.0
trans-1,2-Dichloroethene	ND		5.0
1,2-Dichloropropane	ND		5.0
cis-1,3-Dichloropropene	ND		5.0
trans-1,3-Dichloropropene	ND		5.0
Ethylbenzene	ND		5.0
2-Hexanone	ND		10
Methylene Chloride	ND		10
4-Methyl-2-pentanone (MIBK)	ND		10
Styrene	ND		5.0
1,1,2,2-Tetrachloroethane	ND		5.0
Tetrachloroethene	ND		5.0
Toluene	ND		5.0
1,1,1-Trichloroethane	ND		5.0
1,1,2-Trichloroethane	ND		5.0
Trichloroethene	ND		5.0
Vinyl chloride	ND		5.0
o-Xylene	ND		5.0
m-Xylene & p-Xylene	ND		10
Xylenes, Total	ND		5.0

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	110	70 - 130
Dibromofluoromethane	106	70 - 130
4-Bromofluorobenzene	108	70 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Trelleborg CRP Inc

Job Number: 600-6486-1

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	102	70 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Trelleborg CRP Inc

Job Number: 600-6486-1

Lab Control Spike - Batch: 600-9562

Method: 8260B
Preparation: 5030B

Lab Sample ID: LCS 600-9562/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 01/28/2009 1158
Date Prepared: 01/28/2009 1158

Analysis Batch: 600-9562
Prep Batch: N/A
Units: ug/L

Instrument ID: VOA-V
Lab File ID: H02803.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acetone	100	108	108	38 - 154	
Benzene	50.0	48.7	97	69 - 124	
Bromoform	50.0	43.7	87	49 - 143	
Bromomethane	50.0	51.9	104	44 - 144	
2-Butanone (MEK)	100	118	118	53 - 140	
Carbon disulfide	50.0	43.2	86	47 - 139	
Carbon tetrachloride	50.0	44.4	89	57 - 134	
Dibromochloromethane	50.0	49.1	98	67 - 131	
Chlorobenzene	50.0	53.3	107	70 - 129	
Chloroethane	50.0	50.0	100	53 - 136	
Chloroform	50.0	46.9	94	69 - 128	
Chloromethane	50.0	49.2	98	23 - 162	
1,1-Dichloroethane	50.0	47.0	94	66 - 126	
1,2-Dichloroethane	50.0	48.7	97	65 - 134	
1,1-Dichloroethene	50.0	44.8	90	45 - 136	
cis-1,2-Dichloroethene	50.0	49.4	99	69 - 127	
trans-1,2-Dichloroethene	50.0	48.1	96	65 - 128	
1,2-Dichloropropane	50.0	52.0	104	72 - 125	
cis-1,3-Dichloropropene	50.0	49.4	99	67 - 135	
trans-1,3-Dichloropropene	50.0	56.6	113	66 - 147	
Ethylbenzene	50.0	52.6	105	69 - 128	
2-Hexanone	100	116	116	50 - 141	
Methylene Chloride	50.0	45.7	91	62 - 131	
4-Methyl-2-pentanone (MIBK)	100	109	109	56 - 145	
Styrene	50.0	52.2	104	68 - 133	
1,1,2,2-Tetrachloroethane	50.0	51.0	102	70 - 130	
Tetrachloroethene	50.0	54.4	109	59 - 134	
Toluene	50.0	51.5	103	70 - 126	
1,1,1-Trichloroethane	50.0	46.3	93	62 - 132	
1,1,2-Trichloroethane	50.0	52.9	106	70 - 130	
Trichloroethene	50.0	53.0	106	68 - 130	
Vinyl chloride	50.0	48.1	96	38 - 153	
o-Xylene	50.0	51.7	103	68 - 134	
m-Xylene & p-Xylene	100	104	104	67 - 132	

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	95	70 - 130
Dibromofluoromethane	92	70 - 130
4-Bromofluorobenzene	93	70 - 130
1,2-Dichloroethane-d4 (Surr)	92	70 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Trelleborg CRP Inc

Job Number: 600-6486-1

Method Blank - Batch: 600-9452

Method: 8270C
Preparation: 3510C

Lab Sample ID:	MB 600-9452/1-A	Analysis Batch:	600-9569	Instrument ID:	MSD1526
Client Matrix:	Water	Prep Batch:	600-9452	Lab File ID:	A0128907.D
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	1000 mL
Date Analyzed:	01/28/2009 1803			Final Weight/Volume:	1.00 mL
Date Prepared:	01/27/2009 1615			Injection Volume:	1.0 uL

Analyte	Result	Qual	RL
Acenaphthene	ND		10
Acenaphthylene	ND		10
Anthracene	ND		10
Benzidine	ND		20
Benzo[a]anthracene	ND		10
Benzo[b]fluoranthene	ND		10
Benzo[k]fluoranthene	ND		10
Benzo[g,h,i]perylene	ND		10
Benzo[a]pyrene	ND		10
Bis(2-chloroethoxy)methane	ND		10
Bis(2-chloroethyl)ether	ND		10
2,2'-oxybis(2-chloropropane)	ND		10
Bis(2-ethylhexyl) phthalate	ND		10
4-Bromophenyl phenyl ether	ND		10
Butyl benzyl phthalate	ND		10
4-Chloroaniline	ND		10
2-Chloronaphthalene	ND		10
4-Chlorophenyl phenyl ether	ND		10
Carbazole	ND		10
Chrysene	ND		10
Di-n-butyl phthalate	ND		10
Dibenz(a,h)anthracene	ND		10
Dibenzofuran	ND		10
1,2-Dichlorobenzene	ND		10
1,3-Dichlorobenzene	ND		10
1,4-Dichlorobenzene	ND		10
3,3'-Dichlorobenzidine	ND		20
Diethyl phthalate	ND		10
Dimethyl phthalate	ND		10
2,4-Dinitrotoluene	ND		10
2,6-Dinitrotoluene	ND		10
Di-n-octyl phthalate	ND		10
Fluoranthene	ND		10
Fluorene	ND		10
Hexachlorobenzene	ND		10
Hexachlorocyclopentadiene	ND		10
Hexachloroethane	ND		10
Hexachlorobutadiene	ND		10
Indeno[1,2,3-cd]pyrene	ND		10
Isophorone	ND		10
2-Methylnaphthalene	ND		10

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Trelleborg CRP Inc

Job Number: 600-6486-1

Method Blank - Batch: 600-9452

Method: 8270C
Preparation: 3510C

Lab Sample ID: MB 600-9452/1-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 01/28/2009 1803
Date Prepared: 01/27/2009 1615

Analysis Batch: 600-9569
Prep Batch: 600-9452
Units: ug/L

Instrument ID: MSD1526
Lab File ID: A0128907.D
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 1.00 mL
Injection Volume: 1.0 uL

Analyte	Result	Qual	RL
Naphthalene	ND		10
2-Nitroaniline	ND		50
3-Nitroaniline	ND		50
4-Nitroaniline	ND		50
Nitrobenzene	ND		10
N-Nitrosodimethylamine	ND		10
N-Nitrosodiphenylamine	ND		10
N-Nitrosodi-n-propylamine	ND		10
Phenanthrene	ND		10
Pyrene	ND		10
1,2,4-Trichlorobenzene	ND		10
Benzyl alcohol	ND		10
4-Chloro-3-methylphenol	ND		10
2-Chlorophenol	ND		10
2-Methylphenol	ND		10
3 & 4 Methylphenol	ND		20
2,4-Dichlorophenol	ND		10
2,4-Dimethylphenol	ND		10
4,6-Dinitro-2-methylphenol	ND		50
2,4-Dinitrophenol	ND		50
2-Nitrophenol	ND		10
4-Nitrophenol	ND		50
Pentachlorophenol	ND		50
Phenol	ND		10
2,4,5-Trichlorophenol	ND		10
2,4,6-Trichlorophenol	ND		10

Surrogate	% Rec	Acceptance Limits
Phenol-d6	25	10 - 94
Nitrobenzene-d5	94	35 - 114
2-Fluorophenol	40	21 - 100
2-Fluorobiphenyl	98	43 - 116
2,4,6-Tribromophenol	86	10 - 123
Terphenyl-d14	68	33 - 141

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Trelleborg CRP Inc

Job Number: 600-6486-1

Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 600-9452

Method: 8270C
Preparation: 3510C

LCS Lab Sample ID:	LCS 600-9452/2-A	Analysis Batch:	600-9569	Instrument ID:	MSD1526
Client Matrix:	Water	Prep Batch:	600-9452	Lab File ID:	A0128908.D
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	1000 mL
Date Analyzed:	01/28/2009 1838			Final Weight/Volume:	1.00 mL
Date Prepared:	01/27/2009 1615			Injection Volume:	1.0 uL

LCSD Lab Sample ID:	LCSD 600-9452/3-A	Analysis Batch:	600-9569	Instrument ID:	MSD1526
Client Matrix:	Water	Prep Batch:	600-9452	Lab File ID:	A0128909.D
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	1000 mL
Date Analyzed:	01/28/2009 1912			Final Weight/Volume:	1.00 mL
Date Prepared:	01/27/2009 1615			Injection Volume:	1.0 uL

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Fluorene	98	94	62 - 118	4	20		
Hexachlorobenzene	95	78	62 - 121	20	20		
Hexachlorocyclopentadiene	51	52	24 - 118	2	20		
Hexachloroethane	69	73	42 - 110	7	20		
Hexachlorobutadiene	69	73	32 - 143	4	20		
Indeno[1,2,3-cd]pyrene	92	58	52 - 130	45	20		*
Isophorone	80	79	58 - 112	1	20		
2-Methylnaphthalene	85	86	52 - 114	2	20		
Naphthalene	86	87	59 - 101	2	20		
2-Nitroaniline	91	82	56 - 122	10	20		
3-Nitroaniline	92	66	55 - 123	32	20		*
4-Nitroaniline	87	70	53 - 140	22	20		*
Nitrobenzene	85	87	55 - 115	2	20		
N-Nitrosodimethylamine	46	42	26 - 80	8	20		
N-Nitrosodiphenylamine	88	87	59 - 91	1	20		
N-Nitrosodi-n-propylamine	82	77	59 - 138	5	20		
Phenanthrene	98	94	68 - 111	5	20		
Pyrene	98	85	47 - 138	14	20		
1,2,4-Trichlorobenzene	78	81	49 - 110	4	20		
2-Methylphenol	40	41	34 - 109	3	20		
3 & 4 Methylphenol	40	41	27 - 113	2	20		
4,6-Dinitro-2-methylphenol	65	64	60 - 119	1	20		
2-Nitrophenol	62	66	61 - 105	6	20		
4-Nitrophenol	17	10	14 - 69	48	20		*
Pentachlorophenol	57	56	44 - 142	2	20		
Phenol	26	23	20 - 59	15	20		
2,4,5-Trichlorophenol	64	66	59 - 123	4	20		
2,4,6-Trichlorophenol	62	67	30 - 143	7	20		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
Phenol-d6	23	23	10 - 94
Nitrobenzene-d5	88	87	35 - 114

Calculations are performed before rounding to avoid round-off errors in calculated results.

3186
Global Env & marine

EPAHQ1040001678

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **2/24/2009**

Dear **Timothy Curl**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3186

Expiration Date 2/24/2011

Generator: Global Environmental & Marine Services
Address: 6700 Woodlands Pkwy Suite 230 Box 224
Woodlands, TX 77382

Waste Information

Name of Waste: Oily Water
TCEQ Waste Code #: Recycle
Container Type:
Detailed Description of Process Generating Waste:
Bilge water from vessels
Color: brown **Odor:** Oil Like **pH:** 3-11
Physical State:
Incompatibilities: none known
Safety Related Data/Special Handling:
Standard PPE Required

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

AB | AV

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility 4904 Griggs Road, Houston, TX 77021 Phone (713) 676-1460 Fax: (713) 676-1676 U.S. EPA ID Number: TXD008950461 ISWR Number: 30900 TCEQ Industrial Solid Waste Permit Number: 30948	☐ CES Environmental Services - Port Arthur Facility 2420 S. Gulfway Dr., Port Arthur, TX 77641 Phone (713) 676-1460 Fax: (713) 676-1460 U.S. EPA ID Number: TXR000079307 ISWR Number: 88585

SECTION 1: Generator Information

Company: Global Environmental & Marine Services
Address: 6700 Woodlands Pkwy Suite 230 Box 224
City: Woodlands **State:** TX **Zip:** 77382
Contact: Timothy Curl **Title:**
Phone Number: (281) 255-9152 **Fax Number:**
24/hr Phone Number: (281) 255-9152
US EPA ID No:
State ID No: **SIC Code:**

SECTION 2: Billing Information - ☐ **Same as Above**

Company:
Address:
City: **State:** **Zip:**
Contact: **Title:**
Phone Number: **Fax Number:**

SECTION 3: General Description of the Waste

Name of Waste: Oily water
Detailed Description of Process Generating Waste:

Bilge water form vessels

Physical State: ☑ **Liquid** ☐ **Sludge** ☐ **Powder**
☐ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: brown **Odor:** oil like

Specific Gravity (water=1): .9-1.1 **Density:** 8 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☐ **Single-phase** ☑ **Multi-phase**

Container Type: ☒ **Drum** ☐ **Tote** ☑ **Truck** ☐ **Other (explain)**

Frequency: ☐ **Weekly** ☐ **Monthly** ☑ **Yearly** ☐ **One-Time**
Quantity:

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: Recycle

Proper US DOT Shipping Name: Recyclable hydrocarbon and water mixture

Class: na **UN/NA:** na **PG :** na **RQ:** na

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>140		3-11		na	mg/l	na	mg/l	<2	%
Oil & Grease		**TOC**		**Zinc**		**Copper**		**Nickel**	
>1500	mg/l	5000	mg/l	na	mg/l	na	mg/l	na	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Bilge Water (Salt Water)	90-10	%
oil	10-90	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Standard PPPE required

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. none

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

none known

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	x
TCLP Volatiles:	x
TCLP Semi-Volatiles:	x
Reactivity:	x
Corrosivity:	x
Ignitability:	x

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory: Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☑ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- [ ] Interceptor wastes
- [ ] Off-specification fuels
- [ ] Underground storage remediation waste
- [ ] Tank clean-out from petroleum or oily sources
- [ ] Non-contact used glycols
- [ ] Aqueous and oil mixtures from parts cleaning operations
- [ ] Wastewater from oil bearing paint washes

***Organics Subcategory*: Subpart C**

- [ ] Landfill leachate
- [ ] Contaminated groundwater clean-up from non-petroleum sources
- [ ] Solvent-bearing wastes
- [ ] Off-specification organic product
- [ ] Still bottoms
- [ ] Byproduct waste glycol
- [ ] Wastewater from paint washes
- [ ] Wastewater from adhesives and/or epoxies formulation
- [ ] Wastewater from organic chemical product operations
- [ ] Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- [ ] Metals Subcategory
- [x] Oils Subcategory
- [ ] Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on [x] generator knowledge and/or [ ] analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: [signature] **Date:** 2-24-09

Printed Name/Title: Joel Curl - Sales + Marketing

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: [signature]
Date: 2-24-09 [x] Approved [ ] Rejected
Approval Number:

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$0.10 /gal
If requires heat or emulsion $0.15/gal

2. Contamination Limit (maximum limit before surchages apply):

Std per rate sheet

3. Surcharge Pricing:

Std per rate sheet

4. Special Testing Requirements:

TOC, solids, oil, metals, pH, phenol ~~cla~~, ~~ch~~ cloudtect, flash

5. Treatment and Handling Protocol:

Sub Cat B WW

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☒ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

3187

NuStar

EPAHQ1040001686

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **2/24/2009**

Dear **Michael Jaskowiak/Angela Brown**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3187

Expiration Date 2/24/2011

Generator: NuStar Terminals Partner TX L.P.
Address: 201 Main Dock Road
Texas City, TX 77592

Waste Information

Name of Waste: Wash water/Fuel Oil/Isobutyl Acrylate Residue
TCEQ Waste Code #: 0006212H
Container Type:
Detailed Description of Process Generating Waste:
tank cleaning of pure product loaded in dirty tanker last containing Isobutyl Acrylate
Color: varies **Odor:** mild **pH:** 4-10
Physical State:
Incompatibilities: strong oxidizers
Safety Related Data/Special Handling:
standard PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

DC/mm

OL

CES Environmental Services, Inc.
4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit Number: 30948
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

SECTION 1: Generator Information

Company: NuStar Terminals Partners TX L.P.
Address: Texas City Terminal #1. 201 Main Dock Road
City: Texas City **State:** TX **Zip:** 77592
Contact: Bob Hill **Title:** HSE Specialist
Phone Number: 409-948-8254 **Fax Number:** 409-948-4460
24/hr Phone Number: 281-750-1486
US EPA ID No: TXD096036561
State ID No: 31060 **SIC Code:** 5171

SECTION 2: Billing Information - ☐ **Same as Above**

Company: Rineco
Address: PO Box 729 - Haskell
City: Benton **State:** AR **Zip:** 72118
Contact: Douglas Highsmith **Title:** Non-Fuels Chemist
Phone Number: 800-377-4692 **Fax Number:** 501-778-8505

SECTION 3: General Description of the Waste

Name of Waste: Wash Water/Fuel Oil/Isobutyl Acrylate Residue
Detailed Description of Process Generating Waste:

tank cleaning of pure product loaded in dirty tanker last containing Isobutyl Acrylate

Physical State: ☑ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color: varies **Odor:** mild

Specific Gravity (water=1): 1 **Density:** _____ lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☐ Single-phase ☑ Multi-phase

Container Type: ☐ Drum ☐ Tote ☑ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☐ Monthly ☑ Yearly ☐ One-Time
Quantity: 5000 gallons

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☑ Yes ☐ No
If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", is it: ☑ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011
Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: 0006212H

Proper US DOT Shipping Name: Waste Flammable Liquid, NOS (Fuel Oil / Isobutyl Acrylate)
Class: 3 UN/NA: UN1993 PG: III RQ: D001 @ 100lbs

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
<140	4-10	NA mg/l	NA mg/l	4 %
Oil & Grease	**TOC**	**Zinc**	**Copper**	**Nickel**
71000 mg/l	21,000 mg/l	0.087 mg/l	0.093 mg/l	0.509 mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Wash Water	90	%
Fuel Oil	10	%
Isobutyl Acrylate and Water Residue	0.1-1	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Standard PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. MSDS, CES evaluation form

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals: X
TCLP Volatiles: X
TCLP Semi-Volatiles: X
Reactivity: X
Corrosivity: X
Ignitability: X

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☑ YES ☐ NO
If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory*: *Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory*: *Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☑ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory **: *Subpart C***

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☑ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☐ generator knowledge and/or ☐ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** 2/12/2009

Printed Name/Title: Douglas Highsmith

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: _____
Date: 2-24-09 ☑ Approved ☐ Rejected
Approval Number: _____

CES Environmental Services, Inc.

LDR Notifications/Certifications

1. Generator Information		2. Receiving Facility Information	
Name:	NuStar Terminals Partners TX L.P.	Name:	CES Environmental Services, Inc.
Address:	Texas City Terminal #1., 201 Main Dock Road	Address:	4904 Griggs Road
	Texas City, TX 77592		Houston, TX 77021
EPA ID No.:	TXD096036561	EPA ID No.:	TXD008950461
Manifest No.:			

3. Waste Description at Point of Generation

Line Item	Waste Description	Hazardous Waste Codes	LDR Subcategory	WW / NWW	Underlying Hazardous Constituents [268.2(i)]
1	Wash Water/Fuel Oil/Isobutyl Acrylate	D001		WW	
2					
3					
4					
5					

4. Waste Disposition

Line Item	Subtitle C Exclusion Subsequent to Point of Generation (if applicable)	Current Disposition of Waste	268.45, Table 1 Technology used to treat debris (if applicable)	Date Shipped
1				
2				
3				
4				
5				

5. Was the waste hazardous at the point of generation but subsequently became excluded from the definition of hazardous waste or exempt from Subtitle C regulation (including characterstic wastes managed in wastewater treatment systems discharging under the CWA)?
☐ Yes ☑ No (if yes, this constituents the 268.7(a)(7) one-time notification.)

6. Waste the waste characterstic at the point of generation, treated onsite to remove the characterstic, and treatment residues then shipped to a Subtitle D land disposal facility? ☐ Yes ☑ No (if yes, complete Certification 1 or 2.)

7. Was the waste "debris" that was hazardous at the point of generation but subsequently became excluded from the definition of hazardous waste under 261.3(f)(1) by treating it using an extraction or destruction technology in 268.45, Table 1? ☐ Yes ☑ No (if yes, complete Certification 3.)

8. Was the waste "debris" that was hazardous at the point of generation but subsequently became excluded from the definition of hazardous waste under 261.3(f)(2) by receiving a "no-longer-contains" determinatin from EPA or the authorized state?
☐ Yes ☑ No (if yes, this constituents the 268.7(d)(1) one-time notification.)

9. Is the waste residue from treating K061, K062 and/or F006 wastes in high-temperature metals recovery (HTMR) units that 1) meets the generic exclusion levels in 261.3(c)(2)(ii)(C), 2) does not exhibit any characterstics, and 3) is shipped to a Subtitle D land disposal facility?
☐ Yes ☑ No (if yes, complete Certification 4.)

10. ☐	Waste that has been treated to remove a characterstic and meets underlying hazardous constituents standards. I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 to remove the hazardous characterstics and that underlying hazardous constituents, as defined in 268.2(i) have been treated on-site to meet the 268.48 Universal Treatment Standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.	Applies to Items: Reference: 268.7(b)(4)(v) and 268.9(d)
11. ☐	Waste that has been treated to remove a characterstic but does not meet underlying hazardous constituents standards. I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 or 268.49 to remove the hazardous characterstic. This decharacterized waste contains underylling hazardous constituents that require further treatment standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.	Applies to Items: Reference: 268.7(b)(4)(v) and 268.9(d)
12. ☐	Debris that has been treated to meet the alternative treatment standards. I certify under penalty of law that the debris has been treated in accordance with the requirements of 40 CFR 268.45. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.	Applies to Items: Reference: 268.7(b)(4)(v) and 268.9(d)
13. ☐	HTMR residue from treating K061, K062 and/or F006 wastes. I certify under penalty of law that the generic exclusion levels for all constituents have been met without impermissible dilution and that no characterstic of hazardous waste is exhibited. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.	Applies to Items: Reference: 268.7(b)(4)(v) and 268.9(d)

Authorized Signature: _____ **Date:** 2/24/2009

Printed Name / Title: Douglas Highsmith/Non-Fuels Chemist

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$0.55/gallon - disposal
Freight - $70/hr

2. Contamination Limit (maximum limit before surchages apply):

TOC - 21,000
Solids - 4%

3. Surcharge Pricing:

TOC - $0.08/gallon / 5000 TOC > 21,000
Solids - $0.01/gallon / % greater than 4%

4. Special Testing Requirements:

On water - metals, phenol, TOC,
On oil phase - lightend mix

5. Treatment and Handling Protocol:

Ground trailer before pulling sample!!
Mix oil phase w/ lightends
Treat water phase

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☒ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

mix w/ lightends

8. Management for Product Recovered/Recycled (if applicable)

mix w/ lightends

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

To: Dana Carter
Cc: Matt Bowman, Prabhaker, Joe Camp, Clint Hopkins

Date: 2/20/09

From: Miles Root

Lab Memo: 09-020

Subject: **Rineco Nustar Terminals Evaluation 0209-30**

A sample of solvent/waste water from Rineco, Nustar Terminals, has been evaluated for potential processing at CES. This sample is evaluation 0209-30 and is material from the tank cleaning of a pure product loaded into a dirty trailer. This one time load contains isobutyl acrylate and residues along with some fuel oil. Overall, we can process this material to recycle the solvent material and successfully treat the remaining water.

Isobutyl acrylate is an ester with only slight water solubility. It is highly flammable and reacts with acids. When this trailer arrives the top phase will contain the isobutyl acrylate in oil. If it is not phase separated upon arrival, just let it sit a while. My laboratory sample phase separated with one hour after vigorous mixing. The trailer will contain some sludge/solids that we will most likely be able to remove into a sludge box. My test sample had 4% sludge which I treated successfully with the water.

The top organic phase mixes with our light ends, but not black oil. The water phase will need to go through standard water treat. The water treats okay. TOC is high at 20,710 ppm. We will want to cover our city charges on this. Phenols are 5 ppm, totally acceptable, and the metals are all at acceptable levels as well. This material will come in with a D001 code for the low flash point of the acrylate. Make sure the trailer is properly grounded before sampling.

The table below summarizes the analytical testing.

Rineco Nustar Terminals	
Evaluation 0209-30	
Solids, vol%	4
Flash Point, deg F	80-90
pH	7
Phenols, ppm	5
TOC, mg/L	20710
Organic phase, vol%	12
Treatability	OK
Metals, ppm	
Ni	0.509
Zn	0.087
Cu	0.093
Cd	0.119
Cr	0.439

Safety data sheet
ISOBUTYL ACRYLATE

1. Substance/preparation and company identification

Company
BASF CORPORATION
100 Campus Drive
Florham Park, NJ 07932

24 Hour Emergency Response Information
CHEMTREC: (800) 424-9300
BASF HOTLINE: (800) 832-HELP

Molecular formula:	C7H1202
Chemical family:	organic acids, esters
Synonyms:	ISOBUTYL ESTER OF ACRYLIC ACID

2. Composition/information on ingredients

CAS Number	Content (W/W)	Chemical name
106-63-8	99.0 %	isobutylacrylate
150-76-5	>= 10.0 - <= 20.0 PPM	MEHQ

3. Hazard identification

Emergency overview

DANGER: FLAMMABLE LIQUID. CAUSES EYE BURNS.
CAUSES SKIN BURNS.
TOXIC IF ABSORBED THROUGH SKIN.
CONTAINS MATERIAL THAT MAY CAUSE ADVERSE REPRODUCTIVE EFFECTS IN FEMALES.
SENSITIZER.
CAN CAUSE LIVER DAMAGE.
Use with local exhaust ventilation.
Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator.
Wear NIOSH-certified chemical goggles.
Wear protective clothing.
Eye wash fountains and safety showers must be easily accessible.
Wear full face shield if splashing hazard exists.

Potential health effects

Primary routes of exposure
Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquified gases.

Irritation:
Extremely irritating to the skin, eyes and respiratory tract. Vapours and mists cause burns or severe irritation to eyes and the respiratory tract. Skin contact can cause burns which may be delayed.

Sensitization:
May cause sensitization by inhalation and skin contact.

Repeated dose toxicity:
No known chronic effects.

Medical conditions aggravated by overexposure:
Data available do not indicate that there are medical conditions that are generally recognized as being aggravated by exposure to this substance/product.

See MSDS section 11 - Toxicological information.

4. First-aid measures

General advice:
Remove contaminated clothing.

If inhaled:
Keep patient calm, remove to fresh air, seek medical attention.

If on skin:
Flush with copious amounts of water for at least 15 minutes. Sterile protective dressing. Immediate medical attention required.

If in eyes:
Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

If swallowed:
Immediately rinse mouth and then drink plenty of water, do not induce vomiting, seek medical attention. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions.

Note to physician

Treatment:	Treat according to symptoms (decontamination, vital functions), no known specific antidote, administer corticosteroid dose aerosol to prevent pulmonary odema.

5. Fire-fighting measures

Flash point:	30 °C	(DIN 51755)
	91.40 °F	(DIN 51755)
Autoignition:	340 °C	(DIN 51794)
	644.00 °F	(DIN 51794)
Lower explosion limit:	1.3 %(V)	(29 °C)
Upper explosion limit:	8.5 %(V)	(67 °C)

Suitable extinguishing media:
carbon dioxide, dry extinguishing media, water spray, foam

Hazards during fire-fighting:

Risk of violent self-polymerization if overheated in a container.

Protective equipment for fire-fighting:
Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:
Vapours are heavier than air and may accumulate in low areas and travel a considerable distance up to the source of ignition. Fight fire from maximum distance.

NFPA Hazard codes:
Health : 2 Fire: 3 Reactivity: 1 Special:

6. Accidental release measures

Personal precautions:
Take appropriate protective measures.

Ensure adequate ventilation. Use personal protective clothing. Breathing protection required.

Environmental precautions:
Substance/product is RCRA hazardous due to its properties.

Cleanup:
Spills should be contained, solidified, and placed in suitable containers for disposal.

7. Handling and storage

Handling

General advice:
Ensure adequate inhibitor and dissolved oxygen level.

Protection against fire and explosion:
Substance/product can form explosive mixture with air. Ground all transfer equipment properly to prevent electrostatic discharge. Containers should be grounded against electrostatic charge. It is recommended that all conductive parts of the machinery are grounded. Avoid all sources of ignition: heat, sparks, open flame. Vapours may form explosive mixture with air. Ignitable mixtures can be formed in the emptied container.

Heated containers should be cooled to prevent polymerization. If exposed to fire, keep containers cool by spraying with water. Emergency cooling must be provided for the eventuality of a fire in the vicinity. Sealed containers should be protected against heat as this results in pressure build-up. Avoid influence of heat.

Storage

General advice:
Risk of polymerization. Protect from direct sunlight.

8. Exposure controls and personal protection

Components with workplace control parameters

MEHQ

ACGIH	TWA value	5 mg/m3 ;

Advice on system design:
Provide local exhaust ventilation to maintain recommended P.E.L.

Personal protective equipment

Respiratory protection:
Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator as needed. At concentrations < 250 ppm, use a chemical cartridge respirator. At concentrations > 250 ppm, use an air-supplied or self-contained breathing apparatus.

Hand protection:
Chemical resistant protective gloves

Eye protection:
Tightly fitting safety goggles (chemical goggles).

Body protection:
light protective clothing

General safety and hygiene measures:
Avoid contact with skin. Avoid inhalation of vapour. Wash soiled clothing immediately.

9. Physical and chemical properties

Form:	liquid	
Odour:	fruity	
Colour:	colourless	
Melting temperature:	approx. -61 °C	
	approx. -77.80 °F	
boiling temperature:	approx. 139 °C	(1.013 bar) (DIN 51751)
	approx. 282.20 °F	(759.81 mmHg) (DIN 51751)
Vapour pressure:	8.8 mbar	(20 °C)
	28.1 hPa	(40 °C)
	6.601 mmHg	(68.00 °F)
	21.077 mmHg	(104.00 °F)
Density:	0.890 g/cm3	(20 °C) (DIN 51757)
Vapour density:	4.4	
Partitioning coefficient n-octanol/water (log Pow):	2.38	
Viscosity, dynamic:	0.83 mPa.s	(20 °C)
Solubility in water:	2 g/l	(25 °C)
Solubility (qualitative):	miscible	
	solvent(s): organic solvents,	

10. Stability and reactivity

Conditions to avoid:
Avoid heat. Avoid oxygen content above the product of less than 5 %. Do not blanket with nitrogen. Avoid UV-light and other radiation with high energy. Avoid direct sunlight. Avoid prolonged storage. Avoid inhibitor loss. Avoid excessive temperatures.

Substances to avoid:
polyvinylchloride, radical formers, free radical initiators, peroxides, mercaptans, nitro-compounds, perborates, azides, ether, ketones, aldehydes, amines, nitrates, nitrites, oxidizing agent, reducing agents, strong bases, acid anhydrides, acid chlorides, concentrated mineral acids, metal salts
Inert gas

Hazardous reactions:
Explosion and fire hazard exists under confined conditions. Ignitable air mixtures can form when the product is heated above the flash point and/or when sprayed or atomized. Formation of explosive gas/air mixtures.
Risk of spontaneous and violent self-polymerization if inhibitor is lost or product is exposed to excessive heat.
Risk of spontaneous polymerization when heated or in the presence of UV radiation. With unstabilised product, spontaneous polymerisation may occur e.g. through ambient heat. Polymerization coupled with heat formation. Polymerization produces gases which may burst closed or confined containers. Reactions may cause ignition.
Risk of spontaneous polymerization by oxygen depletion of the liquid phase.

Radical formation can cause exothermic polymerization. Reacts with peroxides and other radical components. Risk of spontaneous polymerization in the presence of starters for radical chain reactions (e.g. peroxides). Reacts with nitric acid. Polymerizes explosively in contact with strong oxidizing agents. Risk of spontaneous polymerization in the presence of oxidizing agents.
Hazardous reactions in precesence of mentioned substances to avoid.
The product is stabilized against spontaneous polymerization prior to despatch. The product is stable if stored and handled as prescribed/indicated.

Decomposition products:
carbon monoxide, Carbon dioxide

Corrosion to metals:
No corrosive effect on metal.

11. Toxicological information

Acute toxicity

Oral:
LD50/rat: approx. 4,895 mg/kg

Inhalation:
Inhalation-risk test (IRT): No mortality within 30 minutes as shown in animal studies. Deaths possible after prolonged exposure.

Dermal:
LD50/rabbit: 890 mg/kg

Skin irritation:
rabbit: Irritant. (BASF-Test)

Eye irritation :
rabbit: non-irritant (BASF-Test)

Sensitization:
sensitizing effect in animal tests

12. Ecological information

Environmental fate and transport

Biodegradation:
Evaluation: The product is virtually insoluble in water and can thus be separated from water mechanically in suitable effluent treatment plants.
Was found to be potentially biodegradeable.

Bioaccumulation:

Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected.

Environmental toxicity

Acute and prolonged toxicity to fish:
golden orfe/LC50 (96 h): 22 mg/l

Acute toxicity to aquatic invertebrates:
Directive 84/449/EEC, C.2 Daphnia magna/EC50 (48 h): 19.8 mg/l

Toxicity to aquatic plants:
Directive 88/302/EEC, part C, p. 89 green algae/EC50 (72 h): 24 mg/l

Toxicity to microorganisms:
DIN 38412 Part 27 (draft) bacterium/EC10 (0.5 h): 6,400 mg/l
:
The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Other ecotoxicological advice:
Do not release untreated into natural waters. Acutely harmful for aquatic organisms.

13. Disposal considerations

Waste disposal of substance:
Incinerate or dispose of in a RCRA-licensed facility.
Do not discharge into drains/surface waters/groundwater.

Contaminated packaging:
Empty containers with less than 1 inch of residue may be landfilled at a licensed facility. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers. If containers are not empty, they must be disposed of in a RCRA-licensed facility.

RCRA: DOO1

14. Transport information

Reference Bill of Lading

15. Regulatory information

Federal Regulations

Registration status:
TSCA, US released / listed

OSHA hazard category: Toxic - dermal, Flammable Liquid, Skin and/or eye irritant

CERCLA RQ: 100 lb

SARA hazard categories (EPCRA 311/312): Acute, Fire

State regulations

State RTK

CAS Number	Chemical name	State RTK
106-63-8	isobutylacrylate	MA, NJ, PA
150-76-5	MEHQ	MA, NJ, PA

16. Other information

Recommended use: for industrial use only

HMIS III rating
Health: 2 Flammability: 3 Physical hazard: 1

HMIS uses a numbering scale ranging from 0 to 4 to indicate the degree of hazard. A value of zero means that the substance possesses essentially no hazard; a rating of four indicates high hazard.

IMPORTANT: WHILE THE DESCRIPTIONS, DESIGNS, DATA AND INFORMATION CONTAINED HEREIN ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE , IT IS PROVIDED FOR YOUR GUIDANCE ONLY. BECAUSE MANY FACTORS MAY AFFECT PROCESSING OR APPLICATION/USE, WE RECOMMEND THAT YOU MAKE TESTS TO DETERMINE THE SUITABILITY OF A PRODUCT FOR YOUR PARTICULAR PURPOSE PRIOR TO USE. NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE. FURTHER, YOU EXPRESSLY UNDERSTAND AND AGREE THAT THE DESCRIPTIONS, DESIGNS, DATA, AND INFORMATION FURNISHED BY BASF HEREUNDER ARE GIVEN GRATIS AND BASF ASSUMES NO OBLIGATION OR LIABILITY FOR THE DESCRIPTION, DESIGNS, DATA AND INFORMATION GIVEN OR RESULTS OBTAINED, ALL SUCH BEING GIVEN AND ACCEPTED AT YOUR RISK.
This product is of industrial quality and unless otherwise specified or agreed intended exclusively for industrial use., Any other intended applications should be discussed with the manufacturer.
END OF DATA SHEET

3188

Schlumberger

EPAHO104001703

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **2/25/2009**

Dear **Michael Jaskowiak/Angela Brown**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3188

Expiration Date 2/24/2011

Generator: Schlumberger- Reslink
Address: 1121 Buschong St.
Houston, TX 77039

Waste Information

Name of Waste: Non Hazardous Wrapping Machine Coolant Waste
TCEQ Waste Code #: 00091021
Container Type:
Detailed Description of Process Generating Waste:
wastewater and coolant from wrapping machines
Color: clear **Odor:** mile **pH:** 4-10
Physical State:
Incompatibilities: none known
Safety Related Data/Special Handling:
standard level D PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

DC/NMM

Organic Liquid

CES Environmental Services, Inc.
4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit Number: 30948
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

SECTION 1: Generator Information

Company: Schlumberger - Reslink, Inc.
Address: 1121 Buschong Street
City: Houston **State:** TX **Zip:** 77039
Contact: Linda Koch **Title:**
Phone Number: 281-227-9854 **Fax Number:** 281-227-6834
24/hr Phone Number: 281-734-7468
US EPA ID No: TXR000079308
State ID No: 88586 **SIC Code:** 3533

SECTION 2: Billing Information - ☐ **Same as Above**

Company: Rineco
Address: PO Box 729 - Haskell
City: Benton **State:** AR **Zip:** 72118
Contact: Douglas Highsmith **Title:** Non-Fuels Chemist
Phone Number: 800-377-4692 **Fax Number:** 501-778-8505

SECTION 3: General Description of the Waste

Name of Waste: Non Haz Wrapping Machine Coolant Waste
Detailed Description of Process Generating Waste:

Wastewater and coolant from wrapping machines

Physical State: ☑ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color: clear **Odor:** mild

Specific Gravity (water=1): 1 **Density:** _____ lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ Single-phase ☐ Multi-phase

Container Type: ☐ Drum ☑ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☑ Monthly ☐ Yearly ☐ One-Time
Quantity: _____

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No
If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011
Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: #00091021

Proper US DOT Shipping Name: Non Regulated Material
Class: NA **UN/NA:** NA **PG:** NA **RQ:** NA

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
>200	4-10	0 mg/l	0 mg/l	< 1 %

Oil & Grease	TOC	Zinc	Copper	Nickel
>1000 mg/l	10,000 mg/l	NA mg/l	NA mg/l	NA mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Water		99
Monoethanolamine		1
Monoethanolamine CAS# 141-43-5	0.1-0.3%	
3,3'-Methylenebis(5-nethyloxazolidine)		
CAS# 662044-44-2	0.01-0.05%	
Mercaptobenzothiazole, sodium salt CAS# 2492-26-4	<0.01%	
Pyridine-2-thiol 1-oxide, sodium salt CAS# 3811-73-2	<0.01%	

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Standard Ppe

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. SPL 08110061 & 08120352; 16 pages

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

None known

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	X (Lead)
TCLP Volatiles:	X
TCLP Semi-Volatiles:	X
Reactivity:	X
Corrosivity:	X
Ignitability:	X

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☒ YES ☐ NO
If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory: Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☑ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

***Organics Subcategory*: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☑ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☐ generator knowledge and/or ☑ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** 2/24/2009

Printed Name/Title: Douglas Highsmith/Non-Fuels Chemist

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: _____
Date: 2-24-09 ☑ Approved ☐ Rejected
Approval Number: 3188

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$165.00/tote
plus freight & fsc

2. Contamination Limit (maximum limit before surchages apply):

NA

3. Surcharge Pricing:

NA

4. Special Testing Requirements:

Standard

5. Treatment and Handling Protocol:

Process to System 1 or put in Class 1 liquids box

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☒ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

NA

8. Management for Product Recovered/Recycled (if applicable)

NA

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Reslink a Schlumberger Corp.

Certificate of Analysis Number:

08120352

Report To: Reslink a Schlumberger Corp.
Kathy Allford
1121 Buschong Rd.

Houston
Texas
77039-
ph: (713) 725-3588 fax:

Fax To:

Project Name: Wrap Machine Coolant
Site: Houston, TX.
Site Address:

PO Number:
State: Texas
State Cert. No.: T104704205-06-TX
Date Reported:

Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
Wrapping Machine 4	08120352-01	Water	12/8/2008 9:05:00 AM	12/9/2008 7:32:00 AM	314614	☐
Wrapping Machine 5	08120352-02	Water	12/8/2008 9:30:00 AM	12/9/2008 7:32:00 AM	314614	☐
Wrapping Machine 8	08120352-03	Water	12/8/2008 9:10:00 AM	12/9/2008 7:32:00 AM	314614	☐

12/19/2008

Georgia Jones
Senior Project Manager

Date

Richard R. Reed
Laboratory Director

Ted Yen
Quality Assurance Officer

12/19/2008 4:46:10 PM

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: Wrapping Machine 4 **Collected:** 12/08/2008 9:05 **SPL Sample ID:** 08120352-01

Site: **Houston, TX.**

Analyses/Method	Result	QUAL	Rep.Limit	MCL	Dil. Factor	Date Analyzed	Analyst	Seq. #
TCLP METALS BY METHOD 6010B				**MCL**		**SW6010B**	**Units: mg/L**	
Lead	0.557		0.1	5	2	12/10/08 17:13	S_C	4813753

Prep Method	Prep Date	Prep Initials	Prep Factor	Leach Method	Leachate Date	Leach Initials
SW3010A	12/09/2008 15:00	AB1	1.00	SW1311	12/09/2008	ESK

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

12/19/2008 4:46:20 PM

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: Wrapping Machine 5 **Collected:** 12/08/2008 9:30 **SPL Sample ID:** 08120352-02

Site: Houston, TX.

Analyses/Method	Result	QUAL	Rep.Limit	MCL	Dil. Factor	Date Analyzed	Analyst	Seq. #
TCLP METALS BY METHOD 6010B				**MCL**		**SW6010B**	**Units: mg/L**	
Lead	0.483		0.1	5	2	12/10/08 17:27	S_C	4813756

Prep Method	Prep Date	Prep Initials	Prep Factor	Leach Method	Leachate Date	Leach Initials
SW3010A	12/09/2008 15:00	AB1	1.00	SW1311	12/09/2008	ESK

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

12/19/2008 4:46:21 PM

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: Wrapping Machine 8 **Collected:** 12/08/2008 9:10 **SPL Sample ID:** 08120352-03

Site: **Houston, TX.**

Analyses/Method	Result	QUAL	Rep.Limit	MCL	Dil. Factor	Date Analyzed	Analyst	Seq. #
TCLP METALS BY METHOD 6010B				**MCL**		**SW6010B**	**Units: mg/L**	
Lead	0.464		0.1	5	2	12/10/08 17:32	S_C	4813757

Prep Method	Prep Date	Prep Initials	Prep Factor	Leach Method	Leachate Date	Leach Initials
SW3010A	12/09/2008 15:00	AB1	1.00	SW1311	12/09/2008	ESK

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

12/19/2008 4:46:21 PM

SPL, Inc.

Analysis Request & Chain of Custody Record

SPL Workorder No. 314614

0812 0352

page 1 of 1

Client Name: Reslink, a Schlumberger Company
Address: 1121 Buschong, Houston, TX
Phone/Fax: 281-227-9854/281-227-6834
Client Contact: Linda Koch Email: lkoch@slb.com
Project Name/No.: Wrap Machine Coolant
Site Name: Reslink
Site Location: Houston, TX
Invoice To: Linda Koch Ph: 281-227-9854

matrix: W=water S=soil O=oil SL=sludge X=other
bottle: P=plastic A=amber glass G=glass V=vial X=other
size: 1=1 liter 4=4oz 40=vial 8=8oz 16=16oz X=other
pres.: 1=HCl 2=HNO3 3=H2SO4 X=other

Requested Analysis

SAMPLE ID	DATE	TIME	comp	grab	matrix	bottle	size	pres.	Number of Containers	TCLP Lead								
Wrapping Machine 4	12-8-08	905a		X	W	G	X		1	X								
Wrapping Machine 5	↓	930a		X	↓	G	X		1	X								
Wrapping Machine 8	↓	910a		X	↓	G	X		1	X								

Client/Consultant Remarks:

Laboratory remarks:

Intact? ☐ Y ☐ N
Ice? ☐ Y ☐ N
Temp: 4.5°C

Requested TAT

Contract ☐ 72hr ☐
24hr ☐ Standard ☒
48hr ☐
Other ☐ _____

Special Reporting Requirements Results: Fax ☐ Email ☒ PDF ☐
Standard QC ☐ Level 3 QC ☐ Level 4 QC ☐ TX TRRP ☐ LA RECAP ☐

Special Detection Limits (specify):

PM review (initial):

1. Relinquished by Sampler:	date 12-8-08	time 732	2. Received by:
3. Relinquished by:	date	time	4. Received by:
5. Relinquished by:	date 12/8/08	time 7:32	6. Received by Laboratory:

☒ 8880 Interchange Drive
Houston, TX 77054 (713) 660-0901

☐ 500 Ambassador Caffery Parkway
Scott, LA 70583 (337) 237-4775

☐ 459 Hughes Drive
Traverse City, MI 49686 (231) 947-5777

EPAHO104001715

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Reslink a Schlumberger Corp.

Certificate of Analysis Number:

08110061

Report To:		Project Name:	Reslink
Reslink a Schlumberger Corp. Kathy Allford 1121 Buschong Rd. Houston Texas 77039- ph (713) 725-3588 fax:		Site:	Houston
		Site Address:	
		PO Number:	
		State:	Texas
		State Cert. No.:	T104704205-06-TX
		Date Reported:	11/14/2008

This Report Contains A Total Of 9 Pages

Excluding This Page, Chain Of Custody

And

Any Attachments

11/16/2008

Date

Test results meet all requirements of NELAC, unless specified in the narrative.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Case Narrative for:

Reslink a Schlumberger Corp.

Certificate of Analysis Number:

08110061

Report To:		Project Name:	Reslink
Reslink a Schlumberger Corp. Kathy Allford 1121 Buschong Rd. Houston Texas 77039- ph (713) 725-3588 fax:		Site:	Houston
		Site Address:	
		PO Number:	
		State:	Texas
		State Cert. No.:	T104704205-06-TX
		Date Reported:	11/14/2008

Matrix spike (MS) and matrix spike duplicate (MSD) samples are chosen and tested at random from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. Since the MS and MSD are chosen at random from an analytical batch, the sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The Laboratory Control Sample (LCS) and the Method Blank (MB) are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

Some of the percent recoveries and RPD's on the QC report for the MS/MSD may be different than the calculated recoveries and RPD's using the sample result and the MS/MSD results that appear on the report because, the actual raw result is used to perform the calculations for percent recovery and RPD.

Any other exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

Please do not hesitate to contact us if you have any questions or comments pertaining to this data report. Please reference the above Certificate of Analysis Number.

This report shall not be reproduced except in full, without the written approval of the laboratory. The reported results are only representative of the samples submitted for testing.

SPL, Inc. is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

11/16/2008

Georgia Jones — Date
Senior Project Manager

Test results meet all requirements of NELAC, unless specified in the narrative.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Reslink a Schlumberger Corp.

Certificate of Analysis Number:

08110061

Report To: Reslink a Schlumberger Corp.
Kathy Allford
1121 Buschong Rd.

Houston
Texas
77039-
ph (713) 725-3588 fax:

Fax To:

Project Name: Reslink
Site: Houston
Site Address:

PO Number:
State: Texas
State Cert. No.: T104704205-06-TX
Date Reported: 11/14/2008

Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
Wrapping Machine 4	08110061-01	Water	11/3/2008 1:30:00 PM	11/3/2008 2:20:00 PM	318912	☐
Wrapping Machine 5	08110061-02	Water	11/3/2008 1:25:00 PM	11/3/2008 2:20:00 PM	318912	☐
Wrapping Machine 8	08110061-03	Water	11/3/2008 1:35:00 PM	11/3/2008 2:20:00 PM	318912	☐

11/16/2008

Georgia Jones
Senior Project Manager

Date

Richard R. Reed
Laboratory Director

Ted Yen
Quality Assurance Officer

11/16/2008 3:33:59 PM

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: Wrapping Machine 4 **Collected:** 11/03/2008 13:30 **SPL Sample ID:** 08110061-01

Site: Houston

Analyses/Method	Result	QUAL	Rep.Limit	MCL	Dil. Factor	Date Analyzed	Analyst	Seq. #
TCLP METALS BY METHOD 6010B				**MCL**		**SW6010B**	**Units: mg/L**	
Lead	0.332		0.1	5	2	11/07/08 16:07	SC	4759249

Prep Method	Prep Date	Prep Initials	Prep Factor	Leach Method	Leachate Date	Leach Initials
SW3010A	11/04/2008 17:00	AB1	1.00	SW1311	11/04/2008	ESK

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

11/16/2008 3:34:04 PM

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: Wrapping Machine 5 **Collected:** 11/03/2008 13:25 **SPL Sample ID:** 08110061-02

Site: Houston

Analyses/Method	Result	QUAL	Rep.Limit	MCL	Dil. Factor	Date Analyzed	Analyst	Seq. #
TCLP METALS BY METHOD 6010B				**MCL**		**SW6010B**	**Units: mg/L**	
Lead	0.873		0.1	5	2	11/07/08 16:21	SC	4759252

Prep Method	Prep Date	Prep Initials	Prep Factor	Leach Method	Leachate Date	Leach Initials
SW3010A	11/04/2008 17:00	AB1	1.00	SW1311	11/04/2008	ESK

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

11/16/2008 3:34:04 PM

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: Wrapping Machine 8 **Collected:** 11/03/2008 13:35 **SPL Sample ID:** 08110061-03

Site: Houston

Analyses/Method	Result	QUAL	Rep.Limit	MCL	Dil. Factor	Date Analyzed	Analyst	Seq. #
TCLP METALS BY METHOD 6010B				**MCL**		**SW6010B**	**Units: mg/L**	
Lead	0.295		0.1	5	2	11/07/08 16:25	SC	4759253

Prep Method	Prep Date	Prep Initials	Prep Factor	Leach Method	Leachate Date	Leach Initials
SW3010A	11/04/2008 17:00	AB1	1.00	SW1311	11/04/2008	ESK

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

11/16/2008 3:34:04 PM

Quality Control Documentation

11/16/2008 3:34:04 PM

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Quality Control Report

Reslink a Schlumberger Corp.

Reslink

Analysis: TCLP Metals by Method 6010B
Method: SW6010B
WorkOrder: 08110061
Lab Batch ID: 85119

Method Blank

RunID: TJA_081107A-4759246 Units: mg/L
Analysis Date: 11/07/2008 15:53 Analyst: SC
Preparation Date: 11/04/2008 17:00 Prep By: AB1 Method SW3010A

Analyte	Result	Rep Limit
Lead	ND	0.05

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
08110061-01A	Wrapping Machine 4
08110061-02A	Wrapping Machine 5
08110061-03A	Wrapping Machine 8

Leachate Blank

RunID: TJA_081107A-4759247 Units: mg/L
Analysis Date: 11/07/2008 15:58 Analyst: SC

Leach Date: 11/04/2008 0:00 Leach By: ESK Method SW1311

Analyte	Result	Rep Limit
Lead	ND	0.1

Laboratory Control Sample (LCS)

RunID: TJA_081107A-4759248 Units: mg/L
Analysis Date: 11/07/2008 16:03 Analyst: SC
Preparation Date: 11/04/2008 17:00 Prep By: AB1 Method SW3010A

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Lead	2.000	1.885	94.23	80	120

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 08110061-01
RunID: TJA_081107A-4759250 Units: mg/L
Analysis Date: 11/07/2008 16:12 Analyst: SC
Preparation Date: 11/04/2008 17:00 Prep By: AB1 Method SW3010A

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Lead	0.3324	2	2.285	97.63	2	2.258	96.29	1.180	20	75	125

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
E - Estimated Value exceeds calibration curve
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

11/16/2008 3:34:05 PM

Sample Receipt Checklist

And

Chain of Custody

11/16/2008 3:34:05 PM

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Sample Receipt Checklist

Workorder:	**08110061**	Received By:	**RE**
Date and Time Received:	**11/3/2008 2:20:00 PM**	Carrier name:	**Client**
Temperature:	**18.5°C**	Chilled by:	**Water Ice**

1.	**Shipping container/cooler in good condition?**	Yes ☑	No ☐	Not Present ☐
2.	**Custody seals intact on shippping container/cooler?**	Yes ☐	No ☐	Not Present ☑
3.	**Custody seals intact on sample bottles?**	Yes ☐	No ☐	Not Present ☑
4.	**Chain of custody present?**	Yes ☑	No ☐	
5.	**Chain of custody signed when relinquished and received?**	Yes ☑	No ☐	
6.	**Chain of custody agrees with sample labels?**	Yes ☑	No ☐	
7.	**Samples in proper container/bottle?**	Yes ☑	No ☐	
8.	**Sample containers intact?**	Yes ☑	No ☐	
9.	**Sufficient sample volume for indicated test?**	Yes ☑	No ☐	
10.	**All samples received within holding time?**	Yes ☑	No ☐	
11.	**Container/Temp Blank temperature in compliance?**	Yes ☑	No ☐	
12.	**Water - VOA vials have zero headspace?**	Yes ☐	No ☐	VOA Vials Not Present ☑
13.	**Water - Preservation checked upon receipt (except VOA*)?**	Yes ☐	No ☐	Not Applicable ☑

***VOA Preservation Checked After Sample Analysis**

SPL Representative: _____ **Contact Date & Time:** _____

Client Name Contacted: _____

Non Conformance Issues: _____

Client Instructions: _____

11/16/2008 3:34:05 PM

SPL, Inc.

Analysis Request & Chain of Custody Record

SPL Workorder No. 08110061

318912

page 1 of 1

Client Name: Reslink, a Division of Schlumberger
Address: 1121 Buschong, Houston, Tx 77039
Phone/Fax: 281-227-9854
Client Contact: Linda Koch Email: LKoch@slb.com
Project Name/No.: Wrap Machine Sampling
Site Name: Reslink
Site Location: Houston
Invoice To: Linda Koch Ph: 281-227-9854

matrix: W=water S=soil O=oil SL=sludge X=other
bottle: P=plastic A=amber glass G=glass V=vial X=other
size: 1=1 liter 4=4oz 40=vial 8=8oz 16=16oz X=other
pres.: 1=HCl 2=HNO3 3=H2SO4 X=other

Requested Analysis

SAMPLE ID	DATE	TIME	comp	grab	matrix	bottle	size	pres.	Number of Containers	TCLP Lead								
Wrapping Machine 4	11-3-08	1:30p		x	W	P	16	2	1	x								
Wrapping Machine 5	11-3-08	1:25p		x	W	P	16	2	1	x								
Wrapping Machine 8	11-3-08	1:35p		x	W	P	16	2	1	x								

Client/Consultant Remarks:

Laboratory remarks:

Intact? ☐ Y ☐ N
Ice? ☐ Y ☐ N
Temp: 18.5C

Requested TAT

Contract ☐ 72hr ☐
24hr ☐ Standard ☒
48hr ☐
Other ☐ _____

Special Reporting Requirements Results: Fax ☐ Email ☒ PDF ☐
Standard QC ☐ Level 3 QC ☐ Level 4 QC ☐ TX TRRP ☐ LA RECAP ☐

Special Detection Limits (specify):

PM review (initial): DF

1. Relinquished by Sampler: [signature]	date 11-3-08	time 1420	2. Received by:
3. Relinquished by:	date	time	4. Received by:
5. Relinquished by:	date 11/3/08	time 1420	6. Received by Laboratory: [signature]

☒ 8880 Interchange Drive
Houston, TX 77054 (713) 660-0901

☐ 500 Ambassador Caffery Parkway
Scott, LA 70583 (337) 237-4775

☐ 459 Hughes Drive
Traverse City, MI 49686 (231) 947-5777

EPAHO104001726

3189
BJ Services

EPAHO104001727

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **2/25/2009**

Dear **Willie Allen**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3189

Expiration Date 2/25/2011

Generator: BJ Services (Aldine Westfield)
Address: 16610 Aldine Westfield, Bldg. E
Houston, TX 77032

Waste Information

Name of Waste: Non hazardous waste water
TCEQ Waste Code #: CESQ1191
Container Type:
Detailed Description of Process Generating Waste:
DN 30 parts washer (MSDS attached) used to clean
Color: varies **Odor:** none **pH:** 6-10
Physical State:
Incompatibilities: none
Safety Related Data/Special Handling:
level D

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

Attn: Morgan

CES Environmental Services, Inc.

1L

☐ **CES Environmental Services – Houston Facility**
4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

☒ **CES Environmental Services – Port Arthur Facility**
2420 S. Gulfway Drive, Port Arthur, TX 77641
Phone: (713) 676-1460 Fax: (713) 676-1676
U.S. EPA ID No: TXR000079307 ISWR No: 88585

SECTION 1: Material Producer Information

Company: BJ Services
Address: 16610 Aldine Westfield
City, State, Zip: Houston, TX
Contact: Willie Allen **Title:**
Phone No: 281-784-5700 **Fax No:** 281-7846112
24/hr Phone: 281-784-6112
U.S. EPA I.D. No: TXCESQG
State I.D. CESQG **SIC Code:**

SECTION 2: Billing Information – ☒ Same as Above

Company:
Address:
City, State, Zip:
Contact: **Title:**
Phone No: **Fax No:**

SECTION 3: General Description of the Material / Product

Name of Material / Product: Non Hazardous Waste Water
Detailed Description of Process Generating or Producing the Material / Product: DN 30 parts washer (MSDS attached) used to prewash carbon steel dilling equipment prior to phosphating.

Physical State: ☒ **Liquid** ☐ **Sludge** ☐ **Powder** ☐ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: varies **Odor:** none

Specific Gravity (water=1): 1 **Density:** 8.4 lbs/gal

Does this material contain any total phenolic compounds? ☐ **Yes** ☒ **No**

Does this material contain any para substituted phenolic compounds? ☐ **Yes** ☒ **No**

Layers: ☐ **Single-phase** ☒ **Multi-phase**

Container Type: ☐ **Drum** ☐ **Tote** ☒ **Truck** ☐ **Other (explain)**
Container Size: 1000

Frequency: ☐ **Weekly** ☐ **Monthly** ☒ **Quarterly** ☐ **Yearly**
Number of Units (containers): 1 **Other:**

CESQ11a1

Proper U.S. DOT Shipping Name: N on-RCRA, Non-DOT Regulated Wate Water

Class: Na **UN/NA:** Na **PG:** Na **RQ:** Na

Flash Point	pH	N/A	N/A	Solids
>200	6-10			5-15%

Oil&Grease	TOC	Zinc	Copper	Nickel
Namg/l	Namg/l	Namg/l	Namg/l	NAmg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	Concentration	Units
The material / product consists of the following materials	**Ranges are acceptable**	**or %**
Dn 30 Parts Washer	20-30	%
Water	49-78	%
Sludge (drilling muds, oil sludge)	1-20	%
oil	1-3	%

SECTION 5: Safety Related Data

If the handling of this material / product requires the use of special protective equipment, please explain.
Level D PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.
MSDS, Analysis

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
None

SECTION 8: Material Producer's Certification

The information contained herein is based on ☐ generator knowledge and/or ☒ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Willie Allen **Date:** 2-23-09

Printed Name/Title:
Willie Allen Production Supervisor

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Technical Manager: [illegible]

Date: 2-24-09 (Approved) Rejected

Approval Number: _____

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. Base Pricing (including freight):

Disposal $475/1000 gallon load, Trans $110/hr

2. Contamination Limits (maximum limit before surcharges apply):

over TCLP limits

3. Surcharge Pricing:

None

4. Special Testing Requirements:

PH, Phenols, TOC, metals

5. Treatment and Handling Protocol:

~~System 1 to Newpark, Top off trailer~~

Class I w/w to facility

6. Treated Wastewater Discharge Subcategory:

☒ Subcategory A ☐ Subcategory B ☐ Subcategory C

EPAHO104001731

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

7. Tests for Product Recovered/Recycled (if applicable):

Na

8. Management for Product Recovered/Recycled (if applicable):

Na

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

To: Dan Bowman
Cc: Matt Bowman, Prabhaker, Joe Camp, Clint Hopkins

Date: 2/23/09

From: Miles Root

Lab Memo: 09-024

Subject: **BJ Services Evaluation 0209-40**

A sample of waste water from BJ Services at Aldine Westfield, have been evaluated for potential processing at CES. This sample is evaluation 0209-40. This is a new source of water from BJ Services and the exact frequency is unknown, but it could be one or two loads per month. Its acquisition is highly recommended.

This sample foams like soap when shaken, so it could be from a cleaning operation. Since the TOC is low it's probably a phosphorous based detergent. The pH of this water is 10 and it has no solids. The water treats easily but forms an above average amount of dense solids that will take a longer than typical amount of settling time. We can live with this and it is not a real concern, just an observation. The TOC on the treated water is only 2454 ppm and the metals are all at an acceptable level. We should pursue the acquisition of this water as it will be a benefit to our plant processing at this time.

The table below summarizes the analytical testing.

BJ Services	
Evaluation 0209-40	
Solids, vol%	0
pH	10
Phenols, ppm	1
TOC, mg/L	2,454
Oil, vol%	0
Treatability	OK
Metals, ppm	
Ni	1.126
Zn	0.066
Cu	0.092
Cd	0.065
Cr	0.003

Inhalation	:	Remove person to fresh air. If signs/symptoms continue, get medical attention.
Skin contact	:	Wash off immediately with plenty of water for at least 15 minutes.If skin irritation persists, call a physician.
Eye contact	:	Rinse immediately with plenty of water for at least 15 minutes.Keep eye wide open while rinsing.Seek medical advice.
Ingestion	:	Rinse mouth.Drink 1 or 2 glasses of water.Never give anything by mouth to an unconscious person.Obtain medical attention.

SECTION 5. FIRE-FIGHTING MEASURES

Flash point	:	Note: does not flash
Lower explosion limit	:	Note: not applicable
Upper explosion limit	:	Note: not applicable
Suitable extinguishing media	:	Dry chemical Carbon dioxide (CO2) Foam Water
Special protective equipment for fire-fighters	:	In the event of fire, wear self-contained breathing apparatus.
Further information	:	Use water spray to cool unopened containers.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions	:	Ensure adequate ventilation. Material can create slippery conditions.
Methods for cleaning up	:	Ventilate area. Neutralize with hydrochloric acid. Clean up with inert absorbent material. Keep in suitable, closed containers for disposal. Flush with plenty of water.
Additional advice	:	Never return spills in original containers for re-use.

SECTION 7. HANDLING AND STORAGE

Handling

Handling : Use with adequate ventilation.

Storage

Requirements for storage areas and containers : Keep containers dry and tightly closed to avoid moisture absorption and contamination.
Store indoors in a cool, well-ventilated place

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Component	ACGIH TLV (TWA)	OSHA PEL (TWA)
Trade Secret Registry	N.D.	N.D.
Trade Secret Registry	N.D.	N.D.
Alkoxylated alcohol	N.D.	N.D.
Trade Secret Registry	N.D.	N.D.

Eye protection : Chemical resistant goggles must be worn.

Hand protection : Impervious gloves

Skin and body protection : Rubber or plastic apron

Respiratory protection : If the occupational exposure limits cannot be met, in exceptional cases suitable respiratory equipment should be worn only for a short period of time.

Hygiene measures : Avoid contact with skin, eyes and clothing.
Wear suitable gloves and eyeface protection.
Wear suitable protective clothing.
Wash hands before breaks and immediately after handling the product.
Provide adequate ventilation.
Do not inhale fumes.
Keep away from food and drink.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

pH : 12.7

Melting point/range	:	-12.1 °C (-12.1 °C)
Boiling point/boiling range	:	Note: no data available
Vapour pressure	:	Note: no data available
Bulk density	:	9.22 lb/gal
Water solubility	:	Note: completely soluble
Partition coefficient: n-octanol/water	:	Note: no data available
Percent of Volatile by Weight excluding water	:	Note: no data available
Relative density	:	1.11 at 29 °C (29 °C)

SECTION 10. STABILITY AND REACTIVITY

Conditions to avoid	:	Direct sources of heat.
Materials to avoid	:	Acids
Hazardous decomposition products	:	Carbon oxides

SECTION 11. TOXICOLOGICAL INFORMATION

Toxicity:	:	Mixture; Not Determined.
Acute oral toxicity		
Alkoxylated alcohol	:	LD_{50}, rat Dose: 3,200 mg/kg

SECTION 12. ECOLOGICAL INFORMATION

Not Available

SECTION 13. DISPOSAL CONSIDERATIONS

Advice on Disposal	:	Refer to all federal, provincial,state and local regulation prior to disposition of container and unused contents by reuse, recycle or disposal.

SECTION 14. TRANSPORT INFORMATION

Refer to Bill of Lading.

SECTION 15. REGULATORY INFORMATION

TSCA Status	:	All components of this material comply with US TSCA requirements.
SARA 313 Components	:	N.D.
CERCLA Reportable Quantity	:	N.D.
California Prop. 65	:	N.D
NFPA	:	200
HMIS	:	200C
WHMIS	:	D2B: Toxic Material Causing Other Toxic Effects

SECTION 16. OTHER INFORMATION

Further Information

Oakite Products, Inc. warrants that the products described herein will conform with its published specifications. The products supplied by Oakite and information related to them are intended for use by buyers having necessary industrial skill and knowledge. Buyers should undertake sufficient verification and testing to determine the suitability of the Oakite materials for their own particular purpose. Since buyer's conditions of use of products are beyond Oakite's control, Oakite does not warrant any recommendations and information for the use of such products. OAKITE DISCLAIMS ALL [illegible] MERCHANTABILITY AND FITNESS FOR ANY PARTICULAR PURPOSE IN CONNECTION WITH THE USE OF ITS PRODUCTS.

EPAHO104001737

Inhalation	:	Remove to fresh air If symptoms persist, call a physician If breathing is irregular or stopped, administer artificial respiration
Skin contact	:	Wash off immediately with plenty of water for at least 15 minutesTake off contaminated clothing and shoes immediatelyGet medical attention immediately if irritation develops and persists
Eye contact	:	Rinse immediately with plenty of water for at least 15 minutesKeep eye wide open while rinsingGet medical attention immediately
Ingestion	:	Rinse mouthDrink 1 or 2 glasses of waterNever give anything by mouth to an unconscious personGet medical attention immediately

SECTION 5. FIRE-FIGHTING MEASURES

Flash point	:	Note: does not flash
Lower explosion limit	:	Note: Not applicable.
Upper explosion limit	:	Note: Not applicable.
Suitable extinguishing media	:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special protective equipment for fire-fighters	:	In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions	:	Use personal protective equipment. Ventilate the area.
Methods for cleaning up	:	Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Flush with plenty of water.
Additional advice	:	Never return spills in original containers for re-use.

SECTION 7. HANDLING AND STORAGE

Storage

Requirements for storage areas and containers : Keep containers tightly closed to avoid contamination
Store indoors in a cool, well-ventilated place

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Component	ACGIH TLV (TWA)	OSHA PEL (TWA)
Phosphoric acid	1 mg/m3 N.D.	1 mg/m3 N.D.
Nickel nitrate	0.1 mg/m3 soluble compounds as NIN.D.	1 mg/m3 soluble compounds as NIN.D.
Zinc phosphate	N.D.	N.D.
Zinc nitrate	N.D.	N.D.

Eye protection : Chemical resistant goggles must be worn.

Hand protection : impervious gloves

Skin and body protection : chemical resistant apron

Respiratory protection : If the occupational exposure limits cannot be met, suitable respiratory equipment should be worn .

Hygiene measures : Avoid contact with skin, eyes and clothing
Wear suitable gloves and eye/face protection
Wear suitable protective clothing
Wash hands before breaks and immediately after handling the product
Provide adequate ventilation
Do not inhale fumes.
Keep away from food and drink

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

pH : 1.0

Melting point/range : -12.1 °C (-12.1 °C)

Boiling point/range : 100 °C

Vapour pressure : Note: no data available

Bulk density : 10.39 lb/gal

Water solubility : Note: completely soluble

Partition coefficient (n-octanol/water)	:	Note: no data available
Percent of Volatile by Weight excluding water	:	Note: no data available
Relative density	:	1.25

SECTION 10. STABILITY AND REACTIVITY

Materials to avoid	:	bases Warning! Do not use together with other products; may release dangerous gases (chlorine).
Hazardous decomposition products	:	Nitrogen Oxides carbon oxides oxides of phosphorus Hydrogen when reacts with certain metal.

SECTION 11. TOXICOLOGICAL INFORMATION

Toxicity:	:	Mixture; Not Determined.
Acute oral toxicity		
Phosphoric acid	:	LD50, rat Dose: 1,530 mg/kg
Zinc phosphate	:	LD50, rat Dose: 1,990 mg/kg
Acute toxicity (other route)		
Nickel nitrate	:	LDlo, mouse, intravenous Dose: 9 mg/kg

SECTION 12. ECOLOGICAL INFORMATION

Not Available

SECTION 13. DISPOSAL CONSIDERATIONS

Advice on Disposal	:	Refer to all federal, provincial,state and local regulation prior to disposition of container and unused contents by reuse, recycle or disposal.

SECTION 14. TRANSPORT INFORMATION

Refer to Bill of Lading.

SECTION 15. REGULATORY INFORMATION

TSCA Status	:	All components of this material comply with US TSCA requirements.	
SARA 313 Components	:	Nickel nitrate	CAS-No. 13138-45-9
	:	Zinc phosphate	CAS-No. 13847-22-8
	:	Zinc nitrate	CAS-No. 7779-88-6
SARA 313 Components	:	N.D.	
CERCLA Reportable Quantity	:	Phosphoric acid	5,000 Pounds
	:	Nickel nitrate	100 Pounds
	:	Zinc nitrate	1,000 Pounds
California Prop. 65	:	N.D	
NFPA	:	2 0 0	
HMIS	:	2 0 0 C	
WHMIS	:	D2A: Very Toxic Material Causing Other Toxic Effects E: Corrosive Material	

SECTION 16. OTHER INFORMATION

Further Information

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Protech® 1999LC

Water-based rust preventative, provides superior corrosion protection, easy to apply, provides a clear dry-to-touch film

PRIMARY APPLICATION

Protech® 1999LC is a liquid, corrosion inhibitor for ferrous metals. This water-based product is a significant advancement in anti-corrosion technology that replaces solvent and oil-based corrosion preventives. Once applied, the clear protective coating will dry-to-touch within 30 minutes at ambient conditions.

CHEMICAL CHARACTERISTICS

chemical composition	corrosion inhibitor
physical form	liquid
odor	bland
bulk density	8.70 lbs/gal
color of concentrate	clear amber
pH:..(10 %)	8.1

APPLICATION PROCEDURE

Protech 1999LC can be applied to ferrous metals by dip, spray, or flow coat. The concentration of Protech 1999LC to be used depends on the length of time corrosion protection is required.

Short-Term Protection	Up to 3 months	5-10%Medium
Term Protection	3-6 months	10-15%
Long-Term Protection	6-12 months	15-20%

Your Chemetall Americas representative will help you establish the optimum operating criteria for you operation.

SOLUTION CONTROL

Protech 1999LC is controlled by total alkalinity using Gardotest Procedure 210.
Sample Size – 5 ml.
Titrant – 0.1N HCl
Conversion Factor (%) – 1.19

Concentration is also determined by using Refractometer.
Conversion Factor (%) – 2.5

Equipment

Automatic Control: The Chemetall Americas Chemical Metering Pump can be used to automatically maintain the make up chemical requirement of this product. If pre-dilution is required, the Chemetall Americas water driven Proportioners can be used to automatically feed the premixed solution of this product to the process tank. Please contact the Chemetall Americas Process Equipment and Engineering Department for specific recommendations.

Chemetall

Compatible materials of construction for Protech 1999LC include mild steel, stainless steel, and most elastomers.

NOTES ON USE

SAFETY AND HANDLING

Prior to handling and use of any of the materials referenced in this document, the Material Safety Data Sheets should be read and understood by all personnel in contact with these materials.

KEEP OUT OF REACH OF CHILDREN

STORAGE

Dry indoor storage at temperatures between 40°F and 100°F (4.4°C and 37.8°C) is recommended, away from any incompatible materials referenced in the Material Safety Data Sheets. All containers should be tightly closed when not in use.

DISPOSAL

Any disposal of the materials referenced in this document should be in accordance with all applicable federal, state, providential and local regulations. The process solution can contain components other than those present in the materials as supplied. Analysis of process solutions may be required prior to disposal.

Chemetall

ISO 9001
FM 93653

Corporate Headquarters and Eastern Branch (800) 526-4473 • Central Branch (Midwest) (877) 941-3800
Western Branch (800) 331-1197 • Oakite Canada Limited (800) 668-4318
Chemetall Mexicana 011 52 55 5656 1490 • Chemetall do Brasil Ltda. (5511) 4066 8800
Website: www.oakite.com • E-mail: oakite.products@chemetall.com • Shop online at www.oakiestore.com

F17721 – 10/2008
Printed in the USA

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name	:	PROTECH® 1999LC
MSDS Number	:	REL_76180
Company	:	Chemetall US, Inc. 675 Central Avenue New Providence, NJ 07974
Telephone	:	+18005264473
Telefax	:	+19084644658
Emergency telephone no	:	CHEMTREC - 800-424-9300

SECTION 2. HAZARDOUS COMPONENTS INFORMATION

Component	CAS-No.	Weight %
Triethanolamine	102-71-6	1.00 - 5.00
Diethanolamine	111-42-2	1.00 - 5.00

Unidentified ingredients are considered not hazardous under Federal Hazard Communication Standard (29CFR 1910.1200).

SECTION 3. HAZARDS IDENTIFICATION

Emergency Overview

Colour	:	Light amber
Odour	:	Bland
Hazard Summary	:	Irritating to eyes.Irritating to skin.Harmful by inhalation and if swallowed.

Route(s) of Entry :	Inhalation	Skin	Ingestion
	yes	yes	yes

Carcinogenicity:

NTP	No substance in this product is listed by NTP as a carcinogen
IARC	No substance in this product is listed by IARC as a carcinogen
OSHA	No substance in this product is regulated by OSHA as a carcinogen

SECTION 4. FIRST AID MEASURES

Inhalation	:	Remove person to fresh air. If signs/symptoms continue, get medical attention.

Skin contact	:	Flush skin with large amounts of water. If irritation develops and persists, get medical attention.
Eye contact	:	Rinse immediately with plenty of water for at least 15 minutesKeep eye wide open while rinsingSeek medical advice.
Ingestion	:	Rinse mouthDrink plenty of water.Obtain medical attention.

SECTION 5. FIRE-FIGHTING MEASURES

Flash point	:	93.3 °C (93.3 °C)
Lower explosion limit	:	Note: no data available
Upper explosion limit	:	Note: no data available
Suitable extinguishing media	:	dry chemical carbon dioxide (CO2) foam water
Special protective equipment for fire-fighters	:	In the event of fire, wear self-contained breathing apparatus.
Further information	:	Water mist may be used to cool closed containers.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions	:	Ensure adequate ventilation.
Methods for cleaning up	:	Ventilate area. Clean up with inert absorbant material. Keep in suitable, closed containers for disposal. Flush with plenty of water.
Additional advice	:	Never return spills in original containers for re-use.

SECTION 7. HANDLING AND STORAGE

Handling

Handling	:	Use with adequate ventilation.

Storage

Requirements for storage areas and containers	:	Keep containers tightly closed to avoid contamination Store indoors in a cool, well-ventilated place

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Component	ACGIH TLV (TWA)	OSHA PEL (TWA)
Triethanolamine	5 mg/m3 N.D.	N.D.
Diethanolamine	2 mg/m3 N.D.	N.D.

Eye protection	:	Chemical resistant goggles must be worn.
Hand protection	:	impervious gloves
Skin and body protection	:	rubber or plastic apron
Respiratory protection	:	If the occupational exposure limits cannot be met, suitable respiratory equipment should be worn .
Hygiene measures	:	Avoid contact with skin, eyes and clothing Wear suitable gloves and eye/face protection Wear suitable protective clothing Wash hands before breaks and immediately after handling the product Provide adequate ventilation Do not inhale fumes. Keep away from food and drink

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

pH	:	8.1 at 103.6 g/l
Melting point/range	:	Note: no data available
Boiling point/range	:	100 °C
Vapour pressure	:	26.6 hPa
Bulk density	:	8.70 lb/gal
Water solubility	:	Note: completely soluble
Partition coefficient (n-octanol/water)	:	Note: no data available

Percent of Volatile by Weight excluding water	:	11.6
Relative density	:	1.045
Evaporation rate	:	Note: (Butyl Acetate=1) Less than 1

SECTION 10. STABILITY AND REACTIVITY

Conditions to avoid	:	Direct sources of heat.
Materials to avoid	:	strong acids, ~~Avoid contact with Nitrous Acid~~ strong oxidizing agents
Hazardous decomposition products	:	carbon oxides nitrogen oxides (NOx)

SECTION 11. TOXICOLOGICAL INFORMATION

Toxicity:	:	Mixture; Not Determined.
Acute oral toxicity		
Triethanolamine	:	LD50, rat Dose: 8,000 mg/kg
Diethanolamine	:	LD50, rat Dose: 710 mg/kg

SECTION 12. ECOLOGICAL INFORMATION

Not Available

SECTION 13. DISPOSAL CONSIDERATIONS

Advice on Disposal	:	Refer to all federal, provincial,state and local regulation prior to disposition of container and unused contents by reuse, recycle or disposal.

SECTION 14. TRANSPORT INFORMATION

Refer to Bill of Lading.

SECTION 15. REGULATORY INFORMATION

TSCA Status	:	All components of this material comply with US TSCA requirements.	
SARA 313 Components	:	Diethanolamine	CAS-No. 111-42-2
SARA 313 Components	:	N.D.	
CERCLA Reportable Quantity	:	Diethanolamine	100 Pounds
California Prop. 65	:	N.D	
NFPA	:	2 1 0	
HMIS	:	2 1 0 C	
WHMIS	:	D2B: Toxic Material Causing Other Toxic Effects	

SECTION 16. OTHER INFORMATION

Further Information

Oakite Products, Inc. warrants that the products described herein will conform with its published specifications. The products supplied by Oakite and information related to them are intended for use by buyers having necessary industrial skill and knowledge. Buyers should undertake sufficient verification and testing to determine the suitability of the Oakite materials for their own particular purpose. Since buyer's conditions of use of products are beyond Oakite's control, Oakite does not warrant any recommendations and information for the use of such products. OAKITE DISCLAIMS ALL OTHER WARRANTIES INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR ANY PARTICULAR PURPOSE IN CONNECTION WITH THE USE OF ITS PRODUCTS.

Willie,

Here is the information I need:

Facility Information
Name - BJ Services
Address - 16610 Aldine Westfield
Facility phone number 281-784-5700
Facility fax number 281- 784-6112
Contact Name - Willie Allen
Job contact name and number - Willie Allen 281-784-6109
Let me know when this can be done so we may prepare.

Thanks.

TCEQ ID Number: Registration number with the TCEQ (5 digit)
Waste Code number from your TCEQ notice of registration for which you have assigned for this waste
Waste Analysis: Because this is surface preparation for phosphate operations-the TCEQ will require at least a TCLP Metals/PH/and TCLP Benzene (because of the presence of petroleum products). I would strongly recommend you have this done- We can do it and send to a lab for $425.00 and it will be good for 2 years unless you make a change in your process.
MSDS sheets of the product used: DN30 and any other product in the process

The ball park cost for analysis ($425), labor, transportation, and equipment ($1,500) and disposal ($475). Compliance and waste taxes ($25). Basically, $2425 for the first load because of analysis, then $2000 for the following loads.

Dan BJ Services-DN 30.doc

Katie
713-453-6060

3190
Shawcor Pipe

EPAHO104001751

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **2/26/2009**

Dear **Rick Cheatheam**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3190

Expiration Date 2/26/2011

Generator: Shawcor Pipe Protection @ XXCell
Address: 7306 South Lake Houston Pwy.
Houston, TX 77049

Waste Information

Name of Waste: Non-hazardous Waste Araldite GY 507
TCEQ Waste Code #: 00072101
Container Type:
Detailed Description of Process Generating Waste:
unused and out of date material
Color: varies **Odor:** na **pH:** 7-11
Physical State:
Incompatibilities: strong oxidizers
Safety Related Data/Special Handling:
level D PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

DB/MM
OL

CES Environmental Services, Inc.

☒ **CES Environmental Services – Houston Facility**
4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

☒ **CES Environmental Services – Port Arthur Facility**
2420 S. Gulfway Drive, Port Arthur, TX 77641
Phone: (713) 676-1460 Fax: (713) 676-1676
U.S. EPA ID No: TXR000079307 ISWR No: 88585

SECTION 1: Material Producer Information

Company:	XXCell/ Shawcor Pipe Protection		
Address:	7306 South Lake Houston Parkway		
City, State, Zip:	Houston, TX 77049		
Contact:	Rick Cheatheam	**Title:**	
Phone No:	281-997-5608	**Fax No:**	281-412-5874
24/hr Phone:	713-992-8547		
U.S. EPA I.D. No:	TXR000079125		
State I.D.	88504	**SIC Code:**	na

SECTION 2: Billing Information – ☐ Same as Above

Company:	Shawcor Pipe Protection, LLC		
Address:	4502 Knapp Rd		
City, State, Zip:	Pearland, TX 77581		
Contact:	Same as Above	**Title:**	
Phone No:		**Fax No:**	

SECTION 3: General Description of the Material / Product

Name of Material / Product: Non-Hazardous Waste Araldite GY 507
Detailed Description of Process Generating or Producing the Material / Product: Unused, out-of-date Araldite GY 507.

Physical State: ☒ **Liquid** ☐ **Sludge** ☐ **Powder** ☐ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: Varies **Odor:** ____

Specific Gravity (water=1): 1.14 **Density:** 9.5 lbs/gal

Does this material contain any total phenolic compounds? ☒ **Yes** ☐ **No**

Does this material contain any para substituted phenolic compounds? ☒ **Yes** ☐ **No**

Layers: ☒ **Single-phase** ☐ **Multi-phase**

Container Type: ☒ **Drum** ☐ **Tote** ☐ **Truck** ☐ **Other (explain)**
Container Size: 55 gal ____ ____ ____

Frequency: ☐ **Weekly** ☐ **Monthly** ☒ **Quarterly** ☐ **Yearly**

Proper U.S. DOT Shipping Name: 00072101 ~~00062102~~ Non-RCRA, Non DOT Regulated ~~Waste Araldite 507~~ material

Class: Na **UN/NA:** Na **PG:** Na **RQ:** Na

Flash Point	pH	N/A	N/A	Solids
>200	7-11			0-5%

Oil&Grease	TOC	Zinc	Copper	Nickel
0mg/l	Namg/l	Namg/l	Namg/l	Namg/l

SECTION 4: Physical and Chemical Data

[redacted]	[redacted]	[redacted]
The material / product consists of the following materials	**Ranges are acceptable**	**or %**
Araldite GY 507	100	%

SECTION 5: Safety Related Data

If the handling of this material / product requires the use of special protective equipment, please explain.
Level D PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.
MSDS sheets on last contained

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
None

SECTION 8: Material Producer's Certification

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Richard A Cheatham **Date:** 2/25/08

Printed Name/Title: RICHARD A CHEATHEAM / HSE SUPERVISOR

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Technical Manager: [signature]

Date: 2-26-09 Approved Rejected

Approval Number: HOU-3190

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pricing (including freight):**

$75/dm

2. **Contamination Limits (maximum limit before surcharges apply):**

Non conforming to profile

3. **Surcharge Pricing:**

None

4. **Special Testing Requirements:**

None-Conforming

5. **Treatment and Handling Protocol:**

Send out as Class 1 to landfill

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

EPAHO104001755

7. **Tests for Product Recovered/Recycled (if applicable):**

None

8. **Management for Product Recovered/Recycled (if applicable);**

None

Huntsman Advanced Materials Americas Inc.

281 Fields Lane
Brewster, NY 10509

8am to 4:30pm Phone: (914) 785-3000
24-Hour Health/Environmental Emergency Phone: 1-888-354-3323

HUNTSMAN

Effective Date: 1/29/04 **Material Safety Data Sheet** MSDS No: 8801

Health	2
Flammability	1
Reactivity	0
Protective Equipment	X

HMIS RATING

1. PRODUCT IDENTIFICATION

Trade Name: Araldite GY 507

Chemical Family: Epoxide

Intended Use or Product Type: Modified Liquid Epoxy Resin

2. COMPOSITION / INFORMATION ON INGREDIENTS

OSHA	CAS No.	CHEMICAL IDENTITY	EXPOSURE LIMITS					CARCINOGEN STATUS		
			ACGIH		OSHA		MFR.	IARC	NTP	OSHA
			TWA	STEL	PEL	STEL				
*	2210-79-9 Common Name:	Oxirane, [(2-methylphenoxy)methyl]- o-Cresol Glycidyl Ether	NE	NE	NE	NE	PIEL 1 mg/m3	NR	NR	NR
*	25068-38-6 Common Name:	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane Bisphenol A Diglycidyl Ether Polymer	NE	NE	NE	NE	NE	NR	NR	NR

NE = Not Established NR = Not Reviewed * = OSHA Hazardous Ingredient

3. HAZARDS IDENTIFICATION

Emergency Overview: Warning! Can cause skin and eye irritation. Can cause allergic reactions.

Primary Route(s) of Entry: Dermal, inhalation.

4. FIRST AID MEASURES

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Ingestion: If swallowed, immediately give at least 3-4 glasses of water, but do not induce vomiting. If vomiting occurs, give fluids again. Do not give anything by mouth to an unconscious or convulsing person. Get immediate medical attention. Have physician determine whether vomiting or stomach evacuation is necessary.

Skin: For skin contact, wash with large amounts of running water, and soap, if available, for 15 minutes. Remove contaminated clothing and shoes. Get immediate medical attention. Discard or decontaminate clothing before re-use and destroy contaminated shoes.

Inhalation: If inhaled, remove from area to fresh air. If not breathing, give artificial respiration. Get immediate medical attention. If breathing is difficult, transport to medical care and, if available, give supplemental oxygen.

Eyes: For eye contact, immediately flush eyes for at least 15 minutes with running water. Hold eyelids apart to ensure rinsing of the entire eye surface and lids with water. Get immediate medical attention.

Overexposure Effects: Overexposure to this product can cause severe allergic skin reactions and moderate to severe skin irritation although it is only slightly irritating to the eye. May have effects on male reproduction.

Medical Conditions Aggravated by Exposure: Allergy, eczema or skin conditions.

Additional Information: Promptly remove wet contaminated non-impervious clothing. Wash before reuse.

5. FIRE FIGHTING MEASURES

Flash Point:	> 200°F (> 93 °C)
Flash Point Method Used:	Closed Cup

Fire Fighting Extinguishing Media: Carbon dioxide, foam, dry chemical, water spray.

Fire Fighting Equipment: Use self-contained breathing apparatus.

Fire and Explosion Hazards: Decomposition and combustion products may be toxic.

6. ACCIDENTAL RELEASE MEASURES

Accidental Release Measures: Absorb onto sand or other absorbent material. Shovel into closable container for disposal. Wear protective equipment specified below. Flush contaminated area with water.

7. HANDLING AND STORAGE

Precautions: Do not get in eyes, on skin or clothing. Do not breathe vapor, mist or spray. Use only with good ventilation. Individuals should wash thoroughly after handling. For industrial use only.

Storage Information: Store in sealed containers. Keep container closed to prevent moisture absorption and contamination.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal Protective Equipment: Wear protective equipment to avoid personal contact.

EPAHO104001758

Skin Protection: Wear impervious gloves.

Respiratory Protection: Use NIOSH approved respirator suitable for organic vapors, if required.

Eye Protection: Wear splash-proof chemical goggles.

Engineering Controls: Good general mechanical ventilation recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Color:	Clear
Physical State:	Liquid
Solubility in Water:	Negligible
Specific Gravity:	1.14 at 25°C (77 °F)

Percent Volatile: Nil.

10. STABILITY AND REACTIVITY

Conditions to Avoid: Avoid strong acids or bases in bulk and elevated temperatures.

Stability: Stable.

Incompatibility: Strong oxidizing agents.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, aldehydes.

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Oral Effects (LD50): (Rat) > 3500 mg/kg (components).

Acute Dermal Toxicity (LD50): (Rat) > 2100 mg/kg (components).

Inhalation Toxicity (LC50): (Rat) 6.1 mg/l air for a 4-hr exposure, (component).

Sensitization: (Human) Sensitizer.

Skin Irritation: (Rabbit) Moderate irritation.

Eye Irritation: (Rabbit) Mild irritation.

Teratogenicity:
Test results for Diglycidyl Ether of Bisphenol A:

(Rat, Rabbit) No adverse effects on embryonic or fetal development were observed.

Mutagenicity:
Test results for Diglycidyl Ether of Bisphenol A:

EPAHO104001759

Ames Tests: both positive and negative results
Hamster Bone Marrow Cytogenetics (in vivo): negative
Mouse Spermatocytes Cytogenetics (in vivo): negative
Micronucleus Test (in vivo): negative
Mouse Dominant Lethal Test: negative
Alkylation of DNA: positive
Human Mononucleated WBC (in vitro): negative
Host Mediated Assay: negative

Sub-Chronic:
Test results for o-Cresol Glycidyl Ether:

In a 21-day inhalation study with rats exposed to concentrations of 53, 152 and 305 mg/m3 for 6-hr/day, 5-day/wk, the highest exposure concentration proved fatal to the majority of the animals and 5 of 10 males showed reduced spermatogenesis. Acute effects were also seen in those animals with hemorrhaging in the myocardium, lungs, liver, kidney, adrenal, ovaries and the brain. At the mid dose, similar acute effects were also seen with 1 of 10 males showing some reductions in spermatogenesis. The lowest concentration used (53 mg/m3) still had a significant reduction in food consumption and body weight gain compared to controls.

Test results for Diglycidyl Ether of Bisphenol A:

(Rat) No observable effect at highest level studied (1000 mg/kg/day for 28 days).

Chronic Skin Exposure Effects:
Test results for Diglycidyl Ether of Bisphenol A:

2-Year Dermal Study in Mice: No treatment related effects
2-Year Skin Painting Studies:
A) C3HF/BD Mice: No increased tumor incidence
B) C57BL/6BD Mice: Slight increase in epidermal localized carcinomas at high dose
C) C3H Mice: No tumors

Mice receiving skin applications of diglycidyl ether of bisphenol A or essentially identical resins for two years have yielded very limited evidence of weak carcinogenicity. The published report on this study concludes that this resin product "is not a systemic carcinogen when applied to the skin of CF-1 mice" and the tumor data "was of no biological importance". Based on all available data, IARC (International Agency for Research on Cancer) has concluded in 1988 that DGEBPA is not classified as a carcinogen.

12. ECOLOGICAL INFORMATION

Biodegradability: (Modified Sturm method): ~12%.

Fish Toxicity:
Rainbow Trout (96 hr.): LC50 1.5 mg/l.
Zebra Fish (96 hr.): LC50 2.4 mg/l.

Invertebrate Toxicity: Daphnia Toxicity (24 hr.): EC50 3.6 mg/l.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose in accordance with federal, state and local regulations.

14. TRANSPORT INFORMATION

EPAHO104001760

Department of Transportation: Not regulated.

15. REGULATORY INFORMATION

US Federal Regulations:

Occupational Safety and Health Act (OSHA): This Material Safety Data Sheet (MSDS) has been prepared in compliance with the federal OSHA Hazard Communication Standard 29 CFR 1910.1200. This product is considered to be a hazardous chemical under that standard.

Resource Conservation and Recovery Act (RCRA): Not a hazardous waste under RCRA (40 CFR 261).

SARA Title III: Section 304 - CERCLA: Not listed.

SARA Title III: Section 313 Toxic Chemical List (TCL): This product does not contain any chemicals for routine annual toxic chemical release reporting under Section 313 (40 CFR 372).

TSCA Section 8(b) - Inventory Status: Chemical components listed on TSCA Inventory.

TSCA Section 12(b) - Export Notification: This product contains chemical(s) which is (are) regulated by TSCA 12(b) Regulation and it is required that proper export notification shall be sent to EPA prior to shipping out of the United States of America.

CAS Number: 1675-54-3
Chemical Name: Bisphenol A Diglycidyl Ether

International Regulations:

Canadian Inventory Status: All components included on the Domestic Substances List (DSL).

State Regulations:

New Jersey Right-to-Know: The following is required composition information:

CAS Number: 25068-38-6
Chemical Name: Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane

CAS Number: 2210-79-9
Chemical Name: Oxirane, [(2-methylphenoxy)methyl]-

Pennsylvania Right-to-Know: The following is required composition information:

CAS Number: 25068-38-6
Chemical Name: Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane
Common Name: Bisphenol A Epoxy Resin
Comment: Not on Pennsylvania Hazardous Substance List.

CAS Number: 2210-79-9
Chemical Name: Oxirane, [(2-methylphenoxy)methyl]-
Common Name: o-Cresyl Glycidyl Ether
Comment: Not on Pennsylvania Hazardous Substance List.

EPAHO104001761

16. OTHER INFORMATION

MSDS No:	8801
Prepared By:	M. Slattery
Approved By:	James Mumby

Other Information: For further information, contact Product Safety personnel at (914) 785-3000.

Disclaimer: The following supercedes Buyer's documents. SELLER MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, INCLUDING OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. No statements herein are to be construed as inducements to infringe any relevant patent. Under no circumstances shall Seller be liable for incidental, consequential or indirect damages for alleged negligence, breach of warranty, strict liability, tort or contract arising in connection with the product(s). Buyer's sole remedy and Seller's sole liability for any claims shall be Buyer's purchase price. Data and results are based on controlled or lab work and must be confirmed by Buyer by testing for its intended conditions of use. The product(s) has not been tested for, and is therefore not recommended for, uses for which prolonged contact with mucous membranes, abraded skin, or blood is intended; or for uses for which implantation within the human body is intended.

EPAHO104001762

3191
NOV Drilling

EPAHQ104001763

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/2/2009**

Dear **Christy Exely**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3191

Expiration Date 3/2/2011

Generator: NOV Drilling Equipment (West Little York)
Address: 12950 W. Little York
Houston, TX 77041

Waste Information

Name of Waste: Plastisizer
TCEQ Waste Code #: 00184091
Container Type:
Detailed Description of Process Generating Waste:
Product drums containing residual product. Drums will only be 5-30% full.
Color: Varies **Odor:** Hydrocarbon **pH:** 4-10
Physical State:
Incompatibilities: See MSDSs
Safety Related Data/Special Handling:
Level D

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

Profile #3191

GB
JR

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility 4904 Griggs Road, Houston, TX 77021 Phone (713) 676-1460 Fax: (713) 676-1460 U.S. EPA ID Number: TXD008950461 ISWR Number: 30900 TCEQ Industrial Solid Waste Permit Number: 30948	☐ CES Environmental Services - Port Arthur Facility 2420 S. Gulfway Dr., Port Arthur, TX 77641 Phone (713) 676-1460 Fax: (713) 676-1460 U.S. EPA ID Number: TXR000079307 ISWR Number: 88585

SECTION 1: Generator Information

Company: NOV
Address: 12950 W. Little York
City: Houston **State:** TX **Zip:** 77041
Contact: Christy Exely **Title:** EH&S Manager
Phone Number: (713) 856-4145 **Fax Number:** 512-340-5455
24/hr Phone Number: 713-800-7913
US EPA ID No: TXCESQG
State ID No: CESQG **SIC Code:**

SECTION 2: Billing Information - ☑ **Same as Above**

Company:
Address:
City: **State:** **Zip:**
Contact: **Title:**
Phone Number: **Fax Number:**

SECTION 3: General Description of the Waste

Name of Waste: Plastisizer
Detailed Description of Process Generating Waste:

Product drums containing residual product. Drums will only by 5-30% full

Physical State: ☑ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color: varies **Odor:** hydrocarbon

Specific Gravity (water=1): .7-1.02 **Density:** 5.8-8.5 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ Single-phase ☐ Multi-phase

Container Type: ☑ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☑ Monthly ☐ Yearly ☐ One-Time
Quantity: 5-Jan

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: CESQ6061

Proper US DOT Shipping Name: Non-RCRA, Non-DOT Regulated Material (plastisizer)

Class: _____ UN/NA: _____ PG : _____ RQ: _____

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>140		4-10		BRL	mg/l	BRL	mg/l	0-1	%
Oil & Grease		TOC		Zinc		Copper		Nickel	
>20000	mg/l	N/A	mg/l	N/A	mg/l	N/A	mg/l	N/A	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Tarene 14	0-100	%
Culmar P-10, Cumar P-25, Cumar R-27, 10 Resins	0-100	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Standard PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. MSDSs

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

See MSDSs

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	Not Regulated
TCLP Volatiles:	Not Regulated
TCLP Semi-Volatiles:	Not Regulated
Reactivity:	Non-Reactive
Corrosivity:	Non-Corrosive
Ignitability:	>140 degrees

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory*: *Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory*: *Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory*: *Subpart C

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ *Still bottoms*
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☐ generator knowledge and/or ☐ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Christy Exely **Date:** 3.2.09

Printed Name/Title: Christy Exely

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: [signature]
Date: 3-2-09 ☐ Approved ☐ Rejected
Approval Number:

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$30 / DM

2. Contamination Limit (maximum limit before surchages apply):

3. Surcharge Pricing:

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

Process through shredder and put into Class I Sludge box

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

NOV WLY

HCL #247

NEVILLE

NEVILLE CHEMICAL COMPANY
Neville Island, Pittsburgh, Pennsylvania 15225
412/331-4200 FAX: 412/777-4234

NH

MATERIAL SAFETY DATA

1. PRODUCT INFORMATION

Date: January 20, 1999

Tradename: CUMAR® P-10, CUMAR P-25, & CUMAR R-27,10 Resins

24 HOUR EMERGENCY ASSISTANCE
Neville Chemical Company 412-331-4200
CHEMTREC 800-424-9300

Chemical Family: Coumarone Indene/Hydrocarbon Resin

Chemical Name & Synonyms: Coumarone Indene/Hydrocarbon Resin

CAS No.: NA/Mixture

HMIS Hazard Rating

Least	0	Health	0
Slight	1	Flammable	1
Moderate	2	Reactivity	0
High	3		
Extreme	4	Personal Protection	B

2. HAZARDOUS INGREDIENTS

Principal Hazardous Components (Chemical and Common Names)

This product is not hazardous as defined in CFR 1910.1200, and under the provisions of Title III, Sections 311/312 of the Superfund Amendments and Reauthorization Act.

3. PHYSICAL DATA

Softening Point, R&B (°C):	5-30	Percent Volatiles (by Weight)	NA
Specific Gravity	1.02 - 1.09 @25°C (Approx.)	Evaporation Rate (Water=1)	<1
Boiling Point (°F/°C)	NA		
Solubility in Water	Negligible	Vapor Pressure (mm Hg.)	NDA
Appearance and Odor	Amber colored semi-solid, Typical Cl odor	Vapor Density (Air=1)	NDA

4. FIRE AND EXPLOSION HAZARD DATA

Flash Point >300°F (COC)

Flammable Limits Lel NDA Uel NDA

Extinguishing Media: Water spray, dry chemical, CO_2, foam

Autoignition Temperature NDA

Special Fire Fighting Procedures: Do not enter confined fire space without proper protective equipment, including a NIOSH approved SCBA. Use water spray to cool fire exposed surfaces and to protect personnel.

Unusual Fire and Explosion Hazards: None

(Continued on Reverse Side)

NA = Not Applicable
NDA = No Data Available
NE = None Established

5. HEALTH HAZARD DATA

Threshold Limit Value NE, Recommend 5 mg/m³ for mineral oil mist (if used under misting conditions)
Signs and Symptoms of Exposure:
1. **Acute Overexposure:** Not likely to cause any significant acute toxicological effects.
2. **Chronic Overexposure:** No chronic effects known.

Medical Conditions Generally Aggravated by Exposure: May cause skin, eye, and mucous membrane irritation.

Primary Routes of Entry: Skin, eyes: inhalation of oil mist if the product is aerosoled.

Eye Irritation: May cause irritation
Skin Irritation: May cause skin irritation

Chemical Listed as Carcinogen or Potential Carcinogen
National Toxicology Program: Yes___ No_X__ **IARC Monographs:** Yes___ No_X__ **OSHA:** Yes___ No_X__
OSHA Permissible Exposure Limit: NE, Recommend 5 mg/m³ for mineral oil mist
ACGIH Threshold Limit Value: NE, Recommend 5 mg/m³ for mineral oil mist, STEL 10 mg/m³

Emergency and First Aid Procedures:
1. **Inhalation:** Remove victim to fresh air and provide oxygen if breathing is difficult.
2. **Eyes:** Flush eyes with copious quantities of water while holding eye lids open. If irritation persists, consult a physician.
3. **Skin:** Wash skin with soap and water. Use emollient skin creams. If irritation persists, consult a physician.
4. **Ingestion:** Do not induce vomiting. Get medical attention.

6. REACTIVITY DATA

Stability: Unstable___ Stable_X__ **Hazardous Polymerization:** May Occur___ Will not Occur_X__
Conditions to avoid: Open flames, high temperatures, electric arc.

Incompatibility (Materials to Avoid) Oxidizers **Hazardous Decomposition Products** CO CO_2

7. SPILL OR LEAK PROCEDURES

Steps to be taken in case materials is released or spilled: Vapors can spread and result in flash fire. Eliminate sources of ignition. Recover and reclaim large quantities. Collect small amounts with suitable absorbent and place in sealable containers. Keep out of sewers and other public water systems.

Waste Disposal: Reclaim or dispose of in accordance with local, state and federal regulations.

8. SPECIAL PROTECTION INFORMATION

Respiratory Protection: NIOSH approved organic vapor respirator with mist prefilter is recommended if TLV is exceeded.
Ventilation: Provide explosion proof ventilation as required to control vapor levels.
Protective Gloves: Rubber, neoprene
Eye Protection: Wear safety glasses or chemical goggles to prevent eye contact
Other Equipment: Wear other protective equipment as required to minimize skin contact.

9. SPECIAL PRECAUTIONS

Precautions to be Taken in Handling: Eliminate ignition sources, use explosion proof equipment. Conveying and processing equipment should be spark-proof, electrically bonded and grounded.

Other Precautions: Wash with soap and water before eating, drinking, smoking or using toilet facilities. Launder contaminated clothing before reuse.

10. OTHER REGULATORY INFORMATION

All components of this mixture are on the TSCA inventory.
Some of the components in this mixture are not on the Canadian DSL. A Partial NSN Schedule VII has been filed to preserve their transitional status.
This material is not regulated under SARA Title III, Sections 302 or 313.

NOUWCY

HCL #246

MATERIAL SAFETY DATA SHEET
TARENE™ 14

Date Revised: March 11, 2004

SECTION I - PRODUCT AND COMPANY IDENTIFICATION

TRADE NAME: TARENE 14
CHEMICAL NAME: Synthetic Pine Tar

HMIS RATING	
Health	1
Flammability	1
Reactivity	0

Company: NATROCHEM, INC.
P.O. Box 1205
Savannah, GA 31402-1205

Telephone Numbers:
Transportation Emergencies:
CHEMTREC (U.S.A.): (800) 424-9300 (24 hours)
CHEMTREC (International): (202) 483-7616 (24 hours, call collect)
Product Information: (912) 236-4464 (EST, 8:00AM – 4:00PM M-F)

SECTION II - HAZARDOUS INGREDIENTS

The component(s) listed below is identified as a hazardous chemical under the criteria of the OSHA Hazard Communication Standard (29 CFR 1910.1200).

INGREDIENT	CAS REGISTRY	PERCENT
Tall Oil Pitch	8016-81-7	65.2
No. 2 Diesel Oil	68476-34-6	20.1
Crude Tall Oil	8002-26-4	5.5

SECTION III - PHYSICAL DATA

Boiling Point: 288°F
Vapor Pressure (mm Hg): N/D
Vapor Density (Air = 1): N/D
Solubility in Water: Negligible
Specific Gravity: 0.975
Percent Volatiles: 5
Evaporation Rate: N/D
Appearance and Odor: Dark brown, viscous material with pine tar odor.

SECTION IV - FIRE & EXPLOSION DATA

FLASH POINT (Method Used): 288°F (COC)
FLAMMABLE LIMITS: N/D
AUTOIGNITION TEMPERATURE: N/D

EXTINGUISHING MEDIA: CO_2, dry powder, chemical foam, water fog or mist.

SPECIAL FIRE FIGHTING PROCEDURES: Avoid use of water, other than light fog or mist.

UNUSUAL FIRE & EXPLOSION HAZARDS: Liquid evaporates and forms vapor (fumes) which can catch fire and burn with explosive violence. Invisible vapor spreads easily and can be set on fire by many sources such a pilot lights, welding equipment and electrical motors and switches.

SECTION V - PERMISSIBLE EXPOSURE LIMITS

None established for this product.

MARKETED BY
HARWICK STANDARD DISTRIBUTION CORPORATION
60 S. Seiberling Street • Akron, Ohio 44305

SECTION VI - HEALTH HAZARD DATA

PRIMARY ROUTE OF ENTRY- Eye and skin.
CHEMICAL COMPONENTS LISTED AS CARCINOGEN OR POTENTIAL CARCINOGEN: None.
NTP: No IARC: No OSHA: No

EFFECTS OF EXPOSURE
EYES- This material may cause mild eye irritation. Direct contact with liquid or exposure to vapors or mists may cause stinging, tearing and redness.

SKIN- This material may cause mild skin irritation. Prolonged or repeated contact may cause redness, burning and drying and cracking of the skin. Contact may result in skin absorption but symptoms of toxicity are not anticipated by this route alone under normal conditions of use. Persons with pre-existing skin disorders may be more susceptible to the effects of this material.

INHALATION- While this material has a low degree of toxicity, breathing high concentrations of vapors or mists may cause flushing, blurred vision, nausea, and signs of nervous system depression (e.g. headache, drowsiness, dizziness, loss of coordination and fatigue). Exposure to high concentrations may cause loss of consciousness, convulsions, respiratory collapse and death. Respiratory symptoms associated with pre-existing lung disorders (e.g. asthma-like conditions) may be aggravated by exposure to this material.

INGESTION- ASPIRATION HAZARD -- This material can enter lungs during swallowing or vomiting and cause lung inflammation and damage. Ingestion of excessive quantities of this material may cause irritation of the digestive tract and signs of nervous system depression (e.g. headache, drowsiness, dizziness, loss of coordination and fatigue).

SECTION VII - EMERGENCY & FIRST AID PROCEDURES

EYE CONTACT: If irritation or redness develops, move victim away from exposure and into fresh air. Flush eyes with clean water. If symptoms persist, seek medical attention.

SKIN CONTACT: Immediately remove contaminated clothing. Wash skin thoroughly with mild soap and water and, if necessary, a waterless skin cleanser. Seek medical attention if ill effect or irritation develops.

INHALATION: If overcome by exposure, remove victim to fresh air. If symptoms persist, call a physician immediately. If victim is not breathing, immediately begin artificial respiration. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention.

INGESTION: DO NOT induce vomiting or give anything by mouth because this material can enter lungs and cause severe lung damage. If victim is drowsy or unconscious, place on side with head down. Seek medical attention.

NOTE TO PHYSICIAN: Exposure to high concentration of this material (e.g. in enclosed spaces or with deliberate abuse) may be associated with cardiac arrhythmias. Epinephrine and other sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to this material. Other drugs with less arrhythmogenic potential should be considered. If sympathomimetic drugs are administered, observe for the development of cardiac arrhythmias.

SECTION VIII - REACTIVITY DATA

STABILITY: Stable
MATERIALS TO AVOID- Strong oxidizing agents or alkali.
CONDITIONS TO AVOID- Very high temperatures and open flames.
HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon and reactive hydrocarbons (aldehydes, aromatics, etc.).
HAZARDOUS POLYMERIZATION: Will not occur.

SECTION IX - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: MINIMIZE SPILL AREA. Contain and recover.

WASTE DISPOSAL METHOD: In accordance with local, state, and federal regulations.

SECTION X - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: Organic vapor canister. Respiratory protection is generally not required during normal operations. Supplied air is required if hydrogen sulfide or other TRS gases are present.

VENTILATION: Provide explosion proof ventilation as required to control airborne dust levels. The sum total of all ingredients may emit vapors during normal processing. All possible health effects are not known and individual sensitivities will vary. Effective exhaust ventilation should always be provided to draw dust, fumes and vapors away from workers to prevent routine inhalation. Ventilation should be adequate to maintain ambient workplace atmosphere below the limits listed in Section V.

PROTECTIVE GLOVES: Impervious gloves to protect against contact with product.

EYE PROTECTION: Chemical goggles or safety glasses with side shield.

OTHER PROTECTIVE EQUIPMENT: Protective clothing, eye wash station, safety shower.

SECTION XI - SPECIAL PRECAUTIONS

HANDLING AND STORAGE: Eliminate ignition sources, use explosive proof equipment. Conveying and processing equipment should be spark-proof, well bonded and grounded.

OTHER PRECAUTIONS: Wash with soap and water before eating, drinking, smoking, or using toilet facilities. Launder contaminated clothing before reuse.

SECTION XII - ENVIRONMENTAL INFORMATION

This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372):

CAS REGISTRY #	CHEMICAL NAME	PERCENT BY WEIGHT
NONE.		

This information must be included in all MSDS' that are copied and distributed for this material.

THE FOLLOWING INFORMATION MAY BE USEFUL IN COMPLYING WITH VARIOUS STATE AND FEDERAL LAWS AND REGULATIONS UNDER VARIOUS ENVIRONMENTAL STATUES:

Reportable Quantity (RQ), EPA Regulation 40 CFR 302 (CERCLA Section 102):
No RQ for product or any constituent greater than 1% or 0.1% (carcinogen).

Threshold Planning Quantity (TPQ), EPA Regulation 40 CFR 355 (SARA Sections 301-313):
No TPQ for product or any constituent greater than 1% or 0.1% (carcinogen).

Hazardous Chemical Reporting, EPA Regulation 40 CFR 370 (SARA Sections 311-312):

Component Name	Physical Hazard	Health Hazard
Tall Oil Pitch	Acute and Chronic	Irritant, Eye & skin.
Crude Tall Oil	Acute and Chronic	Irritant, Eye & skin.
#2 Diesel Oil	Combustible	Toxic
Rosin Oil	Acute & Chronic	Irritant, Eye & Skin

SECTION XII - ENVIRONMENTAL INFORMATION (Continued)

The components of this product are included on the TSCA Chemical Substance Inventory:

TRANSPORTATION: Not regulated.

SECTION XIII - OTHER INFORMATION

Revision Note: Review.
Prepared by: James L. Pye, Jr.
Title: Safety Coordinator

N/A = Not applicable N/D = Not determined N/DA = No Data Available
N/E = Not established

The information given in this MSDS was obtained from sources which we believe are reliable. However, since data, safety standards, and government regulations are subject to change and the conditions of

3192
IDM

EPAHQ1040017777

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/4/2009**

Dear **Zac or Dave**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3192

Expiration Date 3/3/2011

Generator: IDM
Address: 11616 Galayda
Houston, TX 77086

Waste Information

Name of Waste: Used oil filters
TCEQ Waste Code #: Recycle
Container Type:
Detailed Description of Process Generating Waste:
oil filters from machinery
Color: dark **Odor:** hydrocarbon **pH:** 4-10
Physical State:
Incompatibilities: strong oxidizers
Safety Related Data/Special Handling:
standard

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

DB/MM

CES Environmental Services, Inc.

4904 Griggs Road Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

✓ Recycle

SECTION 1: Generator Information

Company : IDM
Address : 11616 Galayda 10707 Honea Egypt Rd.
City, State, Zip : Houston TX 77086
Contact : William **Title :**
Phone No : (713) 409-0949 **Fax :**
24 / HR Phone :
U.S EPA I.D No :
State I.D : **SIC Code**

SECTION 2: Billing Information

Company : CKG Services Conroe
Address : 10707 Honea Egypt Road 10707 Honea Egypt Road
City, State, Zip : Montgomery TX 77316
Contact : Zac or Dave **Title :**
Phone No : (936) 483-3662 **Fax :** (936) 756-1226

SECTION 3: General Description of the Waste

Name of Waste : used oil filters

Detailed Description of the Process Generating Waste:

used oil filters from trucks etc

Physical State : ☐ Liquid ☐ Sludge ☐ Powder ☑ Solid ☐ Filter Cake ☐ Combination

Color : varies **Odor :** hydrocarbon

Specific Gravity (Water=1) : na **Density :** na lbs / gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834	2835	2836	2841	2842	2843	2844	2851
2861	2865	2869	2873	2874	2876	2879	2891	2892	2893	2896	2899	2911	3312	4953	4959	9511

Layers : ☑ Single-Phas ☐ Multi-Phase

Container Type : ☑ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Container Size : 55

Number Of Units : 1

Is this a USEPA "Hazardous Waste" per 40 CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", is it: ☐ D001 ☐ D002 ☐ D003

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristics for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☐ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code No : Recycle

Proper U.S. State Waste Code No : Non-RCRA/Non-DOT Regulated Material

Class : na **UN/NA :** na **PG :** na **RQ :** na

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
>200	6-9	0 mg/l	0 mg/l	100 %
Oil and Grease	**TOC**	**Zinc**	**Copper**	**Nickel**
>1500 mg/l	0 mg/l	0 mg/l	0 mg/l	0 mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The material / product consists of the following materials	Concentration Ranges are acceptable	Units or %
motor oil	1-10	%
oil filters	90-99	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

none

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.

none

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):

none

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generators knowledge

TCLP Metals : x

TCLP Volatilies : x

TCLP Semi-Volatiles : x

Reactivity : x

Corrosivity : x

Ignitability : x

SECTION 9: Waste Receipt Classification Under 40 CFR 437

Is this material a wastewater or wastewater sludge ? ☐ **YES** ☑ **NO**

If 'YES', complete this section

PLEASE CHECK THE APPROPRIATE BOX: IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE

Matals Subcategory: ***Subpart A***

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phospha
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: ***Subpart B***

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation wastes
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory ***Subpart C***

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bering wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesive and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations

☐ Tank clean-out from organic, non-petroleum sources

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

☐ Metals Subcatego

☐ Oils Subcatego

☐ Organics Subcategory

SECTION 10: Additional Instruction

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature : Date : 3-3-09

Printed Name / Title : Zac McHaughan President

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer :

Date : 3-3-09 Status : Approved Rejected

Approval Number :

Process Facility Information :

~~$45/drum~~

$30/drum

EPAHO104001782

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pricing (including freight):**

$30/dm

2. **Contamination Limits (maximum limit before surcharges apply):**

na-Make sure it conforms with profile

3. **Surcharge Pricing:**

na

4. **Special Testing Requirements:**

na

5. **Treatment and Handling Protocol:**

Send for Recycle

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

EPAHO104001783

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

7. **Tests for Product Recovered/Recycled (if applicable):**

Na

8. **Management for Product Recovered/Recycled (if applicable):**

Na

EPAHO104001784

77226536
TICKET NUMBER

CAT SCALE

CERTIFIED AUTOMATED TRUCK SCALE

CAT SCALE COMPANY
P.O. BOX 630
WALCOTT, IA 52773
(563) 284-6263
www.catscale.com

PUBLIC WEIGHMASTER'S CERTIFICATE OF WEIGHT & MEASURE

THE CAT SCALE GUARANTEE

The CAT Scale Company guarantees that our scales will give an accurate weight. What makes us different from other scale companies is that we back up our guarantee with cash.©

WEIGH WHAT WE SAY OR WE PAY®

If you get an overweight fine from the state AFTER one of our CAT Scales showed a legal weight, we will immediately check our scale and we will:

(1) Reimburse you for the cost of the overweight fine if our scale is wrong, **OR**
(2) A representative of CAT Scale Company will appear in court **WITH** the driver as an expert witness if we believe our scale was correct.

CAT SCALE COLLECTOR CARD INSIDE!

IF YOU SHOULD GET AN OVERWEIGHT FINE, YOU SHOULD DO THE FOLLOWING TO GET THE PROBLEM RESOLVED:

1) Post bond and request a court date.
2) Call CAT Scale Company direct 24 hours a day at 1-877-CAT-SCALE (Toll Free).
3) **IMMEDIATELY** send a copy of the citation, CAT Scale Ticket, your name, company, address, and phone number to CAT Scale Company Attn: Operations Manager.

* The four weights shown below are separate weights. The GROSS WEIGHT is the CERTIFIED WEIGHT and was weighed on a full length platform scale. All weights are guaranteed by CAT Scale.

DATE: 3-03-2009

SCALE LOCATION: 768 LOVES I 10 & EXIT 151 PORT ALLEN LA

STEER AXLE	11960 lb
DRIVE AXLE	28400 lb
TRAILER AXLE	27300 lb
* GROSS WEIGHT	67660 lb

This is to certify that the following described merchandise was weighed, counted, or measured by a public or deputy weighmaster, and when properly signed and sealed shall be prima facia evidence of the accuracy of the weight shown as prescribed by law.

IMPRINT SEAL HERE (IF APPLICABLE)

LIVESTOCK, PRODUCE, PROPERTY, COMMODITY, OR ARTICLE WEIGHED: FREIGHT ALL KINDS

COMPANY: CROSSROADSCARRIERS

TRACTOR #: 128 TRAILER #: 1159

FEE: 8.00

WEIGHMASTER OR WEIGHER SIGNATURE:

FULL WEIGH TICKET # (IF REWEIGH):

DRIVER IN TRUCK UNLESS CHECKED HERE: JOHN

WEIGH NUMBER 6536

CUSTOMER COPY

© 1998 CAT Scale Company® 02/

77226544
TICKET NUMBER

CAT SCALE

CERTIFIED AUTOMATED TRUCK SCALE

CAT SCALE COMPANY
P.O. BOX 630
WALCOTT, IA 52773
(563) 284-6263
www.catscale.com

PUBLIC WEIGHMASTER'S CERTIFICATE OF WEIGHT & MEASURE

THE CAT SCALE GUARANTEE

The CAT Scale Company guarantees that our scales will give an accurate weight. What makes us different from other scale companies is that we back up our guarantee with cash.©

WEIGH WHAT WE SAY OR WE PAY®

If you get an overweight fine from the state AFTER one of our CAT Scales showed a legal weight, we will immediately check our scale and we will:

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CAT SCALE COLLECTOR CARD INSIDE!

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3) **IMMEDIATELY** send a copy of the citation, CAT Scale Ticket, your name, company, address, and phone number to CAT Scale Company Attn: Operations Manager.

*The four weights shown below are separate weights. The GROSS WEIGHT is the CERTIFIED WEIGHT and was weighed on a full length platform scale. All weights are guaranteed by CAT Scale.

DATE: 3-04-2009

SCALE LOCATION: 768
LOVES
I 10 & EXIT 151
PORT ALLEN LA

STEER AXLE	10900	lb
DRIVE AXLE	13480	lb
TRAILER AXLE	8740	lb
*GROSS WEIGHT	33120	lb

IMPRINT SEAL HERE (IF APPLICABLE)

This is to certify that the following described merchandise was weighed, counted, or measured by a public or deputy weighmaster, and when properly signed and sealed shall be prima facia evidence of the accuracy of the weight shown as prescribed by law.

LIVESTOCK, PRODUCE, PROPERTY, COMMODITY, OR ARTICLE WEIGHED: FREIGHT ALL KINDS

COMPANY: CROSSROADSCARRIERS TRACTOR #: 12A TRAILER #: 1159

WEIGH NUMBER 4536

FEE 1.00

WEIGHMASTER OR WEIGHER SIGNATURE: LAMEKA DENTS

FULL WEIGH TICKET # (IF REWEIGH): 77226536

DRIVER IN TRUCK UNLESS CHECKED HERE: ___

CUSTOMER COPY

© 1998 CAT Scale Company®

77226536
TICKET NUMBER

CAT SCALE

CERTIFIED AUTOMATED TRUCK SCALE

CAT SCALE COMPANY
P.O. BOX 630
WALCOTT, IA 52773
(563) 284-6263
www.catscale.com

PUBLIC WEIGHMASTER'S CERTIFICATE OF WEIGHT & MEASURE

THE CAT SCALE GUARANTEE

The CAT Scale Company guarantees that our scales will give an accurate weight. What makes us different from other scale companies is that we back up our guarantee with cash.©

WEIGH WHAT WE SAY OR WE PAY®

If you get an overweight fine from the state AFTER one of our CAT Scales showed a legal weight, we will immediately check our scale and we will:

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(2) A representative of CAT Scale Company will appear in court **WITH** the driver as an expert witness if we believe our scale was correct.

CAT SCALE COLLECTOR CARD INSIDE!

IF YOU SHOULD GET AN OVERWEIGHT FINE, YOU SHOULD DO THE FOLLOWING TO GET THE PROBLEM RESOLVED:

1) Post bond and request a court date.
2) Call CAT Scale Company direct 24 hours a day at 1-877-CAT-SCALE (Toll Free).
3) **IMMEDIATELY** send a copy of the citation, CAT Scale Ticket, your name, company, address, and phone number to CAT Scale Company Attn: Operations Manager.

*The four weights shown below are separate weights. The GROSS WEIGHT is the CERTIFIED WEIGHT and was weighed on a full length platform scale. All weights are guaranteed by CAT Scale.

DATE: 3-03-2009

SCALE LOCATION: 768 LOVES I 10 & EXIT 151 PORT ALLEN LA

STEER AXLE	11960 lb
DRIVE AXLE	28400 lb
TRAILER AXLE	27300 lb
* GROSS WEIGHT	67660 lb

This is to certify that the following described merchandise was weighed, counted, or measured by a public or deputy weighmaster, and when properly signed and sealed shall be prima facia evidence of the accuracy of the weight shown as prescribed by law.

IMPRINT SEAL HERE (IF APPLICABLE)

LIVESTOCK, PRODUCE, PROPERTY, COMMODITY, OR ARTICLE WEIGHED: FREIGHT ALL KINDS

COMPANY: CROSSROADSCARRIERS

TRACTOR #: 128 TRAILER #: 1159

FEE

WEIGHMASTER OR WEIGHER SIGNATURE

FULL WEIGH TICKET # (IF REWEIGH)

WEIGH NUMBER 6536

DRIVER IN TRUCK UNLESS CHECKED HERE: JOHN

CUSTOMER COPY

© 1998 CAT Scale Company® 02

3193
Chemtall

EPAHO104001788

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/2/2009**

Dear **Bill O'Brien (281) 474-7548**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3193

Expiration Date 3/2/2011

Generator: Chemetall
Address: 10150 Bay Area Blvd.
Pasadena, TX 77507

Waste Information

Name of Waste: Butyl Lithium Filters
TCEQ Waste Code #: 00043101
Container Type:
Detailed Description of Process Generating Waste:
Filters used to filter solids from butylithium product. Filters are flushed with mineral oil then immersed in water to react out any residual water reactive solids & buyllithium. Fil are thenplaced into disposal containers (CY sacks)

Color: White to Grey **Odor:** none **pH:** 5-7
Physical State:
Incompatibilities: Oxidizers
Safety Related Data/Special Handling:
Level D

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

#3A3

GB
JR

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility 4904 Griggs Road, Houston, TX 77021 Phone (713) 676-1460 Fax: (713) 676-1460 U.S. EPA ID Number: TXD008950461 ISWR Number: 30900 *TCEQ Industrial Solid Waste Permit Number: 30948*	☐ CES Environmental Services - Port Arthur Facility 2420 S. Gulfway Dr., Port Arthur, TX 77641 Phone (713) 676-1460 Fax: (713) 676-1460 U.S. EPA ID Number: TXR000079307 ISWR Number: 88585

15

SECTION 1: Generator Information

Company: Chemetall Foote Corporation
Address: 10150 Bay Area Blvd.
City: Pasadena **State:** TX **Zip:** 77507
Contact: Bill O'Brien **Title:** EH & S Mgr.
Phone Number: 281-291-0822 **Fax Number:**
24/hr Phone Number: CES-713-676-1460
US EPA ID No: TXR000057455
State ID No: 87416 **SIC Code:**

SECTION 2: Billing Information - ☑ **Same as Above**

Company:
Address:
City: **State:** **Zip:**
Contact: **Title:**
Phone Number: **Fax Number:**

SECTION 3: General Description of the Waste

Name of Waste: Butyl Lithium Filters

Detailed Description of Process Generating Waste:
Filters used to filter solids from butyllithium product. Filters are flushed with mineral oil and then immersed in water to react out any residual water reactive solids and butyllithium. Filters are then placed into disposal containers (Cubic yard sacks).

Physical State: ☐ **Liquid** ☐ **Sludge** ☐ **Powder**
☑ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: White to grey **Odor:** none

Specific Gravity (water=1): 1.2 **Density:** 9 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene **AND** *if the SIC code from your facility is one of the following:*

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ **Single-phase** ☐ **Multi-phase**

Container Type: ☐ **Drum** ☐ **Tote** ☐ **Truck** ☑ **Other (explain)**

Frequency: ☐ **Weekly** ☑ **Monthly** ☐ **Yearly** ☐ **One-Time**
Quantity: 1 sack

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011
Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: 00043101

Proper US DOT Shipping Name: Non-RCRA; Non-DOT Regulated Material
Class: NA **UN/NA:** NA **PG :** NA **RQ:** NA

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>200		neutral		0	mg/l	0	mg/l	100	%
Oil & Grease		**TOC**		**Zinc**		**Copper**		**Nickel**	
>1500	mg/l	NA	mg/l	0	mg/l	0	mg/l	0	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
	98-100	%
Residual Oil	0-1	%
Dirt	0-1	%

SECTION 5: Safety Related Data
If the handling of this waste requires the use of special protective equipment, please explain.

Level D

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. Analysis on filter cartridges (Anacon, Inc. Lab Order #: 0808280

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

oxidizers

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below,**WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:
TCLP Volatiles:
TCLP Semi-Volatiles:
Reactivity:
Corrosivity:
Ignitability:

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory : Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory : Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory **: *Subpart C***

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☑ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Bill O'Brien **Date:** 2/23/2009

Printed Name/Title: William J. O'Brien / Safety, Health and Environmental Manager

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: [signature]
Date: 2-24-09 ☑ Approved ☐ Rejected
Approval Number:

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$100.00 per bag, Excludes price of bag. Bag price $40.00 each. Transportation $70.00/hr plus FSC, 4 hour minimum.

2. Contamination Limit (maximum limit before surchages apply):

NA

3. Surcharge Pricing:

NA

4. Special Testing Requirements:

NA

5. Treatment and Handling Protocol:

Class I solids

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

NA

8. Management for Product Recovered/Recycled (if applicable)

NA

Anacon, Inc. **Date:** *16-Sep-08*

CLIENT: Chemetall Foote Corporation **Client Sample ID:** 000431011 (FC)
Lab Order: 0808280 **Collection Date:** 8/25/2008 9:30:00 AM
Project: PO# 2008-TX-145
Lab ID: 0808280-002 **Matrix:** SOLID

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP METALS, TCLP LEACHED		**SW1311/6020**				Analyst: **HN**
Arsenic	ND	0.100		mg/L	1	9/2/2008 9:54:00 PM
Barium	6.95	0.150		mg/L	1	9/2/2008 9:54:00 PM
Cadmium	ND	0.0500		mg/L	1	9/2/2008 9:54:00 PM
Chromium	ND	0.0500		mg/L	1	9/2/2008 9:54:00 PM
Lead	ND	0.100		mg/L	1	9/2/2008 9:54:00 PM
Mercury	ND	0.0100		mg/L	1	9/2/2008 9:54:00 PM
Selenium	ND	0.100		mg/L	1	9/2/2008 9:54:00 PM
Silver	ND	0.0500		mg/L	1	9/2/2008 9:54:00 PM
SEMIVOLATILES TCLP		**SV8270C**		()		Analyst: **MB**
1,4-Dichlorobenzene	ND	30.0		µg/L	1	8/30/2008 9:21:00 AM
2,4,5-Trichlorophenol	ND	30.0		µg/L	1	8/30/2008 9:21:00 AM
2,4,6-Trichlorophenol	ND	30.0		µg/L	1	8/30/2008 9:21:00 AM
2,4-Dinitrotoluene	ND	30.0		µg/L	1	8/30/2008 9:21:00 AM
2-Methylphenol	ND	30.0		µg/L	1	8/30/2008 9:21:00 AM
4-Methylphenol	ND	30.0		µg/L	1	8/30/2008 9:21:00 AM
Hexachlorobenzene	ND	30.0		µg/L	1	8/30/2008 9:21:00 AM
Hexachlorobutadiene	ND	30.0		µg/L	1	8/30/2008 9:21:00 AM
Hexachloroethane	ND	30.0		µg/L	1	8/30/2008 9:21:00 AM
Nitrobenzene	ND	30.0		µg/L	1	8/30/2008 9:21:00 AM
Pentachlorophenol	ND	30.0		µg/L	1	8/30/2008 9:21:00 AM
Pyridine	ND	30.0		µg/L	1	8/30/2008 9:21:00 AM
Cresols (total)	ND	30.0		µg/L	1	8/30/2008 9:21:00 AM
HERBICIDES TCLP		**SW8151**				Analyst: **MB**
2,4,5-TP	ND	0.100		mg/L	1	9/10/2008
2,4-D	ND	0.100		mg/L	1	9/10/2008
PESTICIDES TCLP		**SW8081A**				Analyst: **MB**
4,4'-DDD	ND	0.500		µg/L	1	8/30/2008
4,4'-DDE	ND	0.180		µg/L	1	8/30/2008
4,4'-DDT	ND	0.210		µg/L	1	8/30/2008
Chlordane	ND	1.00		µg/L	1	8/30/2008
Endrin	ND	1.00		µg/L	1	8/30/2008
gamma-BHC	ND	1.00		µg/L	1	8/30/2008
Heptachlor	ND	1.00		µg/L	1	8/30/2008
Heptachlor epoxide	ND	1.00		µg/L	1	8/30/2008
Methoxychlor	ND	1.00		µg/L	1	8/30/2008
Toxaphene	ND	50.0		µg/L	1	8/30/2008
VOLATILES TCLP		**SW8260B**				Analyst: **KK**
1,1-Dichloroethene	ND	10.0		µg/L	1	9/3/2008 1:12:00 AM
1,2-Dichloroethane	ND	10.0		µg/L	1	9/3/2008 1:12:00 AM

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Anacon, Inc. **Date:** *16-Sep-08*

CLIENT: Chemetall Foote Corporation **Client Sample ID:** 000431011 (FC)
Lab Order: 0808280 **Collection Date:** 8/25/2008 9:30:00 AM
Project: PO# 2008-TX-145
Lab ID: 0808280-002 **Matrix:** SOLID

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILES TCLP		**SW8260B**				Analyst: **KK**
2-Butanone	ND	100		µg/L	1	9/3/2008 1:12:00 AM
Benzene	ND	10.0		µg/L	1	9/3/2008 1:12:00 AM
Carbon tetrachloride	ND	10.0		µg/L	1	9/3/2008 1:12:00 AM
Chlorobenzene	ND	10.0		µg/L	1	9/3/2008 1:12:00 AM
Chloroform	ND	10.0		µg/L	1	9/3/2008 1:12:00 AM
Tetrachloroethene	ND	10.0		µg/L	1	9/3/2008 1:12:00 AM
Trichloroethene	ND	10.0		µg/L	1	9/3/2008 1:12:00 AM
Vinyl chloride	ND	10.0		µg/L	1	9/3/2008 1:12:00 AM
CORROSIVITY (AS PH) IN WATER		**SW9040**				Analyst: **SB**
pH	7.69	0		pH Units	1	9/2/2008
IGNITABILITY		**ASTM E502**				Analyst: **BH**
Ignitability	>200	200		°F	1	9/2/2008

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Anacon, Inc.

Date: *22-Sep-08*

CLIENT: Chemetall Foote Corporation
Work Order: 0808280
Project: PO# 2008-TX-145

ANALYTICAL QC SUMMARY REPORT

TestCode: 1311_M

Sample ID: **BLANK WATER** SampType: **MBLK** TestCode: **1311_M** Units: **mg/L** Prep Date: Run ID: **ICP-MS #1_080902D**
Client ID: **ZZZZZ** Batch ID: **R18859** TestNo: **SW1311/6020** Analysis Date: **9/2/2008** SeqNo: **234680**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.100									
Barium	ND	0.150									
Cadmium	ND	0.0500									
Chromium	ND	0.0500									
Lead	ND	0.100									
Mercury	ND	0.0100									
Selenium	ND	0.100									
Silver	ND	0.0100									

Sample ID: **LCS WATER** SampType: **LCS** TestCode: **1311_M** Units: **mg/L** Prep Date: Run ID: **ICP-MS #1_080902D**
Client ID: **ZZZZZ** Batch ID: **R18859** TestNo: **SW1311/6020** Analysis Date: **9/2/2008** SeqNo: **234681**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.1144	0.100	0.1	0	114	90.3	136	0	0		
Barium	0.102	0.150	0.1	0	102	88.3	123	0	0		J
Cadmium	0.1057	0.0500	0.1	0	106	59.6	123	0	0		
Chromium	0.1204	0.0500	0.1	0	120	55.1	151	0	0		
Lead	0.09456	0.100	0.1	0	94.6	85.6	137	0	0		J
Mercury	0.001659	0.0100	0.002	0	83	59	144	0	0		J
Selenium	0.1113	0.100	0.1	0	111	51.3	150	0	0		
Silver	0.04554	0.0100	0.05	0	91.1	63.8	120	0	0		

Sample ID: **0808208-002A-MS** SampType: **MS** TestCode: **1311_M** Units: **mg/L** Prep Date: Run ID: **ICP-MS #1_080902D**
Client ID: **ZZZZZ** Batch ID: **R18859** TestNo: **SW1311/6020** Analysis Date: **9/2/2008** SeqNo: **234683**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.1302	0.100	0.1	0	130	70	130	0	0		S
Barium	0.1561	0.150	0.1	0.05657	99.5	70	130	0	0		
Cadmium	0.1039	0.0500	0.1	0	104	70	130	0	0		

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits

EPAHO104001798

CLIENT: Chemetall Foote Corporation
Work Order: 0808280
Project: PO# 2008-TX-145

ANALYTICAL QC SUMMARY REPORT

TestCode: 1311_M

100

Sample ID: **0808208-002A-MS** SampType: **MS** TestCode: **1311_M** Units: **mg/L** Prep Date: Run ID: **ICP-MS #1_080902D**
Client ID: **ZZZZZ** Batch ID: **R18859** TestNo: **SW1311/6020** Analysis Date: **9/2/2008** SeqNo: **234683**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.1303	0.0500	0.1	0	130	70	130	0	0		S
Lead	0.09605	0.100	0.1	0	96	70	130	0	0		J
Mercury	ND	0.0100	0.002	0	0	70	130	0	0		S
Selenium	0.1151	0.100	0.1	0	115	70	130	0	0		
Silver	0.04285	0.0100	0.05	0	85.7	70	130	0	0		

Sample ID: **0808208-002A-MSD** SampType: **MSD** TestCode: **1311_M** Units: **mg/L** Prep Date: Run ID: **ICP-MS #1_080902D**
Client ID: **ZZZZZ** Batch ID: **R18859** TestNo: **SW1311/6020** Analysis Date: **9/2/2008** SeqNo: **234684**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.1167	0.100	0.1	0	117	70	130	0.1302	10.9	25	
Barium	0.1554	0.150	0.1	0.05657	98.8	70	130	0.1561	0.449	25	
Cadmium	0.1021	0.0500	0.1	0	102	70	130	0.1039	1.75	25	
Chromium	0.1167	0.0500	0.1	0	117	70	130	0.1303	11.0	25	
Lead	0.09387	0.100	0.1	0	93.9	70	130	0.09605	0	25	J
Mercury	ND	0.0100	0.002	0	0	70	130	0	0	25	S
Selenium	0.1343	0.100	0.1	0	134	70	130	0.1151	15.4	25	S
Silver	0.04301	0.0100	0.05	0	86	70	130	0.04285	0.373	25	

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

EPAHO104001799

CLIENT: Chemetall Foote Corporation
Work Order: 0808280
Project: PO# 2008-TX-145

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_I

Sample ID: **method blank** SampType: **mblk** TestCode: **8260_I** Units: **µg/L** Prep Date: Run ID: **MS-VOA-1_080902A**
Client ID: **ZZZZZ** Batch ID: **R18868** TestNo: **SW8260B** Analysis Date: **9/2/2008** SeqNo: **234795**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	ND	20.0									
1,2-Dichloroethane	ND	20.0									
2-Butanone	ND	100									
Benzene	ND	20.0									
Carbon tetrachloride	ND	100									
Chlorobenzene	ND	20.0									
Chloroform	3.01	100									J
Tetrachloroethene	ND	20.0									
Trichloroethene	ND	20.0									
Vinyl chloride	ND	20.0									
Surr: 1,2-Dichloroethane-d4	105	6.33	100	0	105	71	124	0	0		
Surr: 4-Bromofluorobenzene	115.8	7.40	100	0	116	85	125	0	0		
Surr: Dibromofluoromethane	84.88	3.41	100	0	84.9	70	135	0	0		
Surr: Toluene-d8	84.17	3.90	100	0	84.2	83	118	0	0		

Sample ID: **lcs** SampType: **lcs** TestCode: **8260_I** Units: **µg/L** Prep Date: Run ID: **MS-VOA-1_080902A**
Client ID: **ZZZZZ** Batch ID: **R18868** TestNo: **SW8260B** Analysis Date: **9/2/2008** SeqNo: **234794**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	55.47	20.0	50	0	111	56	153	0	0		
Benzene	47.35	20.0	50	0	94.7	69	139	0	0		
Chlorobenzene	42.12	20.0	50	0	84.2	75	134	0	0		
Trichloroethene	52.1	20.0	50	0	104	71	140	0	0		
Surr: 1,2-Dichloroethane-d4	96.27	6.33	100	0	96.3	71	124	0	0		
Surr: 4-Bromofluorobenzene	88.94	7.40	100	0	88.9	85	125	0	0		
Surr: Dibromofluoromethane	79.74	3.41	100	0	79.7	70	135	0	0		
Surr: Toluene-d8	83.45	3.90	100	0	83.4	83	118	0	0		

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

EPAHO104001800

CLIENT: Chemetall Foote Corporation
Work Order: 0808280
Project: PO# 2008-TX-145

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_I

Sample ID: **0808327-001a** SampType: **ms** TestCode: **8260_I** Units: **µg/L** Prep Date: Run ID: **MS-VOA-1_080902A**
Client ID: **ZZZZZ** Batch ID: **R18868** TestNo: **SW8260B** Analysis Date: **9/2/2008** SeqNo: **234816**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	46.52	20.0	50	0	93	70	145	0	0		
Benzene	45.03	20.0	50	0	90.1	75	130	0	0		
Chlorobenzene	41.47	20.0	50	0	82.9	80	130	0	0		
Trichloroethene	50.08	20.0	50	0	100	80	140	0	0		
Surr: 1,2-Dichloroethane-d4	124.8	6.33	100	0	125	60	140	0	0		
Surr: 4-Bromofluorobenzene	94.24	7.40	100	0	94.2	80	125	0	0		
Surr: Dibromofluoromethane	103.6	3.41	100	0	104	70	140	0	0		
Surr: Toluene-d8	80.77	3.90	100	0	80.8	70	130	0	0		

Sample ID: **0808327-001a** SampType: **msd** TestCode: **8260_I** Units: **µg/L** Prep Date: Run ID: **MS-VOA-1_080902A**
Client ID: **ZZZZZ** Batch ID: **R18868** TestNo: **SW8260B** Analysis Date: **9/2/2008** SeqNo: **234817**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	14.42	20.0	50	0	28.8	70	145	46.52	0	20	JS
Benzene	47.04	20.0	50	0	94.1	75	130	45.03	4.37	20	
Chlorobenzene	45.05	20.0	50	0	90.1	80	130	41.47	8.28	20	
Trichloroethene	51.56	20.0	50	0	103	80	140	50.08	2.91	20	
Surr: 1,2-Dichloroethane-d4	97.62	6.33	100	0	97.6	60	140	0	0	20	
Surr: 4-Bromofluorobenzene	94.59	7.40	100	0	94.6	80	125	0	0	20	
Surr: Dibromofluoromethane	82.7	3.41	100	0	82.7	70	140	0	0	20	
Surr: Toluene-d8	82.03	3.90	100	0	82	70	130	0	0	20	

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

EPAHO104001801

CLIENT: Chemetall Foote Corporation
Work Order: 0808280
Project: PO# 2008-TX-145

ANALYTICAL QC SUMMARY REPORT

TestCode: 8270_L

Sample ID: MB1 082908	SampType: MBLK	TestCode: 8270_L	Units: µg/L	Prep Date: 8/29/2008	Run ID: MS-ABN-1_080829A
Client ID: ZZZZZ	Batch ID: 1352	TestNo: SV8270C	()	Analysis Date: 8/30/2008	SeqNo: 234405

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene	ND	0.770									
2,4,5-Trichlorophenol	ND	1.42									
2,4,6-Trichlorophenol	ND	1.16									
2,4-Dinitrotoluene	ND	1.11									
2-Methylphenol	ND	1.04									
4-Methylphenol	ND	0.980									
Hexachlorobenzene	ND	1.01									
Hexachlorobutadiene	ND	1.25									
Hexachloroethane	ND	1.03									
Nitrobenzene	ND	0.650									
Pentachlorophenol	ND	1.29									
Pyridine	ND	0.510									
Cresols (total)	ND	2.02									
Surr: 2,4,6-Tribromophenol	96.8	0.990	100	0	96.8	10	123	0	0		
Surr: 2-Fluorobiphenyl	90.95	1.04	100	0	91	43	116	0	0		
Surr: 2-Fluorophenol	37.3	0.430	100	0	37.3	21	100	0	0		
Surr: 4-Terphenyl-d14	75.2	2.51	100	0	75.2	33	141	0	0		
Surr: Nitrobenzene-d5	54.2	0.690	100	0	54.2	35	114	0	0		
Surr: Phenol-d6	34.7	0.270	100	0	34.7	10	94	0	0		

Sample ID: LCS1 082908	SampType: LCS	TestCode: 8270_L	Units: µg/L	Prep Date: 8/29/2008	Run ID: MS-ABN-1_080829A
Client ID: ZZZZZ	Batch ID: 1352	TestNo: SV8270C	()	Analysis Date: 8/30/2008	SeqNo: 234404

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene	31.55	0.770	100	0	31.6	23	125	0	0		
2,4-Dinitrotoluene	17.85	1.11	100	0	17.8	10	112	0	0		
Pentachlorophenol	108.7	1.29	100	0	109	10	133	0	0		
Surr: 2,4,6-Tribromophenol	127	0.990	100	0	127	10	133	0	0		
Surr: 2-Fluorobiphenyl	92.45	1.04	100	0	92.5	44	114	0	0		
Surr: 2-Fluorophenol	57.75	0.430	100	0	57.8	10	125	0	0		
Surr: 4-Terphenyl-d14	70.45	2.51	100	0	70.4	49	118	0	0		

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits

EPAHO104001802

CLIENT: Chemetall Foote Corporation
Work Order: 0808280
Project: PO# 2008-TX-145

ANALYTICAL QC SUMMARY REPORT

TestCode: 8270_L

011

Sample ID: LCS1 082908	SampType: LCS	TestCode: 8270_L	Units: µg/L	Prep Date: 8/29/2008	Run ID: MS-ABN-1_080829A
Client ID: ZZZZZ	Batch ID: 1352	TestNo: SV8270C	()	Analysis Date: 8/30/2008	SeqNo: 234404

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Nitrobenzene-d5	73.35	0.690	100	0	73.4	26	133	0	0		
Surr: Phenol-d6	49.2	0.270	100	0	49.2	10	125	0	0		

Sample ID: MS1 082908	SampType: MS	TestCode: 8270_L	Units: µg/L	Prep Date: 8/29/2008	Run ID: MS-ABN-1_080829A
Client ID: ZZZZZ	Batch ID: 1352	TestNo: SV8270C	()	Analysis Date: 8/30/2008	SeqNo: 234406

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene	26.15	0.770	100	0	26.2	20	124	0	0		
2,4-Dinitrotoluene	16.85	1.11	100	0	16.8	39	139	0	0		S
Pentachlorophenol	335.8	1.29	100	0	336	14	176	0	0		S
Surr: 2,4,6-Tribromophenol	145.4	0.990	100	0	145	10	123	0	0		S
Surr: 2-Fluorobiphenyl	82.05	1.04	100	0	82	43	116	0	0		
Surr: 2-Fluorophenol	50.35	0.430	100	0	50.4	21	100	0	0		
Surr: 4-Terphenyl-d14	72	2.51	100	0	72	33	141	0	0		
Surr: Nitrobenzene-d5	62.8	0.690	100	0	62.8	35	114	0	0		
Surr: Phenol-d6	44.2	0.270	100	0	44.2	10	94	0	0		

Sample ID: MSD1 082908	SampType: MSD	TestCode: 8270_L	Units: µg/L	Prep Date: 8/29/2008	Run ID: MS-ABN-1_080829A
Client ID: ZZZZZ	Batch ID: 1352	TestNo: SV8270C	()	Analysis Date: 8/30/2008	SeqNo: 234407

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene	31.9	0.770	100	0	31.9	20	124	26.15	19.8	25	
2,4-Dinitrotoluene	17.95	1.11	100	0	18	39	139	16.85	6.32	25	S
Pentachlorophenol	99.95	1.29	100	0	100	14	176	335.8	108	25	R
Surr: 2,4,6-Tribromophenol	137.6	0.990	100	0	138	10	123	0	0	25	S
Surr: 2-Fluorobiphenyl	93.15	1.04	100	0	93.2	43	116	0	0	25	
Surr: 2-Fluorophenol	56.6	0.430	100	0	56.6	21	100	0	0	25	
Surr: 4-Terphenyl-d14	70.2	2.51	100	0	70.2	33	141	0	0	25	
Surr: Nitrobenzene-d5	74.25	0.690	100	0	74.2	35	114	0	0	25	
Surr: Phenol-d6	50.4	0.270	100	0	50.4	10	94	0	0	25	

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits

EPAHO104001803

Anacon, Inc.
730 FM 1959
Houston, TX 77034

QA/QC REPORT - LCS

Sample ID: LCS **Matrix:** solids
Anacon Number: 8280, 8334, 8335, 8315 **Units** mg/kg

Analyte / Method Number	Blk. Value	Spike Conc.	LCS Conc.	% Recovery	Recovery Limits
TPH-GRO - 1005	<50	500	469	93.8	75-125
TPH-DRO - 1005	<50	500	438	87.6	75-125

*Matrix interference
**Sample too concentrated to spike

LCS Advisory Limits
REC: 0 outside of limits

QA/QC Manager MLight

012

Anacon, Inc.
730 FM 1959
Houston, TX 77034

QA/QC REPORT - MS/MSD

Sample ID: MS/MSD
Anacon Number: 8280, 8334, 8335, 8315

Matrix: solids
Units mg/kg

Analyte/Method Number	Blank	Sample	Spike Level	MS	% REC	MSD	% REC	RPD	QC LIMITS RPD	QC LIMITS % REC
TPH-GRO - 1005	<50	<50	500	459	91.8	403	80.6	13.0	20	75-125
TPH-DRO - 1005	<50	<50	500	422	84.4	514	102.8	19.7	20	75-125

* Matrix Interference
** Sample too concentrated to spike

MS/MSD Advisory Limits
RPD : 0 outside of QC limits
REC : 0 outside of QC limits

QA/QC Manager MLigot

013

ANACON, INC.

730 FM 1959
HOUSTON, TX 77034
(281) 922-7000 Tel.
(281) 481-0089 Fax

Chain of Custody Record

Shaded Areas for Lab Use Only.

Page 1 of 1

ORIGINAL

Client: Chemetall Foote Corporation
Address: 10150 Bay Area Blvd.
Pasadena Tx 77507
PO#: 2008-TX-145

Contact Person: Bill OBrien
Phone Number: 281-291-0822 ext 3
Fax Number: 281-474-9465
E-mail Address: bill.obrien@chemetall.com

Anacon Log Number: 0808280
Turn Around Time: Stnd.
Sample Location:

Delivered By: Bill OBrien
Custody Seal (Y/N): Y
Temperature:

Sampled By: Bill OBrien
Please Print

Log Number	Sample Matrix	Date Collected	Time Collected	# of Containers	Type of Container	Pres.	Client Sample ID	Full TCLP	TPH	Corrosivity	Flashpoint									Remarks
~~01~~	~~S~~	~~8/25/08~~	~~930AM~~	~~1~~	~~JAR~~	~~none~~	~~000351911 (DE)~~	~~X~~	~~X~~	~~X~~	~~X~~									
02	S	8/25/08	930AM	1	bag	none	000431011 (FC)	X	X	X	X									

Relinquished By:	Date:	Time:
Bill OBrien	8/25/08	4:30
Accepted By: [signature]	Date: 8/25/08	Time: 4:30
Relinquished By:	Date:	Time:
Accepted By:	Date:	Time:
Relinquished by:	Date:	Time:
Accepted By:	Date:	Time:

Preservation Code:		Matrix Code:		Containers:
1=HNO3	6=Other	S=Solid	EFF=Effluent	P=Plastic
2=H2SO4		W=Water		G=Glass
3=NaOH		Sldg=Sludge		V=Voa
4=HCL		O=Oil		B=Bacterial
5=None		INF=Influent		

Notes:

EPAHO104001806

3194

Arkema

EPAHO104001807

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/3/2009**

Dear **Grace Dean**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # PA-3194

Expiration Date 3/3/2011

Generator: Arkema, Inc. - Houston
Address: 2231 Haden Road
Houston, TX 77015

Waste Information

Name of Waste: Sulfur Organic liquid
TCEQ Waste Code #: Product
Container Type:
Detailed Description of Process Generating Waste:
Producing Mercaptan product
Color: Brown **Odor:** Storng **pH:** neutral
Physical State:
Incompatibilities: None Known
Safety Related Data/Special Handling:
Standard PPE. Also use all nessecary safety precautions to handle this stream. It has H2

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

JB/AL

CES Environmental Services, Inc.

☒ CES Environmental Services – Houston Facility
4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

☐ CES Environmental Services – Port Arthur Facility
2420 S. Gulfway Drive, Port Arthur, TX 77641
Phone: (713) 676-1460 Fax: (713) 676-1676
U.S. EPA ID No: TXR000079307 ISWR No: 88585

SECTION 1: Material Producer Information

Company:	Arkema, Inc		
Address:	2231 Haden Road		
City, State, Zip:	Houston, TX 77015		
Contact:	James Wheeland	**Title:**	Materials Supervisor
Phone No:	713.450.6767	**Fax No:**	713-450-9609
24/hr Phone:	713.304.7037		
U.S. EPA I.D. No:	na		
State I.D.	na	**SIC Code:**	

SECTION 2: Billing Information – ☐ Same as Above

Company:	Arkema, Inc		
Address:	200 Market Street		
City, State, Zip:	Philadelphia, PA 19103		
Contact:		**Title:**	
Phone No:	800.628.4453	**Fax No:**	215.419.7210

SECTION 3: General Description of the Material / Product

Name of Material / Product: Sulfur Organic Liquid
Detailed Description of Process Generating or Producing the Material / Product: Producing Mercaptan product

Physical State: ☒ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color: Brown **Odor:** Strong

Specific Gravity (water=1): .84 **Density:** 7.5 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☐ Drum ☐ Tote ☒ Truck ☐ Other (explain)
Container Size: ____ ____ 5500 gal ____

Frequency: ☒ Weekly ☐ Monthly ☐ Quarterly ☐ Yearly
Number of Units (containers): 2 **Other:** ____

Proper U.S. DOT Shipping Name: NA1993, Combustible Liquid, n.o.s. (Didodecyl sulfide) 3, PG III

Class: 3 **UN/NA:** NA1993 **PG:** III **RQ:** na

Mar 03 09 11:05a Arkema 555 p.2

EPAHO104001809

Flash Point	pH	N/A	N/A	Solids
>170 F	neutral			0%

Oil&Grease	TOC	Zinc	Copper	Nickel
<1500mg/l	namg/l	namg/l	namg/l	namg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The material / product consists of the following materials	Concentration Ranges are acceptable	Units or %
Didodecyl sulfide	40-55	%
sec -Dodecyl	25-40	%
n-Dodecyl Mercaptan	<10	%
Propylene tetramer	<10	%
tert- Dodecanethiol	<10	%
See attached additional componets and specs table		

SECTION 5: Safety Related Data

If the handling of this material / product requires the use of special protective equipment, please explain.
Standard PPE, also use respirator able to withstand H2S when opening dome lid.

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.
MSDS

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
None known

SECTION 8: Material Producer's Certification

The information contained herein is based on ☐ generator knowledge and/or ☒ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: [signature] **Date:** 3.3.9

Printed Name/Title: Derrick Stanley Mgr. HES

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Technical Manager: [signature] Date: 3-3-09 Approved Rejected Approval Number: 3194	

C7 -14 sulfides and disulfides	<10	%
Dodecene	<5	%
Hydrogen Sulfide	<50	ppm

Exhibit A

SULFUR ORGANIC LIQUID PRODUCT GENERAL SPECIFICATIONS:

Specification:	ASTM:	Typical:	Min./Max.
Ash, Wt. %	D-482	<0.01	0.02 Max.
API Gravity	D-287	36.0	35 Min.
Sulfur, Wt. %	D-1552	4.25	4.25 Max.
Pour Point, Deg F.	D-97	100	120 Max.
Oil, %	-	100	99 Min.
Water, %	D-95	0.00	0.5 Max.
Solids, %	D-473 0.00	0.01	0.01Max.
Flash Point, Deg. F.	D-93	>200	140 Min.

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pricing (including freight):**

No Payment / No Charge

2. **Contamination Limits (maximum limit before surcharges apply):**

Ash < 0.5 %
Flashpoint > 170 deg F
No Solids. must conform with specifications

3. **Surcharge Pricing:**

4. **Special Testing Requirements:**

Must pick up pre shipment sample before scheduling load. Run ash and Flash point on sample and check that material is compatible to send to CES Ograno sulfur fuels tank. Once scheduled and trailer is picked up must check H2S in headspace of trailer. Follow sampling SOP to include venting trailer for H2S. must be less than 50 ppm

5. **Treatment and Handling Protocol:**

After we have approved the material as suitable for PEAK, the material must be brought to PACES. You must contact the operations manager before you climb onto the trailer. This is very important. Then we should check the H2S levels by using the personal H2S monitors at the manway level to ensure the levels read less than 50 ppm. If the levels exceed 50 ppm on the personal monitors, we will have to pull a Kevlar bag sample on the headspace and take it to Core or Chemtex and have them perform a sulfur speciation. The levels must show H2S less than 50 ppm to be acceptable.

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

EPAHO104001813

7. **Tests for Product Recovered/Recycled (if applicable):**

See Section 4

8. **Management for Product Recovered/Recycled (if applicable);**

See section 5

SULFUR ORGANIC LIQUID

Material Safety Data Sheet

Arkema Inc.

1 PRODUCT AND COMPANY IDENTIFICATION

Thio and Fine Chemicals
Arkema Inc.
2000 Market Street
Philadelphia, PA 19103

EMERGENCY PHONE NUMBERS:
Chemtrec: (800) 424-9300 (24hrs) or (703) 527-3887
Medical: Rocky Mountain Poison Control Center
(866) 767-5089 (24Hrs)

Information Telephone Numbers	Phone Number	Available Hrs
Customer Service	1-800-628-4453	8:30 to 5:30 EST

Product Name	SULFUR ORGANIC LIQUID
Product Synonym(s)	
Chemical Family	Mixture
Chemical Formula	
Chemical Name	
EPA Reg Num	
Product Use	Fuel Oil Cutter Stock

2 COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient Name	CAS RegistryNumber	Typical %	OSHA
Didodecyl sulfide	2469-45-6	40-55% By Wt.	Y
sec-Dodecyl mercaptan	14402-50-7	25-40% By Wt.	Y
n-Dodecyl mercaptan	112-55-0	< 10% By Wt.	Y
Propylene tetramer	6842-15-5	< 10% By Wt.	Y
tert-Dodecanethiol	25103-58-6	< 10% By Wt.	Y
Alkenes, C8-10-branched, C9-rich	97593-01-6	< 10% By Wt.	Y
C7-14 sulfides and disulfides	NE	< 10% By Wt.	Y
Dodecene	112-41-4	< 5% By Wt.	Y
Hydrogen sulfide	7783-06-4	< 50PPM By Wt.	Y

The substance(s) marked with a "Y" in the OSHA column, are identified as hazardous chemicals according to the criteria of the OSHA Hazard Communication Standard (29 CFR 1910.1200)

This material is classified as hazardous under Federal OSHA regulation.

COMPONENTS OF THIS BYPRODUCT ARE NOT ON THE TSCA INVENTORY. THIS BYPRODUCT IS PROVIDED UNDER THE TSCA PREMANUFACTURE NOTICE EXEMPTION AT 40 CFR 720.30(G) ONLY FOR BURNING AS FUEL OR MIXING (NOT REACTING) WITH OTHER MATERIALS FOR BURNING AS FUEL.

3 HAZARDS IDENTIFICATION

Emergency Overview
Brown liquid with strong odor
WARNING!
COMBUSTIBLE LIQUID AND VAPOR.
CAUSES EYE IRRITATION.
CAUSES RESPIRATORY TRACT IRRITATION.
MAY CAUSE ALLERGIC SKIN REACTION.
MAY CAUSE NAUSEA, HEADACHE OR DIZZINESS.

EPAHO104001815

Potential Health Effects

Inhalation and skin contact are expected to be the primary routes of occupational exposure to this material. Based on its composition, it is anticipated to be severely irritating to the eyes and respiratory tract. This material has a strong objectionable odor that may cause nausea, headache, or dizziness. Repeated exposure may cause an allergic skin reaction. Medical conditions which may be aggravated by exposure to this material include lung disease or limited respiratory capacity.

4 FIRST AID MEASURES

IF IN EYES, immediately flush with plenty of water for at least 15 minutes. Get medical attention.

IF ON SKIN, immediately wash with soap and plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Thoroughly clean shoes before reuse.

IF SWALLOWED, do NOT induce vomiting. Give water to drink. Get medical attention immediately. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

IF INHALED, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

5 FIRE FIGHTING MEASURES

Fire and Explosive Properties

Auto-Ignition Temperature	NE	
Flash Point	>170F	Flash Point Method
Flammable Limits- Upper	NE	
Lower	NE	

Extinguishing Media

Use water spray, carbon dioxide, foam or dry chemical.

Fire Fighting Instructions

Fire fighters and others who may be exposed to products of combustion should wear full fire fighting turn out gear (full Bunker Gear) and self-contained breathing apparatus (pressure demand NIOSH approved or equivalent). Fire fighting equipment should be thoroughly decontaminated after use.

Fire and Explosion Hazards

None known.

6 ACCIDENTAL RELEASE MEASURES

In Case of Spill or Leak

Isolate hazard area and deny entry to unnecessary or unprotected personnel. Contain spilled liquid with sand or earth. Clean up spill immediately, observing precautions in the Personal Protection section of MSDS. Avoid runoff into storm sewers and ditches which lead to waterways.

EPAHO104001816

7 HANDLING AND STORAGE

Handling

Avoid contact with eyes. Wash thoroughly after handling. Avoid prolonged or repeated contact with skin. Avoid breathing vapor or mist. Keep container closed. Use only with adequate ventilation.

Emptied container retains vapor and product residue. Observe all labeled safeguards until container is cleaned, reconditioned or destroyed.

Storage

This material is not hazardous under normal storage conditions; however, material should be stored in closed containers, in a secure area to prevent container damage and subsequent spillage.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls

Investigate engineering techniques to reduce exposures below airborne exposure limits. Provide ventilation if necessary to control exposure levels below airborne exposure limits (see below). If practical, use local mechanical exhaust ventilation at sources of air contamination such as open process equipment. Consult ACGIH ventilation manual or NFPA Standard 91 for design of exhaust systems.

Eye / Face Protection

Where there is potential for eye contact, wear chemical goggles and have eye flushing equipment immediately available.

Skin Protection

Wear appropriate chemical resistant protective clothing and chemical resistant gloves to prevent skin contact. Consult glove manufacturer to determine appropriate type glove material for given application. Wear face shield and chemical resistant clothing such as a rubber apron when splashing may occur. Rinse contaminated skin promptly. Wash contaminated clothing and clean protective equipment before reuse. Wash skin thoroughly after handling.

Respiratory Protection

Avoid breathing vapor or mist. When airborne exposure limits are exceeded (see below), use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Consult respirator manufacturer to determine appropriate type equipment for given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where exposure limit may be significantly exceeded, use an approved full face positive-pressure, self-contained breathing apparatus or positive-pressure airline with auxiliary self-contained air supply. Respiratory protection programs must comply with 29 CFR § 1910.134.

Airborne Exposure Guidelines for Ingredients

Exposure Limit		Value
n-Dodecyl mercaptan		
ACGIH Sensitizer Designator	-	Y
ACGIH TWA	-	0.1 ppm
Hydrogen sulfide		
ACGIH STEL	-	15 ppm (21 mg/m3)
ACGIH TWA	-	10 ppm (14 mg/m3)
OSHA Ceiling PEL	-	20 ppm

EPAHO104001817

tert-Dodecanethiol

Arkema 8-hour TWA	-	5 ppm

-Only those components with exposure limits are printed in this section.
-Skin contact limits designated with a "Y" above have skin contact effect. Air sampling alone is insufficient to accurately quantitate exposure. Measures to prevent significant cutaneous absorption may be required.
-ACGIH Sensitizer designator with a value of "Y" above means that exposure to this material may cause allergic reactions.
-WEEL-AIHA Sensitizer designator with a value of "Y" above means that exposure to this material may cause allergic skin reactions.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Odor	Brown liquid with strong odor
pH	5 - 7
Specific Gravity	0.84
Vapor Pressure	NE
Vapor Density	NE
Melting Point	85 F
Freezing Point	NE
Boiling Point	NE
Solubility In Water	Insoluble

10 STABILITY AND REACTIVITY

Stability

This material is chemically stable under normal and anticipated storage and handling conditions.

Incompatibility

There are no known incompatibilities to this product.

Hazardous Decomposition Products

None known.

11 TOXICOLOGICAL INFORMATION

Toxicological Information

Data on this material and/or its components are summarized below.

n-Dodecyl Mercaptan
Single exposure (acute) studies indicate that this material is slightly toxic to practically non-toxic if swallowed (rat LD50 1,960 - >5,000 mg/kg) or inhaled (rat 4-hr LC50 >8-9 ppm; no deaths following exposure to saturated vapor), no more than slightly toxic if absorbed through skin (rat LD0 >2,000 mg/kg), corrosive to rabbit eyes and severely irritating to rabbit skin (24-hr exposure, PII 8.0/8.0)

Skin allergy was observed in guinea pigs following repeated exposure in some tests, but not others. A potential for irritation and allergic reactions in humans has been reported. Following repeated inhalation exposures, rats and mice exhibited eye, nasal and respiratory tract irritation and breathing difficulties, followed by death which was associated with lung damage. A repeated inhalation exposure study in mice produced microscopic liver changes. Following a longer-term inhalation exposure study, rats showed reduced growth, reduced liver and adrenal function, general congestion of the internal organs and microscopic changes in lungs, liver, kidney,

EPAHO104001818

11 TOXICOLOGICAL INFORMATION

heart and brain. No birth defects were observed in the offspring of rats exposed by inhalation during pregnancy, even at amounts which produced significant adverse effects on the mothers. No genetic changes were observed in tests using bacteria or animal cells.

Paraffin
This material is neither digested nor absorbed and is considered non-toxic. When ingested, it has been reported to have a mild laxative effect.

12 ECOLOGICAL INFORMATION

Ecotoxicological Information

Data on this material and/or its components are summarized below.

n-Dodecyl mercaptan
This material is practically non-toxic to Daphnia magna, rainbow trout and algae (no effect up to the limit of solubility).

Chemical Fate Information

Data on this material and/or its components are summarized below.

Paraffin
This material is reported to be biodegradable.

n-Dodecyl mercaptan
This material is not readily biodegradable (39.2% after 28-days). The log Pow is 6.18

13 DISPOSAL CONSIDERATIONS

Waste Disposal

Incineration is the recommended method for disposal observing all local, state and federal regulations. Note: Chemical additions to, processing of, or otherwise altering this material may make this waste management information incomplete, inaccurate, or otherwise inappropriate. Furthermore, state and local waste disposal requirements may be more restrictive or otherwise different from federal laws and regulations.

14 TRANSPORT INFORMATION

DOT Name	Non Bulk Domestic/ Bulk and Non bulk international: Not Regulated
DOT Technical Name	
DOT Hazard Class	
UN Number	
DOT Packing Group	PG
RQ	
DOT Special Information	Domestic Bulk shipments Combustible liquid, n.o.s. (Didodecyl sulfide) 3; NA 1993; PGIII

EPAHO104001819

15 REGULATORY INFORMATION

Hazard Categories Under Criteria of SARA Title III Rules (40 CFR Part 370)

Immediate (Acute) Health	Y	Fire	N
Delayed (Chronic) Health	N	Reactive	N
		Sudden Release of Pressure	N

COMPONENTS OF THIS BYPRODUCT ARE NOT ON THE TSCA INVENTORY. THIS BYPRODUCT IS PROVIDED UNDER THE TSCA PREMANUFACTURE NOTICE EXEMPTION AT 40 CFR 720.30(G) ONLY FOR BURNING AS FUEL OR MIXING (NOT REACTING) WITH OTHER MATERIALS FOR BURNING AS FUEL.

Ingredient Related Regulatory Information:

SARA Reportable Quantities	CERCLA RQ	SARA TPQ
Dodecene	NE	
n-Dodecyl mercaptan	NE	
Hydrogen sulfide	100 LBS	500 LBS
Didodecyl sulfide	NE	
tert-Dodecanethiol	NE	NE
sec-Dodecyl mercaptan	NE	
Propylene tetramer	NE	NE
C7-14 sulfides and disulfides	NE	NE
Alkenes, C8-10-branched, C9-rich	NE	NE

SARA Title III, Section 302

This product does contain chemical(s), as indicated below, currently on the Extremly Hazardous Substance List, Section 302, SARA Title III. See Section 2 for further details regarding concentrations and registry numbers.

Hydrogen sulfide

Massachusetts Right to Know

This product does contain the following chemicals(s), as indicated below, currently on the Massachusetts Right to Know Substance List.

Hydrogen sulfide
tert-Dodecanethiol

New Jersey Right to Know

This product does contain the following chemical(s), as indicated below, currently on the New Jersey Right-to-Know Substances List.

Hydrogen sulfide
Propylene tetramer

Pennsylvania Environmental Hazard

This product does contain the following chemical(s), as indicated below, currently on the Pennsylvania Environmental Hazard List.

Hydrogen sulfide

Pennsylvania Right to Know

This product does contain the following chemical(s), as indicated below, currently on the Pennsylvania Hazardous Substance List.

Hydrogen sulfide
n-Dodecyl mercaptan
tert-Dodecanethiol

16 OTHER INFORMATION

Revision Information

Revision Date	31 OCT 2006	Revision Number 7
Supercedes Revision Dated	08-MAR-2006	

Revision Summary
Revised section 2.

Key
NE= Not Established NA= Not Applicable (R) = Registered Trademark

Arkema Inc. believes that the information and recommendations contained herein (including data and statements) are accurate as of the date hereof. NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY, OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE CONCERNING THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specific product designated and may not be valid where such product is used in combination with any other materials or in any process. Further, since the conditions and methods of use are beyond the control of Arkema Inc., Arkema Inc. expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information.

EPAHO104001821

3195
Kinder Morgan

EPAHO104001822

CES Environmental
Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/3/2009**

Dear **Jonny Salinas**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3195

Expiration Date 3/3/2011

Generator: Kinder Morgan
Address: 906 Clinton Dr
Galena Park, TX 77547

Waste Information

Name of Waste: Cumene tank bottoms
TCEQ Waste Code #: 00186091
Container Type: 40 yd vac box
Detailed Description of Process Generating Waste:
Tank bottoms from a storage tank containing cumene
Color: muddy color **Odor:** gasoline/hydrocarbon **pH:** 7
Physical State:
Incompatibilities: see msds
Safety Related Data/Special Handling:
level d

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

'hank you,

Bowman, President
vironmental Services, Inc.

S Ward
J. Rust

CES Environmental Services, Inc.
4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit Number: 30948
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

SECTION 1: Generator Information

Company: Kinder Morgan
Address: 906 Clinton Drive
City: Galena Park **State:** TX **Zip:** 77547
Contact: Johnny Salinas **Title:**
Phone Number: (713) 725-5984 **Fax Number:**
24/hr Phone Number:
US EPA ID No: TXD026481253
State ID No: 30573 **SIC Code:**

SECTION 2: Billing Information - ☑ **Same as Above**

Company:
Address:
City: **State:** **Zip:**
Contact: **Title:**
Phone Number: **Fax Number:**

SECTION 3: General Description of the Waste

Name of Waste: Cumene Tank Bottoms
Detailed Description of Process Generating Waste:

Tank bottoms from a storage tank containing Cumene.

Physical State: ☐ **Liquid** ☑ **Sludge** ☐ **Powder** ☐ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: Muddy Color **Odor:** gasoline / hydrocarbon smell

Specific Gravity (water=1): 1 **Density:** 8 lbs/gal

Does this material contain any total phenolic compounds? ☑ Yes ☐ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☐ **Single-phase** ☑ **Multi-phase**

Container Type: ☐ **Drum** ☐ **Tote** ☐ **Truck** ☑ **Other (explain)**

Frequency: ☐ **Weekly** ☐ **Monthly** ☐ **Yearly** ☑ **One-Time**
Quantity: 40yds in vacuum box

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No
If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011
Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: 00186091

Proper US DOT Shipping Name: Non-Hazardous, Non-Regulated sludge
Class: / **UN/NA:** **PG :** **RQ:**

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
>140	7	0 mg/l	0 mg/l	80 %
Oil & Grease	**TOC**	**Zinc**	**Copper**	**Nickel**
0 mg/l	104 mg/l	.2 mg/l	.08 mg/l	.5 mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Rust / Scale / Dirt	60-85	%
Water	15-40	%
Cumene	0-5	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Level D

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. MSDS & Lab Memo#09-029

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

See MSDS

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	BRL
TCLP Volatiles:	BRL
TCLP Semi-Volatiles:	BRL
Reactivity:	Non-Reactive
Corrosivity:	Non-Corrosive
Ignitability:	Non-Ignitable

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☑ YES ☐ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory: Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory*: *Subpart C

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☒ Wastewater from organic chemical product operations
- ☒ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Johny Salinas **Date:** 3/2/09

Printed Name/Title: Johnny Salinas

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: Robert Johnson
Date: 3-3-09 ☑ Approved ☐ Rejected
Approval Number: 3195

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pricing (including freight):**

$85/yard + $6/ton environmental fee from disposal facility + 5% energy/fuel surcharge
$69/hr for trans (Customer is aware that trans will include hours to take box to disposal facility and back to CES for cleaning.)
$275 Washout
$3 Heel Surcharge
$70 box cleaning hourly rate
$200 local box return

2. **Contamination Limits (maximum limit before surcharges apply):**

N/A

3. **Surcharge Pricing:**

N/A

4. **Special Testing Requirements:**

Wastewater treatment on sample pulled from liquid portion of box.

5. **Treatment and Handling Protocol:**

Decant the liquids off of the top of the box and put through wastewater treatment facility.
Terminate manifest and send the box to the approved CES disposal facility for Class 1 sludge.

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A ☐ Subcategory B ☒ Subcategory C

EPAHO104001828

7. **Tests for Product Recovered/Recycled (if applicable):**

N/A

8. **Management for Product Recovered/Recycled (if applicable);**

N/A

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

To: Shannon Ward
Cc: Matt Bowman, Prabhaker, Joe Camp, Clint Hopkins

Date: 2/27/09

From: Miles Root

Lab Memo: 09-029

Subject: **Kinder Morgan Evaluation 0209-37**

A sample of water from Kinder Morgan has been evaluated for potential processing at CES. This sample is evaluation 0209-37. This evaluation represents material from a cumene tank bottoms. The available quantity of water is around 400 gallons. Overall, this water contains no cumene and is an easy water to handle and treat at CES.

This sample contains mostly solids, scale and rust, with a water layer. These will be disposed of off-site and are not an issue with CES This water has a pH of 7 and a flash point greater than 140 deg F. The water treats easily and forms a nice large floc that quickly phase separates out. The TOC is only 104 ppm with 1 ppm phenol. Metals are all at acceptable levels. This small amount of water may be brought in and mixed with any other of our process waters for treatment with no issues.

The table below summarizes the analytical testing.

Kinder Morgan	
Evaluation 0209-37	
pH	7
Phenols, ppm	1
TOC, mg/L	104
Oil, vol%	0
Treatability	OK
Metals, ppm	
Ni	0.505
Zn	0.205
Cu	0.080
Cd	0.080
Cr	0.215

Kinder Morgan MSDS Vault

Current Location: **All Kinder Morgan -> Liquids Terminals ->**

Personal Protective Pictograms

GHS Pictograms

SECTION 1: CHEMICAL PRODUCT and COMPANY IDENTIFICATION

07503

Product Name:	**Cumene**
Synonyms:	Isopropylbenzene; Benzene, (1-methylethyl)-; 2-Phenylpropane; (1-Methylethyl)benzene; CITGO® Material Code: 07503
CAS Number:	98-82-8
Chemical Family:	Product: Petroleum hydrocarbon solvent
Manufacturer MSDS.:	07503
Manufacturer Name:	Citgo Petroleum Corporation
Address:	P.O. Box 4689 Houston, TX 77210
Business Phone:	Technical Contact: (800) 248-4684
CHEMTREC Numbers:	
For emergencies in the US, call CHEMTREC: 800-424-9300	
Health Phone:	Emergency: (832) 486-4700
Revision Date:	10/30/2008 Version Number: 10.1
Trade Names:	Cumene
Physical Form:	Transparent, Liquid.
Color:	Colorless.
Odor:	Aromatic.

NFPA

3
1 1

HMIS

HEALTH	2
FIRE	3
REACTIVITY	1
PPE	

Emergency Overview:
WARNING:
Flammable liquid; vapor may cause flash fire.
Harmful or fatal if swallowed - can enter lungs and cause damage.
Can cause eye, skin or respiratory tract irritation.
Overexposure can cause central nervous system (CNS) depression and/or other target organ effects.
Harmful to aquatic organisms.

Hazard Rankings:
* = Chronic Health Hazard

Protective Equipment:
Minimum Recommended
See Section 8 for Details

IMPORTANT: This MSDS is prepared in accordance with 29 CFR 1910.1200. Read this MSDS before transporting, handling, storing or disposing of this product and forward this information to employees, customers and users of this product.

Product Codes: 07503

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SECTION 2 : COMPOSITION, INFORMATION ON INGREDIENTS 07503

Ingredient Name	CAS#	Ingredient Percent
Cumene	98-82-8	Concentration: > 99%

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SECTION 3 : HAZARDS IDENTIFICATION 07503

Emergency Overview: Also see Emergency Overview and Hazard Ratings on the Section 1 of this MSDS.

Cumene :

Route of Exposure: Major Route(s) of Entry: Skin contact. Inhalation.

Potential Health Effects:

Eye Contact: Signs and Symptoms of Acute Exposure: This material can cause eye irritation with tearing, redness, or a stinging or burning feeling. Further, it can cause swelling of the eyes with blurred vision. Effects may become more serious with repeated or prolonged contact.

Skin Contact: Signs and Symptoms of Acute Exposure: May cause mild skin irritation with redness and/or an itching or burning feeling. Effects may become more serious with repeated or prolonged contact.
It is likely that some components of this material are able to pass into the body through the skin and may cause similar effects as from breathing or swallowing it.

Inhalation: Signs and Symptoms of Acute Exposure: Breathing high concentrations may be harmful. Mist or vapor can irritate the throat and lungs. Breathing this material may cause central nervous system depression with symptoms including nausea, headache, dizziness, fatigue, drowsiness, or unconsciousness.

Ingestion: Signs and Symptoms of Acute Exposure: Swallowing this material may be harmful. Swallowing this material may cause stomach or intestinal upset with pain, nausea, and/or diarrhea. This material can get into the lungs during swallowing or vomiting. Small amounts in the lungs can cause lung damage, possibly leading to chronic lung dysfunction or death. Swallowing this material may cause effects similar to those described in the inhalation section (see "inhalation" above).

Chronic Health Effects: Summary: Secondary effects of ingestion and subsequent aspiration into the lungs may cause pneumatocele (lung cavity) formation and chronic lung dysfunction.
See Toxicological Information (Section 11)

Carcinogenicity: This product is not known to contain any components at concentrations

Target Organs: May cause damage to the following organs: kidneys, liver, mucous membranes, spleen, upper respiratory tract, skin, adrenal, central nervous system (CNS), eye, lens or cornea

Aggravation of Pre-Existing Conditions: Disorders of the following organs or organ systems that may be aggravated by significant exposure to this material or its components include: Skin, Respiratory System, Central Nervous System (CNS)

OSHA Hazard Classification is indicated by an "Yes" in the box adjacent to the hazard title. If no "Yes" is present, the product does not exhibit the hazard as defined in the OSHA Hazard Communication Standard (29 CFR 1910.1200).

OSHA Health Hazard Classification:
Irritant: Yes
OSHA Physical Hazard Classification:
Flammable: Yes

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SECTION 4 : FIRST AID MEASURES 07503

Eye Contact:	Check for and remove contact lenses. Flush eyes with cool, clean, low-pressure water for at least 15 minutes while occasionally lifting and lowering eyelids. Do not use eye ointment unless directed to by a physician. Seek medical attention if excessive tearing, irritation, or pain persists.
Skin Contact:	Remove contaminated shoes and clothing. Flush affected area with large amounts of water. If skin surface is damaged, apply a clean dressing and seek medical attention. Do not use ointments. If skin surface is not damaged, clean affected area thoroughly with mild soap and water. Seek medical attention if tissue appears damaged or if pain or irritation persists.
Inhalation:	Move victim to fresh air. If victim is not breathing, immediately begin rescue breathing. If breathing is difficult, 100 percent humidified oxygen should be administered by a qualified individual. Seek medical attention immediately. Keep the affected individual warm and at rest.
Ingestion:	Do not induce vomiting. If spontaneous vomiting is about to occur, place victim's head below knees. If victim is drowsy or unconscious, place on the left side with head down. Never give anything by mouth to a person who is not fully conscious. Do not leave victim unattended. Seek medical attention immediately.
Note to Physicians:	INHALATION: Inhalation overexposure can produce toxic effects. Monitor for respiratory distress. If cough or difficulty in breathing develops, evaluate for upper respiratory tract inflammation, bronchitis, and pneumonitis. Administer supplemental oxygen with assisted ventilation, as required. This material (or a component) sensitizes the heart to the effects of sympathomimetic amines. Epinephrine and other sympathomimetic drugs may initiate cardiac arrhythmias in individuals exposed to this material. Administration of sympathomimetic drugs should be avoided. INGESTION: If ingested, this material presents a significant aspiration and chemical pneumonitis hazard. Induction of emesis is not recommended. Consider activated charcoal and/or gastric lavage. If patient is obtunded, protect the airway by cuffed endotracheal intubation or by placement of the body in a Trendelenburg and left lateral decubitus position.
Other First Aid:	Take proper precautions to ensure your own health and safety before attempting rescue or providing first aid. For more specific information, refer to Exposure Controls and Personal Protection in Section 8 of this MSDS.

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SECTION 5 : FIRE FIGHTING MEASURES 07503

Flash Point:	36 deg C (96 deg F).
Flash Point Method:	Closed cup: (Pensky-Martens.)
Upper Flammable or Explosive Limit:	AP 6.5 %
Lower Flammable or Explosive Limit:	AP 0.9 %
Auto Ignition Temperature:	424 deg C (795 deg F)
Flammability Class:	NFPA: NFPA Class-IC flammable liquid.
Extinguishing Media:	SMALL FIRE: Use dry chemicals, carbon dioxide, foam, water fog, or inert gas (nitrogen). LARGE FIRE: Use foam, water fog, or water spray. Water fog and spray are effective in cooling containers and adjacent structures. However, water can cause frothing and/or may not extinguish the fire. Water can be used to cool the external walls of vessels to prevent excessive pressure, autoignition or explosion. DO NOT use a solid stream of water directly on the fire as the water may spread the fire to a larger area.
Hazardous Combustion Byproducts:	Carbon dioxide, carbon monoxide, smoke, fumes, and/or unburned hydrocarbons.
Fire Fighting Instructions:	Firefighters must use full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against potential hazardous combustion or decomposition products and oxygen deficiencies. Evacuate area and fight the fire from a maximum distance or use unmanned hose holders or monitor nozzles. Cover pooling liquid with foam. Containers can build pressure if exposed to radiant heat; cool adjacent containers with flooding quantities of water until well after the fire is out. Withdraw immediately from the area if there is a rising sound from a venting safety device or discoloration of vessels, tanks, or pipelines. Be aware that burning liquid will float on water. Notify appropriate authorities of potential fire and explosion hazard if liquid enter sewers or waterways.
Special Properties:	Flammable Liquid! This material releases vapors at or below ambient temperatures. When mixed with air in certain proportions and exposed to an ignition source, its vapor can cause a flash fire. Use only with adequate ventilation. Vapors are heavier than air and may travel long distances along the ground to an ignition source and flash back. A vapor and air mixture can create an explosion hazard in confined spaces such as sewers. If container is not

properly cooled, it can rupture in the heat of a fire.

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SECTION 6 : ACCIDENTAL RELEASE MEASURES 07503

Spill Cleanup Measures: Flammable Liquid! Release causes an immediate fire or explosion hazard. Evacuate all non-essential personnel from immediate area and establish a "regulated zone" with site control and security. A vapor-suppressing foam may be used to reduce vapors. Eliminate all ignition sources. All equipment used when handling this material must be grounded. Stop the leak if it can done without risk. Do not touch or walk through spilled material. Remove spillage immediately from hard, smooth walking areas. Prevent spilled material from entering waterways, sewers, basements, or confined areas. Absorb or cover with dry earth, sand, or other non-combustible material and transfer to appropriate waste containers. Use clean, non-sparking tools to collect absorbed material.

Large Spill: For large spills, secure the area and control access. Prevent spilled material from entering sewers, storm drains, other drainage systems, and natural waterways. Dike far ahead of a liquid spill to ensure complete collection. Water mist or spray may be used to reduce or disperse vapors; but, it may not prevent ignition in closed spaces. This material will float on water and its run-off may create an explosion or fire hazard. Verify that responders are properly HAZWOPER-trained and wearing appropriate respiratory equipment and fire-resistant protective clothing during cleanup operations. In an urban area, cleanup spill as soon as possible; in natural environments, cleanup on advice from specialists. Pick up free liquid for recycle and/or disposal if it can be accomplished safely with explosion-proof equipment. Collect any excess material with absorbant pads, sand, or other inert non-combustible absorbent materials. Place into appropriate waste containers for later disposal. Comply with all applicable local, state and federal laws and regulations.

Take proper precautions to ensure your own health and safety before attempting spill control or clean-up. For more specific information, refer to the Emergency Overview on Section 1, Exposure Controls and Personal Protection in Section 8 and Disposal Considerations in Section 13 of this MSDS.

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SECTION 7 : HANDLING and STORAGE 07503

Handling: A spill or leak can cause an immediate fire or explosion hazard. Keep containers closed and do not handle or store near heat, sparks, or any other potential ignition sources. Avoid contact with oxidizing agents. Do NOT breathe vapor. Use only with adequate ventilation and personal protection. Never siphon by mouth. Avoid contact with eyes, skin, and clothing. Prevent contact with food and tobacco products. Do NOT take internally.

When performing repairs and maintenance on contaminated equipment, keep unnecessary persons away from the area. Eliminate all potential ignition sources. Drain and purge equipment, as necessary, to remove material residues. Follow proper entry procedures, including compliance with 29 CFR 1910.146 prior to entering confined spaces such as tanks or pits. Use gloves constructed of impervious materials and protective clothing if direct contact is anticipated. Use appropriate respiratory protection when concentrations exceed any established occupational exposure level (See Section 8) Promptly remove contaminated clothing. Wash exposed skin thoroughly with soap and water after handling.

Non-equilibrium conditions may increase the fire hazard associated with this product. A static electrical charge can accumulate when this material is flowing through pipes, nozzles or filters and when it is agitated. A static spark discharge can ignite accumulated vapors particularly during dry weather conditions. Always bond receiving containers to the fill pipe before and during loading. Always confirm that receiving container is properly grounded. Bonding and grounding alone may be inadequate to eliminate fire and explosion hazards associated with electrostatic charges. Carefully review operations that may increase the risks associated with static electricity such as tank and container filling, tank cleaning, sampling, gauging, loading, filtering, mixing, agitation, etc. In addition to bonding and grounding, efforts to mitigate the hazards of an electrostatic discharge may include, but are not limited to, ventilation, inerting and/or reduction of transfer velocities. Dissipation of electrostatic charges may be improved with the use of conductivity additives when used with other mitigation efforts, including bonding and grounding. Always keep nozzle in contact with the container throughout the loading process.

Do NOT fill any portable container in or on a vehicle. Do NOT use compressed air for filling, discharging or other handling operations. Product container is NOT designed for elevated pressure. Do NOT pressurize, cut, weld, braze solder, drill, or grind on containers. Do NOT expose product containers to flames, sparks, heat or other potential ignition sources. Empty containers may contain material residues which can ignite with explosive force. Observe label precautions.

Storage: Keep container tightly closed. Store in a cool, dry, well-ventilated area. Store only in approved containers. Do not store with oxidizing agents. Do not store at

elevated temperatures or in direct sunlight. Protect containers against physical damage. Head spaces in tanks and other containers may contain a mixture of air and vapor in the flammable range. Vapor may be ignited by static discharge. Storage area must meet OSHA requirements and applicable fire codes. Additional information regarding the design and control of hazards associated with the handling and storage of flammable and combustible liquids may be found in professional and industrial documents including, but not limited to, the National Fire Protection Association (NFPA) publications NFPA 30 ("Flammable and Combustible Liquid Code"), NFPA 77 ("Recommended Practice on Static Electricity") and the American Petroleum Institute (API) Recommended Practice 2003, ("Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents").

Consult appropriate federal, state and local authorities before reusing, reconditioning, reclaiming, recycling or disposing of empty containers or waste residues of this product.

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SECTION 8 : EXPOSURE CONTROLS, PERSONAL PROTECTION 07503

Engineering Controls:	Provide ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits indicated below. All electrical equipment should comply with the National Electrical Code. An emergency eye wash station and safety shower should be located near the work-station.
Personal Protective Equipment Routine Handling:	Personal protective equipment should be selected based upon the conditions under which this material is used. A hazard assessment of the work area for PPE requirements should be conducted by a qualified professional pursuant to OSHA regulations. The following pictograms represent the minimum requirements for personal protective equipment. For certain operations, additional PPE may be required.
Hand Protection Description:	Avoid skin contact. Use heavy duty gloves constructed of chemical resistant materials such as Viton® or heavy nitrile rubber. Wash hands with plenty of mild soap and water before eating, drinking, smoking, use of toilet facilities or leaving work. DO NOT use gasoline, kerosene, solvents or harsh abrasives as skin cleaners.
Eye/Face Protection:	Safety glasses equipped with side shields are recommended as minimum protection in industrial settings. Chemical goggles should be worn during transfer operations or when there is a likelihood of misting, splashing, or spraying of this material. A suitable emergency eye wash water and safety shower should be located near the work station.
Protective Clothing/Body Protection:	Avoid skin contact. Wear long-sleeved fire-retardant garments (e.g., Nomex®) while working with flammable and combustible liquids. Additional chemical-resistant protective gear may be required if splashing or spraying conditions exist. This may include an apron, boots and additional facial protection. If product comes in contact with clothing, immediately remove soaked clothing and shower. Promptly remove and discard contaminated leather goods
Respiratory Protection:	For known vapor concentrations above the occupational exposure guidelines (see below), use a NIOSH-approved organic vapor respirator if adequate protection is provided. Protection factors vary depending upon the type of respirator used. Respirators should be used in accordance with OSHA requirements (29 CFR 1910.134).
Exposure Limits:	Applicable Workplace Exposure Levels
Comments:	General Comments: Warning! Use of this material in spaces without adequate ventilation may result in generation of hazardous levels of combustion products and/or inadequate oxygen levels for breathing. Odor is an inadequate warning for hazardous conditions.

Ingredient Guidelines

Ingredient: Cumene

Guideline Type:	ACGIH TLV-TWA
Guideline Information:	50 ppm 8 hour(s). (United States).
Guideline Type:	OSHA PEL-TWA
Guideline Information:	50 ppm 8 hour(s). (United States). Skin

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SECTION 9 : PHYSICAL and CHEMICAL PROPERTIES 07503

Physical State/Appearance:	Transparent
Color:	Colorless.
Odor:	Aromatic.
Physical State:	Liquid.
pH:	Not applicable.
Vapor Pressure:	1.1 kPa (8 mm Hg) (at 20 deg C)

Vapor Density:	4.1 (Air = 1)
Flash Point:	36 deg C (96 deg F).
Flash Point Method:	Closed cup: (Pensky-Martens.)
Boiling Point:	152 deg C (306 deg F)
Freezing Point:	Not available.
Melting Point:	Not available.
Solubility:	In Water: Negligible solubility in cold water.
Specific Gravity:	0.86 (Water = 1)
Volatile Organic Compound Content:	862 g/l VOC (w/v)
Viscosity:	(cSt @ 40 deg C): 0.7

Additional Properties:
Paraffin, Isoparaffin and Cycloparaffin Hydrocarbons Content = < 1 Wt.% (ASTM D-1319);
Aromatic Hydrocarbon Content = > 99 Wt. % (ASTM D-1319);
Average Density at 60 deg F = 7.19 lbs./gal. (Calculated via ASTM D-287);
Aniline Cloud Point Temperature = 52 deg F (11 deg C) (ASTM D-611);
Kauri-Butanol (KB) Value = 96 (ASTM D-1133);
Dry Point Temperature = 307 deg F (153 deg C) (ASTM D-86, D-850 or D-1078);
Evaporation Rate = 0.5 (n-Butyl acetate = 1.0);
Heat Value = 18,670 Btu. per pound

PHYSICAL AND CHEMICAL PROPERTIES (TYPICAL)

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SECTION 10 : STABILITY and REACTIVITY 07503

Chemical Stability:	Normally stable but may form peroxides when stored for prolonged time periods in contact with air.
Conditions to Avoid:	Keep away from heat, sparks and flame. Forms peroxides with prolonged storage.
Incompatibilities with Other Materials:	Strong acids, alkalies, and oxidizers.
Hazardous Polymerization:	Not expected to occur.
Hazardous Decomposition Products:	No additional hazardous decomposition products were identified other than the combustion products identified in Section 5 of this MSDS.

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SECTION 11 : TOXICOLOGICAL INFORMATION 07503

Cumene :

Acute Health Effects:	Overexposure to cumene may cause upper respiratory tract irritation and CNS depression.
Chronic Effects:	Effects from Prolonged or Repeated Exposure: Studies in laboratory animals indicate evidence of adverse effects on the kidney, spleen and adrenal glands following high level exposure. The relevance of these findings to humans is not clear at this time.
Toxicological Paragraph:	For other health-related information, refer to the Emergency Overview on Section 1 and the Hazards Identification in Section 3 of this MSDS.

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SECTION 12 : ECOLOGICAL INFORMATION 07503

Ecotoxicity:	LC50 (fish): 1-10 mg/l. This product is potentially toxic to freshwater and saltwater ecosystems.
Environmental Fate:	This product will normally float on water. Components will evaporate rapidly. Aquatic toxicity values are expected to be in the range of 1 - 10 mg/l based upon data from components and similar products. This material may be harmful to aquatic organisms and may cause long term adverse effects in the aquatic environment. The log Kow value for this product is 3.66.

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SECTION 13 : DISPOSAL CONSIDERATIONS 07503

Waste Disposal:	Hazard characteristic and regulatory waste stream classification can change with product use. Accordingly, it is the responsibility of the user to determine the proper storage, transportation, treatment and/or disposal methodologies for

spent materials and residues at the time of disposition.

If discarded, Cumene is regulated by US EPA as a listed hazardous waste (U055). Transportation, treatment, storage and disposal of waste material must be conducted in accordance with RCRA regulations (see 40 CFR 260 through 40 CFR 271). State and/or local regulations may be more restrictive. Contact the RCRA/Superfund Hotline at (800) 424-9346 or your regional US EPA office for guidance concerning case specific disposal issues.

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SECTION 14 : TRANSPORT INFORMATION 07503

Transportation Information:	The shipping description below may not represent requirements for all modes of transportation, shipping methods or locations outside of the United States.
DOT Shipping Information:	US DOT Status: A U.S. Department of Transportation (DOT) regulated material. Reportable Quantity: RQ 5000 lbs. [Based upon maximum Cumene concentration of 100% and an RQ of 5000 lbs.] Placard(s): FLAMMABLE LIQUID 3
DOT Shipping Name:	Isopropylbenzene (Cumene)
DOT UN Number:	UN 1918
DOT Hazard Class:	3
DOT Packing Group:	III
NAERG Number:	128
MARPolIIIStatus:	Not a DOT "Marine Pollutant" per 49 CFR 171.8.

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SECTION 15 : REGULATORY INFORMATION 07503

Cumene :

TSCA 8(b): Inventory Status:	This product and/or its components are listed on the Toxic Substances Control Act (TSCA) inventory.
Section 302:	SARA 302 Emergency Planning and Notification: The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to Subparts 302 to submit emergency planning and notification information based on Threshold Planning Quantities (TPQs) and Reportable Quantities (RQs) for "Extremely Hazardous Substances" listed in 40 CFR 355. No components were identified.
Section 304:	SARA 304 Emergency Planning and Notification: The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to Subparts 304 to submit emergency planning and notification information based on Threshold Planning Quantities (TPQs) and Reportable Quantities (RQs) for "Extremely Hazardous Substances" listed in 40 CFR 302.4. No components were identified. CERCLA: The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center concerning release of quantities of "hazardous substances" equal to or greater than the reportable quantities (RQ's) listed in 40 CFR 302.4. As defined by CERCLA, the term "hazardous substance" does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically designated in 40 CFR 302.4. Chemical substances present in this product or refinery stream that may be subject to this statute are: Chemical Name: Cumene CAS No.: 98-82-8 RQ = 5000 lbs. (2268 kg) Concentration: > 99%
Section 312 Hazard Category:	SARA 311/312 Hazard Identification: The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to this subpart to submit aggregate information on chemicals by "Hazard Category" as defined in 40 CFR 370.2. This material would be classified under the following hazard categories:
Acute:	Yes
Chronic:	Yes
Fire:	Yes
Section 313 Toxic Release Form:	SARA 313 Toxic Chemical Notification and Release Reporting: This product contains the following components in concentrations above de minimis levels that are listed as toxic chemicals in 40 CFR Part 372 pursuant to the requirements of Section 313 of SARA: Chemical Name: Cumene CAS No.: 98-82-8 Concentration: > 99%

Section 116.4 part 117: Clean Water Act	(CWA): This material is classified as an oil under Section 311 of the Clean Water Act (CWA) and the Oil Pollution Act of 1990 (OPA). Discharges or spills which produce a visible sheen on waters of the United States, their adjoining shorelines, or into conduits leading to surface waters must be reported to the EPA's National Response Center at (800) 424-8802.
OSHA 29 CFR 1200:	This MSDS is prepared in accordance with 29 CFR 1910.1200.
State:	California Proposition 65: This material may contain the following components which are known to the State of California to cause cancer, birth defects or other reproductive harm, and may be subject to the requirements of California Proposition 65 (CA Health & Safety Code Section 25249.5): Benzene: < 0.005% New Jersey Right-to-Know Label: For New Jersey R-T-K labeling requirements, refer to components listed in Section 2.
Regulatory Paragraph:	Additional Regulatory Remarks: Federal Hazardous Substances Act, related statutes, and Consumer Product Safety Commission regulations, as defined by 16 CFR 1500.14(b)(3) and 1500.83(a)(13): This product contains "Petroleum Distillates" which may require special labeling if distributed in a manner intended or packaged in a form suitable for use in the household or by children. Precautionary label dialogue should display the following: DANGER: Contains Petroleum Distillates! Harmful or fatal if swallowed! Call Physician Immediately. KEEP OUT OF REACH OF CHILDREN!

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SECTION 16 : ADDITIONAL INFORMATION 07503

HMIS:	
Health Hazard:	*2 (* = Chronic Health Hazard)
Fire Hazard:	3
Reactivity:	1
NFPA:	
Health:	1
Fire Hazard:	3
Reactivity:	1
MSDS Revision Date:	10/30/2008 Version Number: 10.1

Disclaimer:

DISCLAIMER OF LIABILITY:
THE INFORMATION IN THIS MSDS WAS OBTAINED FROM SOURCES WHICH WE BELIEVE ARE RELIABLE. HOWEVER, THE INFORMATION IS PROVIDED WITHOUT ANY WARRANTY, EXPRESSED OR IMPLIED REGARDING ITS CORRECTNESS. SOME INFORMATION PRESENTED AND CONCLUSIONS DRAWN HEREIN ARE FROM SOURCES OTHER THAN DIRECT TEST DATA ON THE SUBSTANCE ITSELF. THIS MSDS WAS PREPARED AND IS TO BE USED ONLY FOR THIS PRODUCT. IF THE PRODUCT IS USED AS A COMPONENT IN ANOTHER PRODUCT, THIS MSDS INFORMATION MAY NOT BE APPLICABLE. USERS SHOULD MAKE THEIR OWN INVESTIGATIONS TO DETERMINE THE SUITABILITY OF THE INFORMATION OR PRODUCTS FOR THEIR PARTICULAR PURPOSE.

THE CONDITIONS OR METHODS OF HANDLING, STORAGE, USE, AND DISPOSAL OF THE PRODUCT ARE BEYOND OUR CONTROL AND MAY BE BEYOND OUR KNOWLEDGE. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH HANDLING, STORAGE, USE OR DISPOSAL OF THE PRODUCT.

Hazard Rankings:
Protective Equipment:
Minimum Recommended
See Section 8 for Details

Refer to the Section 1 for the HMIS and NFPA Hazard Ratings for this product.

ABBREVIATIONS:
AP: Approximately
EQ: Equal
> : Greater Than
< : Less Than
NA: Not Applicable
ND: No Data
NE: Not Established
ACGIH: American Conference of Governmental Industrial Hygienists
AIHA: American Industrial Hygiene Association
IARC: International Agency for Research on Cancer
NTP: National Toxicology Program
NIOSH: National Institute of Occupational Safety and Health
OSHA: Occupational Safety and Health Administration
NPCA: National Paint and Coating Manufacturers Association
HMIS: Hazardous Materials Information System
NFPA: National Fire Protection Association
EPA: US Environmental Protection Agency

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3196

Port of Houston—Turning Basin

EPAHO104001840

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/3/2009**

Dear **Jonny Salinas**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3195

Expiration Date 3/3/2011

Generator: Kinder Morgan
Address: 906 Clinton Dr
Galena Park, TX 77547

Waste Information

Name of Waste: Cumene tank bottoms
TCEQ Waste Code #: 00186091
Container Type: 40 yd vac box
Detailed Description of Process Generating Waste:
Tank bottoms from a storage tank containing cumene
Color: muddy color **Odor:** gasoline/hydrocarbon **pH:** 7
Physical State:
Incompatibilities: see msds
Safety Related Data/Special Handling:
level d

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

✓ #3196 GB JR

inorganic solid

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility 4904 Griggs Road, Houston, TX 77021 Phone (713) 676-1460 Fax: (713) 676-1460 U.S. EPA ID Number: TXD008950461 ISWR Number: 30900 TCEQ Industrial Solid Waste Permit Number: 30948	☐ CES Environmental Services - Port Arthur Facility 2420 S. Gulfway Dr., Port Arthur, TX 77641 Phone (713) 676-1460 Fax: (713) 676-1460 U.S. EPA ID Number: TXR000079307 ISWR Number: 88585

SECTION 1: Generator Information

Company: Port of Houston Authority - Turning Basin
Address: 7300 Clinton Drive
City: Houston **State:** TX **Zip:** 77029
Contact: Roxana Herrera **Title:**
Phone Number: 713-670-2814 **Fax Number:** 713-670-2427
24/hr Phone Number:
US EPA ID No: TXCESQG
State ID No: CESQG **SIC Code:**

SECTION 2: Billing Information - ☐ **Same as Above**

Company: Port of Houston Authority
Address: P.O. Box 2652
City: Houston **State:** TX **Zip:** 77252-2562
Contact: Roxana Herrera **Title:**
Phone Number: 713-670-2814 **Fax Number:** 713-670-2427

SECTION 3: General Description of the Waste

Name of Waste: Soil
Detailed Description of Process Generating Waste

Soil from a clean up

Physical State: ☐ Liquid ☐ Sludge ☐ Powder ☑ Solid ☐ Filter Cake ☐ Combination

Color: Dark **Odor:** Slight

Specific Gravity (water=1): N/A **Density:** N/A lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☐ Single-phase ☑ Multi-phase

Container Type: ☑ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☑ Monthly ☐ Yearly ☐ One-Time
Quantity: 1

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No
If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011
Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: CESQ3021

Proper US DOT Shipping Name: Non-RCRA, Non-DOT Regulated Material (soil)
Class: _____ UN/NA: _____ PG : _____ RQ: _____

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>140		8.2		BRL	mg/l	BRL	mg/l	100	%
Oil & Grease		TOC		Zinc		Copper		Nickel	
>1500	mg/l	N/A	mg/l	N/A	mg/l	N/A	mg/l	.3	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Soil	80-95	%
Rust / Scale	5-20	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Level D

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. Analytical#09020227

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

None

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	Not Regulated
TCLP Volatiles:	Not Regulated
TCLP Semi-Volatiles:	Not Regulated
Reactivity:	Non-Reactive
Corrosivity:	Non-Corrosive
Ignitability:	Non-Ignitable

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory: Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory*: *Subpart C

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** 3-2-09

Printed Name/Title: Roxana Herrera

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: _____
Date: 3-4-09 ☑ Approved ☐ Rejected
Approval Number: _____

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$165/DM

2. Contamination Limit (maximum limit before surchages apply):

3. Surcharge Pricing:

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

Bulk to Class 1 box

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

2DM
Bulk Clay
1 bl

Laboratory Analysis Report

Total Number of Pages: 15

Job ID : 09020227

10100 East Freeway, Suite 100, Houston, TX 77029 tel: 713-453-6060, fax: 713-453-6091, http://www.ablabs.com

Client Project Name :
0209-07 POH-Tuning Basin Ike Drum / POH- Turning Basin

Report To :	Client Name:	CES Environmental	P.O.#.: 0209-07
	Attn:	Gary Brauckman	Sample Collected By: Durim T.
	Client Address:	4904 Griggs Rd	Date Collected: 02/03/09
	City, State, Zip:	Houston, Texas, 77021	

A&B Labs has analyzed the following samples...

Client Sample ID	Matrix	A&B Sample ID
Steel Shot (0209-07-A)	Soil	09020227.01
Steel Shot (0209-07-B)	Soil	09020227.02

Sonia West

Released By: Sonia West
Title: Senior Project Manager
Date: 2/26/2009

This Laboratory is NELAP (T104704213-08B-TX) accredited. Effective: 07/01/2008; Expires: 06/03/2009
Scope: Non-Potable Water, Drinking Water, Air, Solid, Hazardous Waste

I am the laboratory manager, or his/her designee, and I am responsible for the release of this data package. This laboratory data package has been reviewed and is complete and technically compliant with the requirements of the methods used, except where noted in the attached exception reports. I affirm, to the best of my knowledge that all problems/anomalies observed by this laboratory (and if applicable, any and all laboratories subcontracted through this laboratory) that might affect the quality of the data, have been identified in the Laboratory Review Checklist, and that no information or data have been knowingly withheld that would affect the quality of the data.

This report cannot be reproduced, except in full, without prior written permission of A&B Labs. Results shown relate only to the items tested. Samples are assumed to be in acceptable condition unless otherwise noted. Blank correction is not made unless otherwise noted. Air concentrations reported are based on field sampling information provided by client.

Date Received : 02/09/2009 15:30

EPAHO104001848

LABORATORY TERM AND QUALIFIER DEFINITION REPORT

Job ID : 09020227

Date: 2/26/2009

General Term Definition

Back-Wt	Back Weight	Post-Wt	Post Weight
BRL	Below Reporting Limit	ppm	parts per million
cfu	colony-forming units	Pre-Wt	Previous Weight
Conc.	Concentration	Q	Qualifier
D.F.	Dilution Factor	RegLimit	Regulatory Limit
Front-Wt	Front Weight	RPD	Relative Percent Difference
LCS	Laboratory Check Standard	RptLimit	Reporting Limit
LCSD	Laboratory Check Standard Duplicate	surr	Surrogate
MS	Matrix Spike	T	Time
MSD	Matrix Spike Duplicate	TNTC	Too numerous to count
MW	Molecular Weight		

Qualifier Definition

J	Estimation. Below calibration range but above MDL.

EPAHO104001849

LABORATORY TEST RESULTS

Job ID : 09020227

Date 2/26/2009

Client Name: CES Environmental

Attn: Gary Brauckman

Project Name: 0209-07 POH-Tuning Basin Ike Drum / POH- Turning Basin

Client Sample ID: Steel Shot (0209-07-A)
Date Collected: 02/03/09
Time Collected: 14:00
Other Information:

Job Sample ID: 09020227.01
Sample Matrix Soil

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 1010	Ignitability (Flash Point)								
	Ignitability	>150	°F	1				02/17/09 08:05	SG
SW-846 6010C	TCLP Metals								
	Antimony	BRL	mg/L	1	0.1	1		02/12/09 16:42	TK
	Arsenic	BRL	mg/L	1	0.04	1.8		02/12/09 16:42	TK
	Barium	0.090	mg/L	1	0.04	100.0		02/12/09 16:42	TK
	Beryllium	BRL	mg/L	1	0.04	0.08		02/12/09 16:42	TK
	Cadmium	BRL	mg/L	1	0.04	0.5		02/12/09 16:42	TK
	Chromium	BRL	mg/L	1	0.04	5.0		02/12/09 16:42	TK
	Lead	BRL	mg/L	1	0.04	1.5		02/12/09 16:42	TK
	Nickel	0.331	mg/L	1	0.04	70		02/12/09 16:42	TK
	Selenium	BRL	mg/L	1	0.1	1.0		02/12/09 16:42	TK
	Silver	BRL	mg/L	1	0.04	5.0		02/12/09 16:42	TK
SW-846 7.3	Reactive Cyanide								
	Reactive Cyanide	BRL	mg/Kg	1	25			02/12/09 10:00	KS
SW-846 7.3	Reactive Sulfide								
	Reactive Sulfide	BRL	mg/Kg	1	25			02/11/09 13:30	KS
SW-846 7470A	TCLP Metals, Mercury								
	Mercury	BRL	mg/L	1	0.0005	0.2		02/11/09 14:42	TK
SW-846 9045D	Corrosivity, pH								
	pH	9.20	s.u.					02/11/09 14:00	RK
TX 1005	Total Petroleum Hydrocarbons								
	C6-C12	BRL	mg/Kg	1	14.7			02/11/09 10:23	WS
	>C12-C28	BRL	mg/Kg	1	18.4			02/11/09 10:23	WS
	>C28-C35	BRL	mg/Kg	1	19.1			02/11/09 10:23	WS
	Total C6-C35	BRL	mg/Kg	1				02/11/09 10:23	WS
	Chlorooctadecane(surr)	70.2	%	1	50-149			02/11/09 10:23	WS
	1-Chlorooctane(surr)	53.5	%	1	50-149			02/11/09 10:23	WS

EPAHO104001850

LABORATORY TEST RESULTS

Job ID : 09020227

Date 2/26/2009

Client Name: CES Environmental

Attn: Gary Brauckman

Project Name: 0209-07 POH-Tuning Basin Ike Drum / POH- Turning Basin

Client Sample ID: Steel Shot (0209-07-B)
Date Collected: 02/03/09
Time Collected: 14:00
Other Information:

Job Sample ID: 09020227.02
Sample Matrix Soil

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 1010	Ignitability (Flash Point)								
	Ignitability	>150	°F	1				02/17/09 08:05	SG
SW-846 6010C	TCLP Metals								
	Antimony	BRL	mg/L	1	0.1	1		02/12/09 16:46	TK
	Arsenic	BRL	mg/L	1	0.04	1.8		02/12/09 16:46	TK
	Barium	0.131	mg/L	1	0.04	100.0		02/12/09 16:46	TK
	Beryllium	BRL	mg/L	1	0.04	0.08		02/12/09 16:46	TK
	Cadmium	BRL	mg/L	1	0.04	0.5		02/12/09 16:46	TK
	Chromium	BRL	mg/L	1	0.04	5.0		02/12/09 16:46	TK
	Lead	BRL	mg/L	1	0.04	1.5		02/12/09 16:46	TK
	Nickel	BRL	mg/L	1	0.04	70		02/12/09 16:46	TK
	Selenium	BRL	mg/L	1	0.1	1.0		02/12/09 16:46	TK
	Silver	BRL	mg/L	1	0.04	5.0		02/12/09 16:46	TK
SW-846 7.3	Reactive Cyanide								
	Reactive Cyanide	BRL	mg/Kg	1	25			02/12/09 10:00	KS
SW-846 7.3	Reactive Sulfide								
	Reactive Sulfide	BRL	mg/Kg	1	25			02/11/09 13:30	KS
SW-846 7470A	TCLP Metals, Mercury								
	Mercury	BRL	mg/L	1	0.0005	0.2		02/11/09 14:49	TK
SW-846 8021B	Purgeable Aromatics								
	Benzene	BRL	mg/Kg	1	0.01			02/11/09 01:05	HK
	Toluene	BRL	mg/Kg	1	0.01			02/11/09 01:05	HK
	Ethylbenzene	BRL	mg/Kg	1	0.01			02/11/09 01:05	HK
	m- & p-Xylenes	BRL	mg/Kg	1	0.02			02/11/09 01:05	HK
	o-Xylene	BRL	mg/Kg	1	0.01			02/11/09 01:05	HK
	Xylenes	BRL	mg/Kg	1	0.03			02/11/09 01:05	HK
	Trifluorotoluene(surr)	105	%	1	81-111			02/11/09 01:05	HK
SW-846 9045D	Corrosivity, pH								
	pH	7.20	s.u.					02/11/09 14:00	RK
TX 1005	Total Petroleum Hydrocarbons								
	C6-C12	20.3	mg/Kg	1	14.7		J	02/11/09 10:45	WS
	>C12-C28	274	mg/Kg	1	18.4			02/11/09 10:45	WS
	>C28-C35	1791	mg/Kg	10	191			02/10/09 20:05	WS
	Total C6-C35	2085.3	mg/Kg	10				02/10/09 20:05	WS
	1-Chlorooctane(surr)	99.6	%	1	50-149			02/11/09 10:45	WS
	Chlorooctadecane(surr)	129	%	1	50-149			02/11/09 10:45	WS

EPAHO104001851

QUALITY CONTROL CERTIFICATE

Job ID : 09020227 **Date :** 2/26/2009

Analysis : **Corrosivity, pH** **Method :** **SW-846 9045D** **Reporting Units :** **s.u.**

QC Batch ID : Qb09021106 **Created Date :** 02/11/09 **Created By :** Rkurup

Samples in This QC Batch : 09020227.01,02

QC Type: Duplicate

QC Sample ID: 09020226.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit		Qual
pH	6.49	6.50	s.u.	0.2	5		

QC Type: LCS and LCSD

Parameter	LCS Assigned	LCS Result		LCSD Assigned	LCSD Result		RPD	RPD CtrlLimit	Tolerance	Qual
pH	4.00	3.98							3.95-4.05	

Refer to the Definition page for terms.

EPAHO104001852

QUALITY CONTROL CERTIFICATE

Job ID : 09020227 **Date :** 2/26/2009

Analysis : TCLP Metals, Mercury **Method : SW-846 7470A** **Reporting Units : mg/L**

QC Batch ID : Qb09021203 **Created Date :** 02/12/09 **Created By :** Tkhuc

Samples in This QC Batch : 09020227.01,02

Digestion :	PB09021204	**Prep Method :**	SW-846 7470A	**Prep Date :**	02/11/09 12:00	**Prep By :**	Tkhuc
TCLP Prep :	PB09021109	**Prep Method :**	SW-846 1311	**Prep Date :**	02/10/09 16:50	**Prep By :**	Sgarcia

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Mercury	7439-97-6	BRL	mg/L	1	0.0005		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Mercury	0.005	0.0051	102						71-143	

QC Type: MS and MSD
QC Sample ID: 09020258.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Mercury	BRL	0.005	0.0050	99.4	0.005	0.0050	99.6	0.2	35	61-175	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 09020227 **Date :** 2/26/2009

Analysis : **Reactive Sulfide** **Method :** **SW-846 7.3** **Reporting Units :** **mg/Kg**

QC Batch ID : Qb09021215 **Created Date :** 02/11/09 **Created By :** Ksudha

Samples in This QC Batch : 09020227.01,02

Sample Preparation : PB09021218 **Prep Method :** SW-846 7.3 **Prep Date :** 02/11/09 09:25 **Prep By :** Ksudha

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Reactive Sulfide		BRL	mg/Kg	1	25		

QC Type: Duplicate

QC Sample ID: 09020199.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit		Qual
Reactive Sulfide	BRL	BRL	mg/Kg		20		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Reactive Sulfide	680	560	82.4	680	520	76.5	7.4	20	40-120	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 09020227 **Date :** 2/26/2009

Analysis : **Reactive Cyanide** **Method :** **SW-846 7.3** **Reporting Units :** **mg/Kg**

QC Batch ID : Qb09021216 **Created Date :** 02/12/09 **Created By :** Ksudha

Samples in This QC Batch : 09020227.01,02

Sample Preparation : PB09021219 **Prep Method :** SW-846 7.3 **Prep Date :** 02/11/09 09:25 **Prep By :** Ksudha

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Reactive Cyanide		BRL	mg/Kg	1	25		

QC Type: Duplicate

QC Sample ID: 09020199.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit		Qual
Reactive Cyanide	BRL	BRL	mg/Kg		20		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Reactive Cyanide	5.0	2.14	42.8	5.0	2.17	43.4	1.4	20	40-120	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 09020227 **Date :** 2/26/2009

Analysis : **TCLP Metals** **Method :** **SW-846 6010C** **Reporting Units :** **mg/L**

QC Batch ID : Qb09021235 **Created Date :** 02/12/09 **Created By :** Tkhuc

Samples in This QC Batch : 09020227.01,02

Digestion : PB09021235 **Prep Method :** SW-846 3010A **Prep Date :** 02/12/09 12:00 **Prep By :** Tkhuc

TCLP Prep : PB09021109 **Prep Method :** SW-846 1311 **Prep Date :** 02/10/09 16:50 **Prep By :** Sgarcia

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Antimony	7440-36-0	BRL	mg/L	1	0.1		
Arsenic	7440-38-2	BRL	mg/L	1	0.04		
Barium	7440-39-3	BRL	mg/L	1	0.04		
Beryllium	7440-41-7	BRL	mg/L	1	0.04		
Cadmium	7440-43-9	BRL	mg/L	1	0.04		
Chromium	7440-47-3	BRL	mg/L	1	0.04		
Lead	7439-92-1	BRL	mg/L	1	0.04		
Nickel	7440-02-0	BRL	mg/L	1	0.04		
Selenium	7782-49-2	BRL	mg/L	1	0.1		
Silver	7440-22-4	BRL	mg/L	1	0.04		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Antimony	2	2.03	102	2	2.01	101	1	20	80-120	
Arsenic	2	2.03	102	2	2.00	100	1.5	20	80-120	
Barium	2	1.89	94.5	2	1.87	93.5	1.1	20	80-120	
Beryllium	2	1.98	99	2	1.95	97.5	1.5	20	80-120	
Cadmium	2	1.81	90.5	2	1.79	89.5	1.1	20	80-120	
Chromium	2	1.89	94.5	2	1.87	93.5	1.1	20	80-120	
Lead	2	1.85	92.5	2	1.83	91.5	1.1	20	80-120	
Nickel	2	1.84	92	2	1.82	91	1.1	20	80-120	
Selenium	2	2.01	101	2	1.97	98.5	2	20	80-120	
Silver	2	1.97	98.5	2	1.94	97	1.5	20	80-120	

QC Type: MS and MSD
QC Sample ID: 09020226.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Antimony	BRL	2	2.02	100						70-130	
Arsenic	BRL	2	2.02	101						45-138	
Barium	0.722	2	2.47	87.4						39-135	
Beryllium	BRL	2	1.94	97						70-130	
Cadmium	BRL	2	1.75	87.3						56-125	
Chromium	BRL	2	1.84	91.8						52-125	
Lead	BRL	2	1.74	87						55-125	

Refer to the Definition page for terms.

EPAHO104001856

QUALITY CONTROL CERTIFICATE

Job ID : 09020227 **Date :** 2/26/2009

Analysis : TCLP Metals **Method : SW-846 6010C** **Reporting Units : mg/L**

QC Batch ID : Qb09021235 **Created Date :** 02/12/09 **Created By :** Tkhuc

Samples in This QC Batch : 09020227.01,02

QC Type: MS and MSD
QC Sample ID: 09020226.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Nickel	BRL	2	1.77	87.3						70-130	
Selenium	BRL	2	2.01	100						70-130	
Silver	BRL	2	1.97	98.5						26-148	

Refer to the Definition page for terms.

EPAHO104001857

QUALITY CONTROL CERTIFICATE

Job ID : 09020227 **Date :** 2/26/2009

Analysis : **Total Petroleum Hydrocarbons** **Method :** **TX 1005** **Reporting Units :** **mg/Kg**

QC Batch ID : Qb09021236 **Created Date :** 02/12/09 **Created By :** Dshen

Samples in This QC Batch : 09020227.01,02

Sample Preparation : PB09021234 **Prep Method :** TX 1005 **Prep Date :** 02/10/09 08:00 **Prep By :** Dshen

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
C6-C12		BRL	mg/Kg	1	14.7		
>C12-C28		BRL	mg/Kg	1	18.4		
>C28-C35		BRL	mg/Kg	1	19.1		
Total C6-C35		BRL	mg/Kg	1			

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
C6-C12	500	454	90.8	500	415	83	9	20	75-125	
>C12-C28	500	498	99.6	500	449	89.8	10.3	20	75-125	
>C28-C35	500	422	84.4	500	388	77.6	8.4	20	75-125	

QC Type: MS and MSD
QC Sample ID: 09020193.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
C6-C12	BRL	500	426	85.2						75-125	
>C12-C28	BRL	500	459	91.6						75-125	
>C28-C35	BRL	500	393	77.3						75-125	

Refer to the Definition page for terms.

EPAHO104001858

QUALITY CONTROL CERTIFICATE

Job ID : 09020227 **Date :** 2/26/2009

Analysis : **Purgeable Aromatics** **Method :** **SW-846 8021B** **Reporting Units :** **mg/Kg**

QC Batch ID : Qb09021324 **Created Date :** 02/13/09 **Created By :** Hkhuc

Samples in This QC Batch : 09020227.02

Sample Preparation : PB09021328 **Prep Method :** SW-846 5030C **Prep Date :** 02/10/09 16:30 **Prep By :** Hkhuc

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Benzene	71-43-2	BRL	mg/Kg	1	0.01		
Toluene	108-88-3	BRL	mg/Kg	1	0.01		
Ethylbenzene	100-41-4	BRL	mg/Kg	1	0.01		
m- & p-Xylenes	108-38-3&106-42-3	BRL	mg/Kg	1	0.02		
o-Xylene	95-47-6	BRL	mg/Kg	1	0.01		
Xylenes		BRL	mg/Kg	1	0.03		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Benzene	0.1	0.103	103	0.1	0.114	114	10.1	20	80-120	
Toluene	0.1	0.093	93	0.1	0.102	102	9.2	20	80-120	
Ethylbenzene	0.1	0.097	97	0.1	0.107	107	9.8	20	80-120	
m- & p-Xylenes	0.2	0.201	101	0.2	0.219	110	8.6	20	80-120	
o-Xylene	0.1	0.094	94	0.1	0.103	103	9.1	20	80-120	
Xylenes	0.3	0.295	98.3	0.3	0.322	107	8.8	20	80-120	

QC Type: MS and MSD
QC Sample ID: 09020233.05

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Benzene	BRL	0.1	0.117	117						68-138	
Toluene	BRL	0.1	0.108	106						67-135	
Ethylbenzene	BRL	0.1	0.108	107						71-127	
m- & p-Xylenes	BRL	0.2	0.223	111						56-135	
o-Xylene	BRL	0.1	0.107	106						56-134	
Xylenes	BRL	0.3	0.33	110						59-134	

Refer to the Definition page for terms.

EPAHO104001859

QUALITY CONTROL CERTIFICATE

Job ID : 09020227 **Date :** 2/26/2009

Analysis : Ignitability (Flash Point) **Method : SW-846 1010** **Reporting Units : °F**

QC Batch ID : Qb09021733 **Created Date :** 02/17/09 **Created By :** Sgarcia

Samples in This QC Batch : 09020227.01,02

QC Type: Duplicate

QC Sample ID: 09020226.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit		Qual
Ignitability	>150	>150	°F		20		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Ignitability	83	85	102	83	85	102	0	20	75-125	

Refer to the Definition page for terms.

EPAHO104001860

A & B Labs — Chain of Custody

The Chain of Custody is a Legal Document

Page 1 of 1

10100 East Fwy (I-10) Ste. 100
Houston, TX 77029
713-453-6060
1-877-478-6060 Toll Free
713-453-6091 Fax
ablabs.com

A&B JOB ID # 09020227

1. REPORT TO:
Company: CES Environmental
Address: 4904 - Griggs
Houston, TX 77021
Contact: Gary Brackman
Phone: cell: 713-417-5737
Fax: ☐
E-mail: ☐

2. INVOICE TO:
Company:
Address:
Contact:
Phone:
Fax: ☐
E-mail: ☐

3. PO # 0209-07

4. Turnaround Time (Business Days)
☐ 1 Day* ☐ Other
☐ 2 Days*
☐ 3 Days* *Surcharge applies
☒ 7 Days - Standard

5. Project # POH - Turning Basin Ike Drum

6. Project Name/Location: POH - Turning Basin

7. Reporting Requirement:
☐ TRRP Limits only ☐ TRRP Rpt. Package ☐ See Attached ☐ Standard Level II

8. Sampler's Name & Company (PLEASE PRINT): [illegible] Darrin
Sampler's Signature & Date: [illegible]

13. 14. Containers* / 15. Preservatives** / 16. PH-Lab Only

17. Analyses/Methods: TCLP(11) metals, TPH, RCI, BTEX

LAB USE ONLY	9. Sample ID and Description	10. Sampling Date	Time	11. Comp.	Grab	12. Matrix Water	Soil	Sludge	Oil	Air	Other	No. of Containers	TCLP(11) metals	TPH	RCI	BTEX				18. REMARKS
01A	Steel shot (0209-07-A)	2-3-09	2:00		✓						✓	1	✓	✓	✓					
02A	Grinding sludge (0209-07B)	"	"					✓				1	✓	✓	✓	✓				

19. RELINQUISHED BY	DATE	TIME	20. RECEIVED BY	DATE	TIME
1 [signature]	2-9-09	3:30			
2					
3			21. RECEIVED BY LABORATORY [signature]	2-9-09	3:30

22. KNOWN HAZARDS/COMMENTS: unknown

Temperature: 23.7 °C

Intact: Y or N Initials

*Containers: VOA - 40 ml vial; A/G - Amber/Glass 1 Liter; 4 oz/8 oz - glass wide mouth; P/O - Plastic/other

**Preservatives: C - Cool; H - HCl; N - HNO_3; S - H_2SO_4; OH - NaOH; T - $Na_2S_2O_3$; X - Other

METHOD OF SHIPMENT

BILL OF LADING/TRACKING #

A&B cannot accept verbal changes
Please FAX written changes to 713-453-6091

Samples will be disposed of after 30 days
A&B reserves the right to return samples

LAB USE ONLY SAMPLING _____ RENTAL _____ P/U _____

EPAHO104001861

Sample Condition Checklist

Date : **02/26/09**

A&B JobID :	**09020227**	Date Received :	**02/09/2009**	Time Received :	**3:30PM**
Client Name :	**CES Environmental**				
Temperature :	**23.7°C**	Sample pH :	**N/A**		

	Check Points	Yes	No
1.	**Cooler seal present and signed.**	N/A	
2.	**Sample(s) in a cooler.**		X
3.	**If yes, ice in cooler.**		X
4.	**Sample(s) received with chain-of-custody.**	X	
5.	**C-O-C signed and dated.**	X	
6.	**Sample(s) received with signed sample custody seal.**	N/A	
7.	**Sample containers arrived intact. (If no comment).**	X	
8.	**Matrix :** Water ☐ Soil ☑ Liquid ☐ Sludge ☑ Solid ☐ Cassette ☐ Tube ☐ Bulk ☐ Badge ☐ Food ☐ Other ☐		
9.	**Sample(s) were received in appropriate container(s).**	X	
10.	**Sample(s) were received with proper preservative**		
11.	**All samples were logged or labeled.**	X	
12.	**Sample ID labels match C-O-C ID's**	X	
13.	**Bottle count on C-O-C matches bottles found.**	X	
14.	**Sample volume is sufficient for analyses requested.**	X	
15.	**Samples were received within the hold time.**	X	
16.	**VOA vials completely filled.**	N/A	
17.	**Sample accepted.**	X	

Comments : Include actions taken to resolve discrepancies/problem:

Temperature requirements not met. Robbin U. Contacted client, client confirmed to run sample. -RUwadia 2/9/09

Received by : Kisom

Check in by/date : Kisom / 02/09/2009

3197
Precision Fluids

EPAHO104001863

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/6/2009**

Dear **Shelly Minton**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3197

Expiration Date 3/6/2011

Generator: Precision Fluids
Address: 5230 Brittmoore
Houston, TX 77003

Waste Information

Name of Waste: Non-Hazardous wastewater
TCEQ Waste Code #: CESQ1192
Container Type:
Detailed Description of Process Generating Waste:
water used to wash our mixing tanks that mix soaps and surfactants
Color: clear to blue **Odor:** mild soapy **pH:** 3-11
Physical State:
Incompatibilities: none known
Safety Related Data/Special Handling:
standard

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

DB/MM

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility 4904 Griggs Road, Houston, TX 77021 Phone (713) 676-1460 Fax: (713) 676-1676 U.S. EPA ID Number: TXD008950461 ISWR Number: 30900 TCEQ Industrial Solid Waste Permit Number: 30948	☐ CES Environmental Services - Port Arthur Facility 2420 S. Gulfway Dr., Port Arthur, TX 77641 Phone (713) 676-1460 Fax: (713) 676-1460 U.S. EPA ID Number: TXR000079307 ISWR Number: 88585

1L

SECTION 1: Generator Information

Company: Precision Fluid
Address: 5230 Brittmore
City: Houston **State:** TX **Zip:** 77041
Contact: Brian Quinlan **Title:**
Phone Number: 713-849-3977 **Fax Number:** 713-848-5445
24/hr Phone Number:
US EPA ID No: TXCESQG
State ID No: CESQG **SIC Code:**

SECTION 2: Billing Information - ☑ **Same as Above**

Company:
Address:
City: **State:** **Zip:**
Contact: **Title:**
Phone Number: **Fax Number:**

SECTION 3: General Description of the Waste

Name of Waste: Non-Hazardous wastewater
Detailed Description of Process Generating Waste:

water used to wash out mixing tanks that mix soaps and surfactants

Physical State: ☑ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color: clear to blue **Odor:** mild soapy

Specific Gravity (water=1): 1 **Density:** 8.34 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ Single-phase ☐ Multi-phase

Container Type: ☐ Drum ☐ Tote ☑ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☑ Monthly ☐ Yearly ☐ One-Time
Quantity: 5000 gal

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No
If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011
Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: CESQ1192

Proper US DOT Shipping Name: Non- Hazardous Wastewater
Class: na **UN/NA:** na **PG :** na **RQ:** na

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
>140	3-11	<30 mg/l	<30 mg/l	0-2 %

Oil & Grease	TOC	Zinc	Copper	Nickel
0 mg/l	0 mg/l	0 mg/l	0 mg/l	0 mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
water	90-98	%
solids	0-2	%
soap	1-5	%
surfactacts	1-5	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

standard

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. analytical

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

none known

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	x
TCLP Volatiles:	x
TCLP Semi-Volatiles:	
Reactivity:	x
Corrosivity:	x
Ignitability:	x

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☑ YES ☐ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory*: *Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory*: *Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- [ ] Interceptor wastes
- [ ] Off-specification fuels
- [ ] Underground storage remediation waste
- [ ] Tank clean-out from petroleum or oily sources
- [ ] Non-contact used glycols
- [ ] Aqueous and oil mixtures from parts cleaning operations
- [ ] Wastewater from oil bearing paint washes

***Organics Subcategory*: Subpart C**

- [ ] Landfill leachate
- [ ] Contaminated groundwater clean-up from non-petroleum sources
- [ ] Solvent-bearing wastes
- [ ] Off-specification organic product
- [ ] Still bottoms
- [ ] Byproduct waste glycol
- [ ] Wastewater from paint washes
- [ ] Wastewater from adhesives and/or epoxies formulation
- [ ] Wastewater from organic chemical product operations
- [x] Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- [ ] Metals Subcategory
- [ ] Oils Subcategory
- [x] Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☐ generator knowledge and/or ☐ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Brian Quinlan **Date:** 3-5-09

Printed Name/Title: Brian Quinlan Ops Mgr.

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: Robert Thyan

Date: 3-6-09 ☑ Approved ☐ Rejected

Approval Number:

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

.28 /gal

2. Contamination Limit (maximum limit before surchages apply):

Solids >5%
High or low PH

3. Surcharge Pricing:

Should not be any
Call Dan if >5% Solids

4. Special Testing Requirements:

PH → good for Taking System 1

5. Treatment and Handling Protocol:

System 1 to New Park

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☒ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

N/A

8. Management for Product Recovered/Recycled (if applicable)

N/A

ENVIRON

Express Laboratories

ENVIRON EXPRESS LABORATORIES, INC.
401 N. 11th. St.
La Porte, TX 77571
281.471.0951 FAX:281.471.5821

RECEIVED
APR 06 2006
BY:

ORIGINAL

Sold To: CES Environmental Srvs., Inc.
4904 Griggs Road
Houston, TX 77021

Invoice Number: 60290

Invoice Date: Apr 4, 2006

Customer PO	Payment Terms	Due Date	Sales Rep ID
	Net 30 Days	5/4/06	

Quantity	Item	Description	Unit Price	Extension
1.00	RCI	Reactivity, Corrosivity, Ignitiability	75.00	75.00
1.00	TPH 1005.3	TPH 1005.3	50.00	50.00
1.00		TCLP RCRA (11) METALS	125.00	125.00
1.00	VOC TCLP	Volatile Organic Cpds.	105.00	105.00
		.....		
		.....		
		ENVIRON ID 60290.01		
		Requested By: Dan Bowman		
		Proj. Pinnacle Products		
		Rec'd. 3/17/06		

PROCESSED BY: ar DATE: 4-12-06

TOTAL 355.00

Remit to :
Environ Express Laboratories
401 N. 11th Street
La Porte, Texas 77571-3115

EPAHO104001871

ENVIRON EXPRESS LABORATORIES, INC.

401 N. 11th. St.
La Porte, TX 77571
281.471.0951 FAX:281.471.5821

Express Laboratories

CERTIFICATE OF ANALYSIS NO: 60290.01

Customer: CES Env. Svcs.
Project ID: ~~Pinnacle Products~~ Precision Fluids
Project Loc: Houston, TX
Charge/P.O.:

Sample ID: Waste Water
Matrix: Water
Type:

Environ ID: 60290.01
Sampled: 03-14-06
Received: 03-17-06
Reported: 03-27-06

RECEIVED BASIS

ANALYTE / PARAMETER	RESULT	UNITS	REG. LIMIT	MQL	TEST METHOD	ANALYST	DATE	TIME
RCI								
Reactive Cyanide	< 50	mg/l	250	50	SW846.7.3.3	JK	03-27-06	13:00
Reactive Sulfide	< 50	mg/l	500	50	SW846.7.3.4	JK	03-27-06	11:00
Corrosivity (Ph)	3.00	su	=>2; =<12.5	--	SW846.9045C	JT	03-16-06	18:00
Ignitability	> 160	°F	> 140	--	SW846.1010	JK	03-27-06	16:00
TOT. PET. HYDROCARBON								
GRO (Gasoline Range)	1,241	mg/l	--	25	TCEQ 1005.03	DMB	03-23-06	15:17
DRO (Diesel Range)	< 25	mg/l	--	25	TCEQ 1005.03	DMB	03-23-06	15:17
ORO (Oil Range)	< 25	mg/l	--	25	TCEQ 1005.03	DMB	03-23-06	15:17
TOTAL TPH	1,241	mg/l	--	25				
METALS (RCRA) - TCLP					SW846.1311	MN	03-17-06	
Antimony	< 0.08	mg/l	1.0	0.08	SW846.6010B	JK	03-22-06	16:00
Arsenic	< 0.02	mg/l	5.00	0.02	SW846.6010B	JK	03-22-06	16:00
Barium	1.02	mg/l	100	0.02	SW846.6010B	JK	03-22-06	16:00
Beryllium	< 0.05	mg/l	0.08	0.05	SW846.6010B	JK	03-22-06	16:00
Cadmium	< 0.02	mg/l	1.00	0.02	SW846.6010B	JK	03-22-06	16:00
Chromium	0.17	mg/l	5.00	0.02	SW846.6010B	JK	03-22-06	16:00
Lead	< 0.02	mg/l	5.00	0.02	SW846.6010B	JK	03-22-06	16:00
Nickel	0.14	mg/l	70.0	0.05	SW846.6010B	JK	03-22-06	16:00
Selenium	< 0.05	mg/l	1.00	0.05	SW846.6010B	JK	03-22-06	16:00
Silver	< 0.05	mg/l	5.00	0.05	SW846.6010B	JK	03-22-06	16:00
Mercury	< 0.04	mg/l	0.20	0.04	SW846.7470A	MN	03-18-06	09:00
VOC - TCLP (Dilution Factor: 1.0)					SW846.1311	MN	03-17-06	
Benzene	< 0.025	mg/l	0.5	0.005	SW846.8260B	HDG	03-27-00	
2-Butanone (MEK)	< 0.125	mg/l	200.0	0.025	SW846.8260B	HDG	03-27-06	17:09
Carbon tetrachloride	< 0.025	mg/l	0.5	0.005	SW846.8260B	HDG	03-27-06	17:09
Chlorobenzene	< 0.025	mg/l	100	0.005	SW846.8260B	HDG	03-27-06	17:09
Chloroform (Trichloromethane)	< 0.025	mg/l	6.0	0.005	SW846.8260B	HDG	03-27-06	17:09
1,2-Dichloroethane (EDC)	< 0.025	mg/l	0.5	0.005	SW846.8260B	HDG	03-27-06	17:09
1,1-Dichloroethene	< 0.025	mg/l	0.7	0.005	SW846.8260B	HDG	03-27-06	17:09
Tetrachloroethene	< 0.025	mg/l	0.7	0.005	SW846.8260B	HDG	03-27-06	17:09
Trichloroethene	< 0.025	mg/l	0.5	0.005	SW846.8260B	HDG	03-27-06	17:09
Vinyl chloride	< 0.050	mg/l	0.2	0.010	SW846.8260B	HDG	03-27-06	17:09

QUALITY CONTROL -- TCLP VOC SURROGATE RECOVERIES

SURROGATE	RESULTS (mg/l)	% RECOVERY	RANGE %
1,2-Dichloroethane-d4 (SS)	0.056	112	76-114
Toluene-d8 (SS)	0.048	96	80-120
4-Bromofluorobenzene (SS)	0.047	94	80-120

Definitions:
TCLP - Toxcisity Charasteric Leaching Procedure su - Standard Units
REG - Regulatory Limit (User Should Confirm Limi VOC - Volatile Organic Compounds
MQL - Method Quanitation Limit SVOC - Semivolatile Organic Compounds
PPM - Parts Per Million TPH - Total petroleum Hydrocarbons
mg/l - PPM by Volume, mg/kg - PPM by Weight

John Keller

John Keller, Ph.D
Laboratory Director

ENVIRON EXPRESS QUALITY CONTROL REPORT

ANALYSIS:	METALS	METHOD:	EPA SW846/6010	MATRIX:	LIQUID

ANALYST:	JK	DATE:	03.22.06	UNITS:	PPM (mg/l)	NO.SAMPLES:	10

SAMPLES:	60288.01	60288.02	60288.03	60288.04	60289.01	60289.02	60289.03	60290.01
	60267.01	60287.01						

MATRIX SPIKE & MATRIX SPIKE DUPLICATE ANALYSIS	BATCH ID:	60288.01

SAMPLE Matrix	SAMPLE RESULTS	SPIKE ADDED	SPIKE RESULTS	RECOV. %	RECOV. DUP. %	REL. DIFF. %	CONT. CALIB.	METHOD BLANK	QC LIMITS RECOV.	QC LIMITS DIFF.
Arsenic	0.00	5	4.52	90	92	1	95	0	75 - 125	20
Barium	0.00	5	4.91	98	98	1	100	0	75 - 125	20
Cadmium	0.00	5	4.64	93	95	2	100	0	75 - 125	20
Chromium	0.00	5	4.50	90	97	7	98	0	75 - 125	20
Lead	0.00	5	4.98	100	100	0	101	0	75 - 125	20
Selenium	0.00	5	4.98	100	99	1	96	0	75 - 125	20
Silver	0.00	5	4.99	100	100	0	93	0	75 - 125	20

John Keller

JOHN KELLER, Ph.D
Laboratory Director

ENVIRON EXPRESS QUALITY CONTROL REPORT

ANALYSIS:	TPH	METHOD:	TNRCC 1005.3

ANALYST:	dmb	MATRIX:	SOIL	UNITS:	mg/kg	SAMPLES:	20

SAMPLES:	60288-01	60288-02	60288-03	60288-04	60289-01	60289-02	60289-03
	60290-01	60298-41	60298-42	60298-43	60298-44	60298-45	60298-46
	60298-47	60298-48	60301-01	60302-01	60302-02	60304-01	

SAMPLE	MB	CCV	LCS	MS	MSD	MS-MSD	QC LIMITS	
60298-46	mg/kg	REC	REC	REC	REC	RPD	REC	RPD
GRO RESULT	<50	102	82	92	100	8	70 - 130	30
DRO RESULT	<50	99	106	112	115	2	70 - 130	30

John Keller 3/23/06

JOHN KELLER, Ph.D, Lab.Dir./QA-QC Mgr. DATE

KEY:

TPH - Total Petroleum Hydrocarbons
GRO - Gasoline Range Organics
DRO - Diesel Range Organics
CCV - Continuing Calibration Verification
MB - Method Blank
LCS - Laboratory Control Sample
MS - Matrix Spike
MSD - Matrix Spike Duplicate
RPD - Relative % Difference
REC - Recovery %

ENVIRON EXPRESS QUALITY CONTROL REPORT

ANALYSIS:	MERCURY	METHOD: EPA SW846/7471A	MATRIX:	LIQUID

ANALYSTS:	MN	DATE:	03.18.06	UNITS:	mg/l	NO.SAMPLES:	10

SAMPLES:	60288.01	60288.02	60288.03	60288.04	60289.01	60289.02	60289.03	60290.01
	60287.01	60267.01						

MATRIX SPIKE & MATRIX SPIKE DUPLICATE ANALYSIS

SAMPLE Matrix	SAMPLE RESULTS	SPIKE ADDED	SPIKE RESULTS	RECOV. %	RECOV. DUP. %	REL. DIFF.	CONT. CALIB.	METH. BLANK	CORR. COEFF.	QC LIMITS RECOV.	QC LIMITS DIFF.
MERCURY	0.00	0.002	0.002	100	100	0	100	0	1	60 - 120	20

JOHN KELLER, Ph.D
Laboratory Director

455 Friday 3/24 A.m

CHAIN OF CUSTODY

ENVIRON Express Laboratories

Page 1 of 1

ENVIRON EXPRESS LABORATORIES, INC.
401 North 11th. St. / La Porte, Texas 77571-3115
(281) 471-0951 / (800) 880-0156
Fax: (281) 471-5821 / After Hours: (281) 844-2308
e-mail: environexp@aol.com

Results To: Dan Bowman	Invoice To: Same
Company: CES	Company: Same
Address: 4904 Griggs Rd	Address: Same
City: Houston State: TX Zip: 77021	City: Same State: Zip:
Phone: 713-854-6150	Phone: Same
Fax: 713-676-1676	Fax: Same
e-Mail:	PO#: Quote#:

TAT (WORKING DAYS) CIRCLE ONE: 1 2 3 (5)

LAB LOT #	COC Present? (Yes) No
Shipment Sealed? (Yes) No	Samples Sealed? (Yes) No
Received on Ice? (Yes) No	Samples Intact? (Yes) No
Cooler Temp. (°C) 2°C	Preservative Shown? Yes (No) NA
Hold Time OK? (Yes) No	Res. Cl2 Check OK? Yes No (NA)
pH Check OK? (Yes) No NA	COC & Labels Agree? (Yes) No

Project Name: Pinnacle Products
Project Location: Houston, TX
Project No:
Sampler (Print): Dan Bowman
Sampler (Sign): Dan Bowman
Sampler Remarks:

Remarks & Additional Analyses

EEL USE ONLY (LAB NO.)	SAMPLE ID.	DATE/TIME SAMPLED	[1] MATRIX	(C)OMP / (G)RAB	BTEX (8021)	TPH (TX1005)	RCI	PAH	TOTAL EPA TCLP VOLATILES	SEMI-VOLS	RCRA METALS
	[2] Cntr. Type		G								
	Number		1								
	Volume		32oz								
	[3] Preservative		1								
60290.01	1) Waste Water	3/14/06 1:00 pm	W			X	X		X		X
	2)										
	3)										
	4)										
	5)										
	6)										
	7)										
	8)										
	9)										
	10)										

Relinquished By: Dan Bowman	Company: CES	Date/Time: 3/17/06 10:30 Am	Received By: [signature] Company:
Relinquished By:	Company:	Date/Time:	Received By: Company:
Relinquished By:	Company:	Date/Time:	Received By: Company:

[1] Matrix Key
S:Soil W:Water WW:Waste Water SL:Sludge SO:Solid SE:Sediment L: Leachate WI:Wipe OR:Organic OL:Oil DS:Drum Solid DL:Drum Liquid O:Other _____

[2] Container Type Key
P:Plastic G:Glass V:VOA Glass O:Other _____

[3] Preservative Key
1:Ice(<4°C) 2:HCL 3:H2SO4 4:HNO3 5:NaOH 6:NaOH+Zn Acetate 7:Na2S2O3 8:None

Delivery of samples constitutes acceptance of Environ's terms and conditions in the Price Schedule.

3-27-06; 5:16PM;Environ ;2814715821 # 6/ 6
EPAHO104001876

3198
Powell Industries

EPAHO104001877

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/6/2009**

Dear **Trey Cherry**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3198

Expiration Date 3/6/2011

Generator: Powell Industries Inc- Offshore Divison
Address: 16535 Jacintoport Blvd
Houston, TX 77015

Waste Information

Name of Waste: TPH Contaminated sandblast and soil
TCEQ Waste Code #: CESQ3011
Container Type:
Detailed Description of Process Generating Waste:
spilled diesel on the ground
Color: varies **Odor:** mild **pH:** neutral
Physical State:
Incompatibilities: none known
Safety Related Data/Special Handling:
Standard PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

JB/AL

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility 4904 Griggs Road, Houston, TX 77021 Phone (713) 676-1460 Fax: (713) 676-1676 U.S. EPA ID Number: TXD008950461 ISWR Number: 30900 TCEQ Industrial Solid Waste Permit Number: 30948	☐ CES Environmental Services - Port Arthur Facility 2420 S. Gulfway Dr., Port Arthur, TX 77641 Phone (713) 676-1460 Fax: (713) 676-1460 U.S. EPA ID Number: TXR000079307 ISWR Number: 88585

15

SECTION 1: Generator Information

Company: Powell Industries Inc - Offshore Divison
Address: 16535 Jacintoport Blvd
City: Houston State: TX Zip: 77015
Contact: Trey Cherry Title:
Phone Number: 713.947.1510 Fax Number: 713.947.1529
24/hr Phone Number: 713.947.1510
US EPA ID No:
State ID No: 20287 SIC Code:

SECTION 2: Billing Information - ☐ Same as Above

Company: MTI Services, LLC
Address: 2150 Pansy road
City: Pasadena State: TX Zip: 77503
Contact: Trey Cherry Title:
Phone Number: 713.947.1510 Fax Number: 713.947.1529

SECTION 3: General Description of the Waste

Name of Waste: TPH conatminated sandblast and soil
Detailed Description of Process Generating Waste:

spilled diesel on on the ground.

Physical State: ☐ Liquid ☐ Sludge ☐ Powder ☑ Solid ☐ Filter Cake ☐ Combination

Color: varies Odor: mild

Specific Gravity (water=1): na Density: na lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ Single-phase ☐ Multi-phase

Container Type: ☑ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☐ Monthly ☑ Yearly ☐ One-Time
Quantity: 10

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☒ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: CESQ3011

Proper US DOT Shipping Name: Non RCRA Non DOT Regulated Material

Class: na UN/NA: na PG : na RQ: na

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>140		neutral		0	mg/l	0	mg/l	100	%
Oil & Grease		TOC		Zinc		Copper		Nickel	
>1500	mg/l	na	mg/l	na	mg/l	na	mg/l	na	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Diesel contaminated sandbalst and soil	100	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Standard PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. none

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

none known

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	Below Regulatory limits
TCLP Volatiles:	Below Regulatory limits
TCLP Semi-Volatiles:	Below Regulatory limits
Reactivity:	Non Reactive
Corrosivity:	Non Corrosive
Ignitability:	Non Ignitable

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory : Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory : Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory : Subpart C

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: [signature] **Date:** 3/6/09

Printed Name/Title: SCOTT ERNEST / PRESIDENT

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: [signature]
Date: 3-6-09 ☑ Approved ☐ Rejected
Approval Number: 3198

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$50/drum

2. Contamination Limit (maximum limit before surchages apply):

No free Liquid

3. Surcharge Pricing:

$65/ drum w/ free liquid

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

Class 1 solids if Dry
Class 1 Sludge if wet

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

3199
Valero

EPAHO104001885

7E
8-4-09
T-35
LAO

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/6/2009**

Dear **Corey Green**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3199

Expiration Date 3/6/2011

Generator: Valero Refining Co Texas
Address: 9701 Manchester
Houston, TX 77012-2408

Waste Information

Name of Waste: Organic Skimmings
TCEQ Waste Code #: PRODUCT
Container Type:
Detailed Description of Process Generating Waste:
W/W treatment plant skimmings
Color: dark **Odor:** hydrocarbon **pH:** 11
Physical State:
Incompatibilities:
Safety Related Data/Special Handling:
Flammable PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

RUSH!

GB
JR

Probably entered - fix

#3199

CES Environmental Services, Inc.

4904 Griggs Road Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

SECTION 1: Material Producer Information

Company:	Valero Refining Co Texas		
Address:	9701 Manchester		
City, State, Zip:	Houston, TX 77012		
Contact:	Merle Kirk	Title:	
Phone No:	(713) 923-3378	Fax No:	(713) 923-3561
24/hr Phone:			
U.S. EPA I.D. No:	N/A		
State I.D.	N/A	SIC Code:	

SECTION 2: Billing Information – ☐ Same as Above

Company:	Environmental Disposal Solutions		
Address:	P.O. Box 58198		
City, State, Zip:	Webster, TX 77598		
Contact:	Craig Byard	Title:	
Phone No:	281-910-0877	Fax No:	

SECTION 3: General Description of the Material / Product

Name of Material / Product: Organic Skimmings
Detailed Description of Process Generating or Producing the Material / Product: Waste water treatment plant skimmings.

Physical State: ☒ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color: Dark Odor: Hydrocarbon

Specific Gravity (water=1): Density: _ lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Layers: ☐ Single-phase ☒ Multi-phase

Container Type:	☐ Drum	☐ Tote	☒ Truck	☐ Other (explain)
Container Size:	____	____	5,000 gal	____

Frequency:	☒ Weekly	☐ Monthly	☐ Quarterly	☐ Yearly

Number of Units (containers): 1-2 Other: ____

Product

Proper U.S. DOT Shipping Name: RQ, Flammable liquids, N.O.S. (Benzene)

Class: 3 UN/NA: UN1996 PG: II RQ: 100

Flash Point	pH	N/A	N/A	Solids
140-145F	11			0-3%

Oil&Grease	TOC	Zinc	Copper	Nickel
>1500mg/l	17,000mg/l	.396mg/l	.04mg/l	.679mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The material / product consists of the following materials	Concentration Ranges are acceptable	Units or %
Water	90-99	%
Organics - Oil / Diesel	1-5	%
Solids	0-5	%

SECTION 5: Safety Related Data

If the handling of this material / product requires the use of special protective equipment, please explain.
Flammable PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.
Lab Memo#09-026

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):

SECTION 8: Material Producer's Certification

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** 03/05/2009

Printed Name/Title: Mark J. Kirk Lead Environmental Technician

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Technical Manager: _____ Date: 3-6-09 Approved Rejected Approval Number: _____	

New P&L Profile & PFI

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

To: Gary Brauckman
Cc: Matt Bowman, Prabhaker, Joe Camp, Clint Hopkins

Date: 2/25/09

From: Miles Root

Lab Memo: 09-026

Subject: **Environmental Disposal Solutions Evaluation 0209-45**

A sample of waste water from Environmental Disposal Solutions (formerly Evergreen), generated by Valero, Houston, has been evaluated for potential processing at CES. This sample is evaluation 0209-45 and is organic skimming from waste water treatment. The potential volume of this stream is one load per month. It carries a D018 code for benzene. Overall, the organic phase of this material may be recycled into our light ends and the water processed and discharged with minimal issues.

This stream contains approximately 3% organics in an aqueous caustic medium that contains 2% of fine silty solids. The pH is 11. The flash point of this stream is between 140 and 145 deg F. Our standard heat and acid treat of this material will give a good phase separation of the organics. While not an emulsion, this treatment does bring out all of the entrained hydrocarbons. I would put these hydrocarbons into our light ends, into which they blend without issue.

The water phase treats okay with typical solids formation. TOC is on the higher side at 16,490 ppm. Phenols are 5 ppm, an acceptable level, and all metals on the treated water are at an acceptable level. This should be a fairly easy stream to handle with minimal issues.

The table below summarizes the analytical testing.

Environmental Disposal Solutions Evaluation 0209-45	
Solids, vol%	2
pH	11
Phenols, ppm	5
TOC, mg/L	16,490
Oil, vol%	3
Treatability	OK
Metals, ppm	
Ni	0.679
Zn	0.396
Cu	0.043
Cd	0.090
Cr	0.389

PRODUCT
skimmings from
w/w Tank

hydroca
~~organics~~
water
solids

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pricing (including freight):**

$0.30 / gallon + transportation

2. **Contamination Limits (maximum limit before surcharges apply):**

3. **Surcharge Pricing:**

4. **Special Testing Requirements:**

TOC, PH, Phenols, Metals

5. **Treatment and Handling Protocol:**

Standard Heat & Acid treat of this material will give a good phase separation of orgnaics. While not an emulsion, this treatment does bring out all of the entrained hydrocarbons. Blend the hydrocarbons w/ the light ends. Water phase treats okay with typical solid formation.

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A ☐ Subcategory B ☒ Subcategory C

EPAHO104001891

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

7. **Tests for Product Recovered/Recycled (if applicable):**

8. **Management for Product Recovered/Recycled (if applicable);**

If we bring in as Gaz (D001, D018)

w/w, then recover

oil, can this oil

be handled as a

product?

organic skimming

TCEQ

Rhodia - Hartwell
Baton Rouge
Clean Harbor Deer Park
Onyx, ~~Hardie~~,
Texas Molecular
, Pasadena

EPAHO104001893

3173

Kinder Morgan

EPAHO104001894

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **2/23/2009**

Dear **Lance Wiley**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3173

Expiration Date 2/4/2011

Generator: Kinder Morgan (Pasadena Facility)
Address: 916N Witter St.
Pasadena, TX 77506

Waste Information

Name of Waste: Universal batteries
TCEQ Waste Code #: UNIV
Container Type: bucket
Detailed Description of Process Generating Waste:
Removal of old batteries

Color: varies **Odor:** none **pH:** na
Physical State:
Incompatibilities: none
Safety Related Data/Special Handling:
Level D

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

GAP
Recycle

SW
JR

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility 4904 Griggs Road, Houston, TX 77021 Phone (713) 676-1460 Fax: (713) 676-1676 U.S. EPA ID Number: TXD008950461 ISWR Number: 30900 TCEQ Industrial Solid Waste Permit Number: 30948	☐ CES Environmental Services - Port Arthur Facility 2420 S. Gulfway Dr., Port Arthur, TX 77641 Phone (713) 676-1460 Fax: (713) 676-1460 U.S. EPA ID Number: TXR000079307 ISWR Number: 88585

SECTION 1: Generator Information

Company: Kinder Morgan
Address: 916 N. Witter Street
City: Pasadena **State:** TX **Zip:** 77506
Contact: Lance Wiley **Title:**
Phone Number: (713) 724-4912 **Fax Number:** (713) 472-7660
24/hr Phone Number:
US EPA ID No: N/A
State ID No: N/A **SIC Code:** N/A

SECTION 2: Billing Information - ☑ **Same as Above**

Company:
Address:
City: **State:** **Zip:**
Contact: **Title:**
Phone Number: **Fax Number:**

SECTION 3: General Description of the Waste

Name of Waste: Universal Batteries
Detailed Description of Process Generating Waste:

Removal of old batteries

Physical State: ☐ Liquid ☐ Sludge ☐ Powder ☑ Solid ☐ Filter Cake ☐ Combination

Color: Varies **Odor:** None

Specific Gravity (water=1): NA **Density:** NA lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ Single-phase ☐ Multi-phase

Container Type: ☐ Drum ☐ Tote ☐ Truck ☑ Other (explain)

Frequency: ☐ Weekly ☐ Monthly ☑ Yearly ☐ One-Time
Quantity: 1 bucket

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☑ Yes ☐ No
If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is It: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☑ D006 ☐ D007 ☐ D008 ☑ D009
☐ D010 ☐ D011
Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: UNIV

Proper US DOT Shipping Name: Environmentally hazardous substance, solid, n.o.s.
Class: 9 **UN/NA:** UN3077 **PG :** III **RQ:** NA

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
NA		NA		NA	mg/l	NA	mg/l	100	%
Oil & Grease		**TOC**		**Zinc**		**Copper**		**Nickel**	
NA	mg/l	NA	mg/l	NA	mg/l	NA	mg/l	NA	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Nicad Batteries	100	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Level D

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. None

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

None

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	X
TCLP Volatiles:	X
TCLP Semi-Volatiles:	X
Reactivity:	X
Corrosivity:	X
Ignitability:	X

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory*: *Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory*: *Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory *: Subpart C*

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Lance Wiley **Date:** 1-28-09

Printed Name/Title: Lance Wiley

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: Robert Ryder
Date: 2-4-09 ☑ Approved ☐ Rejected
Approval Number: 3173

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$1.05/lb

$69/hr. trans + CFSC, Energy surcharge + compliance fee

2. Contamination Limit (maximum limit before surchages apply):

3. Surcharge Pricing:

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

Recycle to Z

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

3174

Phase

EPAHQ104001902

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **2/4/2009**

Dear **Zac or Dave**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3174

Expiration Date 2/5/2011

Generator: Phase Engineering
Address: 335 West 21 Street
Houston, TX 77008

Waste Information

Name of Waste: IDW purge water
TCEQ Waste Code #: CESQ2191
Container Type:
Detailed Description of Process Generating Waste:
waste derived from site investigation activities of a former gas station
Color: brown **Odor:** none **pH:** neutral
Physical State:
Incompatibilities: na
Safety Related Data/Special Handling:
standard

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

GRP

DB/MM

CES Environmental Services, Inc.

4904 Griggs Road Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

SECTION 1: Generator Information

Company:	Phase Engineering		
Address:	335 West 21st Street		
City, State, Zip:	Houston, TX 77008		
Contact:	Ross Phase	**Title:**	
Phone No:	281-476-9844	**Fax No:**	
24/hr Phone:	832-443-6625		
U.S. EPA I.D. No:	NA		
State I.D.	NA	**SIC Code:**	NA

SECTION 2: Billing Information – ☐ Same as Above

Company:	CKG Services (Conroe)		
Address:	10707 Honea Egypt		
City, State, Zip:	Montgomery, TX 77316		
Contact:	Zac McKaughan	**Title:**	Owner
Phone No:	(936) 447-3628	**Fax No:**	

SECTION 3: General Description of the Waste

Name of Waste: NHNI - IDW Purge Water
Detailed Description of Process Generating Waste: Waste derived from site investigation acitivities of an former gas station.

Physical State: ☒ **Liquid** ☐ **Sludge** ☐ **Powder** ☐ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: Brown - Water **Odor:** None

Specific Gravity (water=1): 1 **Density:** 8.34 lbs/gal

Does this material contain any total phenolic compounds? ☐ **Yes** ☒ **No**

Does this material contain any para substituted phenolic compounds? ☐ **Yes** ☒ **No**

Layers: ☒ **Single-phase** ☐ **Multi-phase**

Container Type:	☐ **Drum**	☒ **Tote**	☐ **Truck**	☐ **Other (explain)**
Container Size:	____	275 gal	____	____

Frequency: ☐ **Weekly** ☐ **Monthly** ☐ **Quarterly** ☐ **Yearly**
Number of Units (containers): 2 **Other:** One Time
Texas State Waste Code No: ~~NA~~ CESQ 2191
Proper U.S. DOT Shipping Name: Non Hazardous
Class: ~~2~~ na **UN/NA:** na **PG:** na **RQ:** na

EPAHO104001904

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
>200	neutral	NA mg/l	NA mg/l	1%

Oil&Grease	TOC	Zinc	Copper	Nickel
>150 mg/l	>1500 mg/l	NA mg/l	NA mg/l	NA mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The waste consists of the following materials	Concentration Ranges are acceptable	Units or %
Purge Water	99-100	%
Solids	0-1	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.
NA

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.
Analysis

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
NA

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generator knowledge:

TCLP Metals: X
TCLP Volatiles: X
TCLP Semi-Volatiles: X
Reactivity: X
Corrosivity: X
Ignitability: X

SECTION 9: Generator's Certification

The information contained herein is based on ☐ generator knowledge and/or ☒ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** 1/21/09

Printed Name/Title: Ross Doctor | Project Manager

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: _____

Date: 2-4-09 Approved Rejected

Approval Number: HOV-3174

$ 150/Tote
$ 65/drum

SECTION 10: Waste Receipt Classification Under 40 CFR 437

Is this material a wastewater or wastewater sludge? ☐ YES ☒ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory: Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory: Subpart C

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

EPAHO104001906

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

☐ Metals Subcategory

☐ Oils Subcategory

☐ Organics Subcategory

SECTION 11: Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

EPAHO104001907

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pricing (including freight):**

$150/tote
$65/drum

2. **Contamination Limits (maximum limit before surcharges apply):**

High metals
Flash / Odor

3. **Surcharge Pricing:**

Non as long as meets discharge parameters after testing

4. **Special Testing Requirements:**

Flash, Odor
metals
PH

5. **Treatment and Handling Protocol:**

Waste Water Treatment

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A ☐ Subcategory B ☒ Subcategory C

EPAHO104001908

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

7. **Tests for Product Recovered/Recycled (if applicable):**

NA

8. **Management for Product Recovered/Recycled (if applicable):**

NA

KAP TECHNOLOGIES, Inc.
9391 Grogans Mill Rd, Suite A-2
The Woodlands TX. 77380
Ph: 281.367.0065 Fax: 281.367.6772

Laboratory Analysis Report
Quality Control Data-Water Blank
BTEX/MTBE - SW846/8260B

BTEX/MTBE ORGANIC COMPOUNDS			
CLIENT NAME	: ---	CLIENT SAMPLE ID	: ---
PROJECT MANAGER	: ---	LAB SAMPLE ID	:VBLK39
PROJECT NAME	: ---	SAMPLE MATRIX	:Water
PROJECT NUMBER	: ---	DATE SAMPLED	: ---
METHOD REFERENCE	:SW846-8260B	DATE RECEIVED	: ---
INSTRUMENT ID	:A5973	DATE ANALYZED	:01/18/2009
INSTRUMENT FILE	:A18275	TIME ANALYZED	:20:55
PURGE VOLUME	:10 mL	ANALYST	:SB
DILUTION	:1		

Analyte	MDL	SQL	MQL	Results	Units	Qualifier
Methyl tert-butyl ether	0.39	0.39	1.0	<0.39	ug/L	U
Benzene	0.24	0.24	1.0	<0.24	ug/L	U
Toluene	0.25	0.25	1.0	<0.25	ug/L	U
Ethyl Benzene	0.26	0.26	1.0	<0.26	ug/L	U
Xylenes, Total	0.75	0.75	3.0	<0.75	ug/L	U

QUALITY CONTROL DATA			
Surrogate Compound	Spike Added	% Recovery	QC Limits
Dibromofluoromethane	10 ug/L	82	56 - 153
1,2-Dichloroethane-d4	10 ug/L	84	64 - 130
Toluene-d8	10 ug/L	98	68 - 124
4-Bromofluorobenzene	10 ug/L	87	72 - 137

KAP TECHNOLOGIES, Inc.
9391 Grogans Mill Rd, Suite A-2
The Woodlands TX. 77380
Ph: 281.367.0065 Fax: 281.367.6772

Laboratory Analysis Report
Quality Control Data - LCS
BTEX/MTBE - SW846/8260B

BTEX/MTBE ORGANIC COMPOUNDS

CLIENT NAME	: ---	CLIENT SAMPLE ID	: ---
PROJECT MANAGER	: ---	LAB SAMPLE ID	:VLCS39
PROJECT NAME	: ---	SAMPLE MATRIX	:Water
PROJECT NUMBER	: ---	DATE SAMPLED	: ---
METHOD REFERENCE	:SW846-8260B	DATE RECEIVED	: ---
INSTRUMENT ID	:A5973	DATE ANALYZED	:01/18/2009
INSTRUMENT FILE	:A18276	TIME ANALYZED	:21:29
PURGE VOLUME	:10 mL	ANALYST	:SB
DILUTION	:1		

Analyte	LCS Spike Amount	LCS Found Value	LCS %Recovery	LCS QC Limits	Units	Qualifier
Methyl tert-butyl ether	10	7.92	79	70-130	ug/L	
Benzene	10	10.3	103	70-130	ug/L	
Toluene	10	11.6	116	70-130	ug/L	
Ethyl Benzene	10	11.7	117	70-130	ug/L	
Xylenes, Total	30	33.7	112	70-130	ug/L	

* Indicate Values outside of QC limits

Spike Recovery 0 out of 5 outside limits

QUALITY CONTROL DATA

Surrogate Compound	Spike Added	% Recovery	QC Limits
Dibromofluoromethane	10 ug/L	**92**	56 - 153
1,2-Dichloroethane-d4	10 ug/L	**85**	64 - 130
Toluene-d8	10 ug/L	**105**	68 - 124
4-Bromofluorobenzene	10 ug/L	**97**	72 - 137

KAP TECHNOLOGIES, Inc.
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Laboratory Analysis Report
BTEX/MTBE - SW846/8260B

BTEX/MTBE ORGANIC COMPOUNDS			
CLIENT NAME	**:Phase Engineering, Inc.**	CLIENT SAMPLE ID	**:MW-1**
PROJECT MANAGER	**:Ross Doctoroff**	LAB SAMPLE ID	**:3272.09**
PROJECT NAME	**:Broaddus**	SAMPLE MATRIX	**:Water**
PROJECT NUMBER	**:2812003**	DATE SAMPLED	:01/08/2009
METHOD REFERENCE	:SW846-8260B	DATE RECEIVED	:01/12/2009
INSTRUMENT ID	:A5973	DATE ANALYZED	:01/19/2009
INSTRUMENT FILE	:A18283	TIME ANALYZED	:01:22
PURGE VOLUME	:10 mL	ANALYST	:SB
DILUTION	:1		

Analyte	MDL	SQL	MQL	Results	Units	Qualifier
Methyl tert-butyl ether	0.39	0.39	1.0	92.2	ug/L	
Benzene	0.24	0.24	1.0	4.37	ug/L	
Toluene	0.25	0.25	1.0	< 0.25	ug/L	U
Ethyl Benzene	0.26	0.26	1.0	< 0.26	ug/L	U
Xylenes, Total	0.75	0.75	3.0	< 0.75	ug/L	U

QUALITY CONTROL DATA			
Surrogate Compound	Spike Added	% Recovery	QC Limits
Dibromofluoromethane	10 ug/L	**95**	56 - 153
1,2-Dichloroethane-d4	10 ug/L	**105**	64 - 130
Toluene-d8	10 ug/L	**110**	68 - 124
4-Bromofluorobenzene	10 ug/L	**98**	72 - 137

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Laboratory Analysis Report
BTEX/MTBE - SW846/8260B

BTEX/MTBE ORGANIC COMPOUNDS			
CLIENT NAME	:Phase Engineering, Inc.	CLIENT SAMPLE ID	:MW-2
PROJECT MANAGER	:Ross Doctoroff	LAB SAMPLE ID	:3272.10
PROJECT NAME	:Broaddus	SAMPLE MATRIX	:Water
PROJECT NUMBER	:2812003	DATE SAMPLED	:01/08/2009
METHOD REFERENCE	:SW846-8260B	DATE RECEIVED	:01/12/2009
INSTRUMENT ID	:A5973	DATE ANALYZED	:01/19/2009
INSTRUMENT FILE	:A18284	TIME ANALYZED	:01:56
PURGE VOLUME	:10 mL	ANALYST	:SB
DILUTION	:1		

Analyte	MDL	SQL	MQL	Results	Units	Qualifier
Methyl tert-butyl ether	0.39	0.39	1.0	241	ug/L	
Benzene	0.24	0.24	1.0	3.22	ug/L	
Toluene	0.25	0.25	1.0	< 0.25	ug/L	U
Ethyl Benzene	0.26	0.26	1.0	< 0.26	ug/L	U
Xylenes, Total	0.75	0.75	3.0	< 0.75	ug/L	U

QUALITY CONTROL DATA			
Surrogate Compound	Spike Added	% Recovery	QC Limits
Dibromofluoromethane	10 ug/L	**89**	56 - 153
1,2-Dichloroethane-d4	10 ug/L	**95**	64 - 130
Toluene-d8	10 ug/L	**104**	68 - 124
4-Bromofluorobenzene	10 ug/L	**90**	72 - 137

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Laboratory Analysis Report
BTEX/MTBE - SW846/8260B

BTEX/MTBE ORGANIC COMPOUNDS			
CLIENT NAME	**:Phase Engineering, Inc.**	CLIENT SAMPLE ID	**:MW-3**
PROJECT MANAGER	**:Ross Doctoroff**	LAB SAMPLE ID	**:3272.11**
PROJECT NAME	**:Broaddus**	SAMPLE MATRIX	**:Water**
PROJECT NUMBER	**:2812003**	DATE SAMPLED	:01/08/2009
METHOD REFERENCE	:SW846-8260B	DATE RECEIVED	:01/12/2009
INSTRUMENT ID	:A5973	DATE ANALYZED	:01/19/2009
INSTRUMENT FILE	:A18285	TIME ANALYZED	:02:30
PURGE VOLUME	:10 mL	ANALYST	:SB
DILUTION	:1		

Analyte	MDL	SQL	MQL	Results	Units	Qualifier
Methyl tert-butyl ether	0.39	0.39	1.0	232	ug/L	
Benzene	0.24	0.24	1.0	4.75	ug/L	
Toluene	0.25	0.25	1.0	< 0.25	ug/L	U
Ethyl Benzene	0.26	0.26	1.0	< 0.26	ug/L	U
Xylenes, Total	0.75	0.75	3.0	< 0.75	ug/L	U

QUALITY CONTROL DATA			
Surrogate Compound	Spike Added	% Recovery	QC Limits
Dibromofluoromethane	10 ug/L	**84**	56 - 153
1,2-Dichloroethane-d4	10 ug/L	**87**	64 - 130
Toluene-d8	10 ug/L	**103**	68 - 124
4-Bromofluorobenzene	10 ug/L	**90**	72 - 137

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Laboratory Analysis Report
BTEX/MTBE - SW846/8260B

BTEX/MTBE ORGANIC COMPOUNDS			
CLIENT NAME	**:Phase Engineering, Inc.**	CLIENT SAMPLE ID	**:MW-4**
PROJECT MANAGER	**:Ross Doctoroff**	LAB SAMPLE ID	**:3272.12**
PROJECT NAME	**:Broaddus**	SAMPLE MATRIX	**:Water**
PROJECT NUMBER	**:2812003**	DATE SAMPLED	:01/08/2009
METHOD REFERENCE	:SW846-8260B	DATE RECEIVED	:01/12/2009
INSTRUMENT ID	:A5973	DATE ANALYZED	:01/19/2009
INSTRUMENT FILE	:A18286	TIME ANALYZED	:03:03
PURGE VOLUME	:10 mL	ANALYST	:SB
DILUTION	:1		

Analyte	MDL	SQL	MQL	Results	Units	Qualifier
Methyl tert-butyl ether	0.39	0.39	1.0	240	ug/L	
Benzene	0.24	0.24	1.0	5.91	ug/L	
Toluene	0.25	0.25	1.0	< 0.25	ug/L	U
Ethyl Benzene	0.26	0.26	1.0	< 0.26	ug/L	U
Xylenes, Total	0.75	0.75	3.0	< 0.75	ug/L	U

QUALITY CONTROL DATA			
Surrogate Compound	Spike Added	% Recovery	QC Limits
Dibromofluoromethane	10 ug/L	**90**	56 - 153
1,2-Dichloroethane-d4	10 ug/L	**83**	64 - 130
Toluene-d8	10 ug/L	**108**	68 - 124
4-Bromofluorobenzene	10 ug/L	**87**	72 - 137

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Laboratory Analysis Report
Quality Control Data - Water Blank
TPH (TX1005)

TOTAL PETROLEUM HYDROCARBONS (TX1005)			
CLIENT NAME	: ---	CLIENT SAMPLE ID	: ---
PROJECT MANAGER	: ---	LAB SAMPLE ID	:TPHBLK14
PROJECT NAME	: ---	SAMPLE MATRIX	:Water
PROJECT NUMBER	: ---	DATE SAMPLED	: ---
METHOD REFERENCE	:TX1005	DATE RECEIVED	: ---
INSTRUMENT ID	:A5890	DATE ANALYZED	:01/13/2009
INSTRUMENT FILE	:A9667	TIME ANALYZED	:16:13
EXTRACTION VOLUME	:30 mL	ANALYST	:SK
DILUTION	:1		

Hydrocarbon Range	MDL	SQL	MQL	Results	Units	Qualifier
C_6 - C_{12}	1.23	1.23	2.00	< 1.23	mg/L	U
>C_{12} - C_{28}	1.23	1.23	2.00	< 1.23	mg/L	U
>C_{28} - C_{35}	3.46	3.46	5.00	< 3.46	mg/L	U

QUALITY CONTROL DATA			
Surrogate Compound	Spike Added	% Recovery	QC Limits
1-Chlorooctane	33.3 mg/L	86	70-130
O-Terphenyl	33.3 mg/L	88	70-130

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Laboratory Analysis Report
Quality Control Data - Water LCS/D
TPH(TX1005)

TOTAL PETROLEUM HYDROCARBONS (TX1005)			
CLIENT NAME	: ----	CLIENT SAMPLE ID	: ----
PROJECT MANAGER	: ----	LAB SAMPLE ID	:TPHLCS14/TPHLCSD14
PROJECT NAME	: ----	SAMPLE MATRIX	:Water
PROJECT NUMBER	: ----	DATE SAMPLED	: ----
METHOD REFERENCE	:TX1005	DATE RECEIVED	: ----
INSTRUMENT ID	:A5890	DATE ANALYZED	:01/13/2009
INSTRUMENT FILE	:A9668 & A9669	TIME ANALYZED	:17:01 & 17:49
EXTRACTION VOLUME	:30 mL	ANALYST	:SK
DILUTION	:1		

Hydrocarbon Range	Units	LCS True Value	LCS Found Value	LCSD Found Value	LCS %Recovery	LCSD %Recovery	QC Limits LCS/D	RPD %	QC Limits RPD
C_6 - C_{12}	mg/L	33.3	30.8	31.2	92	94	75-125	1.3	25
$>C_{12}$ - C_{28}	mg/L	33.3	32.6	33.8	98	102	75-125	3.8	25
$>C_{28}$ - C_{35}	mg/L	66.6	67.8	62.7	102	94	75-125	7.8	25

* Indicate Values outside of QC limits

RPD	:	0	out of	3	outside limits
Spike Recovery	:	0	out of	6	outside limits

QUALITY CONTROL DATA				
Surrogate Compounds	Spike Added	LCS %Rec	LCSD %Rec	QC Limits
1-Chlorooctane	33.3 mg/L	93	94	70-130
O-Terphenyl	33.3 mg/L	92	93	70-130

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Laboratory Analysis Report
TPH (TX1005)

TOTAL PETROLEUM HYDROCARBONS (TX1005)			
CLIENT NAME	:Phase Engineering, Inc.	CLIENT SAMPLE ID	:MW-1
PROJECT MANAGER	:Ross Doctoroff	LAB SAMPLE ID	:3272.09
PROJECT NAME	:Broaddus	SAMPLE MATRIX	:Water
PROJECT NUMBER	:2812003	DATE SAMPLED	:01/08/2009
METHOD REFERENCE	:TX 1005	DATE RECEIVED	:01/12/2009
INSTRUMENT ID	:A5890	DATE ANALYZED	:01/18/2009
INSTRUMENT FILE	:A9702	TIME ANALYZED	:08:56
EXTRACTION VOLUME	:30 mL	ANALYST	:SK
DILUTION	:1		

Hydrocarbon Range	MDL	SQL	MQL	Results	Units	Qualifier
C_6 - C_{12}	1.23	1.23	2.00	< 1.23	mg/L	U
$>C_{12}$ - C_{28}	1.23	1.23	2.00	< 1.23	mg/L	U
$>C_{28}$ - C_{35}	3.46	3.46	5.00	< 3.46	mg/L	U

QUALITY CONTROL DATA			
Surrogate Compound	Spike Added	% Recovery	QC Limits
1-Chlorooctane	33.3 mg/L	90	70-130
O-Terphenyl	33.3 mg/L	73	70-130

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Laboratory Analysis Report
TPH (TX1005)

TOTAL PETROLEUM HYDROCARBONS (TX1005)			
CLIENT NAME	:Phase Engineering, Inc.	CLIENT SAMPLE ID	:MW-2
PROJECT MANAGER	:Ross Doctoroff	LAB SAMPLE ID	:3272.10
PROJECT NAME	:Broaddus	SAMPLE MATRIX	:Water
PROJECT NUMBER	:2812003	DATE SAMPLED	:01/08/2009
METHOD REFERENCE	:TX 1005	DATE RECEIVED	:01/12/2009
INSTRUMENT ID	:A5890	DATE ANALYZED	:01/13/2009
INSTRUMENT FILE	:A9674	TIME ANALYZED	:21:45
EXTRACTION VOLUME	:30 mL	ANALYST	:SK
DILUTION	:1		

Hydrocarbon Range	MDL	SQL	MQL	Results	Units	Qualifier
C_6 - C_{12}	1.23	1.23	2.00	< 1.23	mg/L	U
$>C_{12}$ - C_{28}	1.23	1.23	2.00	< 1.23	mg/L	U
$>C_{28}$ - C_{35}	3.46	3.46	5.00	< 3.46	mg/L	U

QUALITY CONTROL DATA			
Surrogate Compound	Spike Added	% Recovery	QC Limits
1-Chlorooctane	33.3 mg/L	95	70-130
O-Terphenyl	33.3 mg/L	89	70-130

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Laboratory Analysis Report

TPH (TX1005)

TOTAL PETROLEUM HYDROCARBONS (TX1005)			
CLIENT NAME	**:Phase Engineering, Inc.**	CLIENT SAMPLE ID	**:MW-3**
PROJECT MANAGER	**:Ross Doctoroff**	LAB SAMPLE ID	**:3272.11**
PROJECT NAME	**:Broaddus**	SAMPLE MATRIX	**:Water**
PROJECT NUMBER	**:2812003**	DATE SAMPLED	:01/08/2009
METHOD REFERENCE	:TX 1005	DATE RECEIVED	:01/12/2009
INSTRUMENT ID	:A5890	DATE ANALYZED	:01/13/2009
INSTRUMENT FILE	:A9675	TIME ANALYZED	:22:31
EXTRACTION VOLUME	:30 mL	ANALYST	:SK
DILUTION	:1		

Hydrocarbon Range	MDL	SQL	MQL	Results	Units	Qualifier
C_6 - C_{12}	1.23	1.23	2.00	< 1.23	mg/L	U
>C_{12} - C_{28}	1.23	1.23	2.00	< 1.23	mg/L	U
>C_{28} - C_{35}	3.46	3.46	5.00	< 3.46	mg/L	U

QUALITY CONTROL DATA			
Surrogate Compound	Spike Added	% Recovery	QC Limits
1-Chlorooctane	33.3 mg/L	**85**	70-130
O-Terphenyl	33.3 mg/L	**84**	70-130

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Laboratory Analysis Report
TPH (TX1005)

TOTAL PETROLEUM HYDROCARBONS (TX1005)			
CLIENT NAME	**:Phase Engineering, Inc.**	CLIENT SAMPLE ID	**:MW-4**
PROJECT MANAGER	**:Ross Doctoroff**	LAB SAMPLE ID	**:3272.12**
PROJECT NAME	**:Broaddus**	SAMPLE MATRIX	**:Water**
PROJECT NUMBER	**:2812003**	DATE SAMPLED	:01/08/2009
METHOD REFERENCE	:TX 1005	DATE RECEIVED	:01/12/2009
INSTRUMENT ID	:A5890	DATE ANALYZED	:01/13/2009
INSTRUMENT FILE	:A9676	TIME ANALYZED	:23:18
EXTRACTION VOLUME	:30 mL	ANALYST	:SK
DILUTION	:1		

Hydrocarbon Range	MDL	SQL	MQL	Results	Units	Qualifier
C_6 - C_{12}	1.23	1.23	2.00	< 1.23	mg/L	U
>C_{12} - C_{28}	1.23	1.23	2.00	< 1.23	mg/L	U
>C_{28} - C_{35}	3.46	3.46	5.00	< 3.46	mg/L	U

QUALITY CONTROL DATA			
Surrogate Compound	Spike Added	% Recovery	QC Limits
1-Chlorooctane	33.3 mg/L	**94**	70-130
O-Terphenyl	33.3 mg/L	**90**	70-130

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Laboratory Analysis Report
Total Dissolved Solids - 160.1

TOTAL DISSOLVED SOLIDS			
Client Project Name:	**Broaddus**	***Client Project Number:***	**2812003**

	Client Sample Identification	Matrix	Sampling		KAP Lab ID:	Analysis Date	Time	TDS (mg/L)
			Date	Time				
1	MW-1	Water	1/8/2009	--	3272.09	1/15/2009	10:00	**5420**

Laboratory Quality Assurance	Matrix	Results (TDS)	Analysis Date & Time
TDS Prep Blank	Water	<1.0	01/15/2009 10:00
TDS RPD	Water	1.4%	01/15/2009 10:00

SAMPLE RECEIPT LOG RECORD

KAP Technologies, Inc.

KAP Lab Episode Number	Date Rec.	Time Rec.	Client/Customer	Project Name	Project Number
3272	01·12·2009		PEI	Broaddus	28/2003

Samples Delivered By: KAP Staff Client FedEX/UPS LoneStar Other	Total Number of Coolers: 1
Temperature/On Ice: Cooler (1) 3.8°C (2)____ (3)____ (4)____ (5)____	Cooler(s) Received with Custody Seal: Yes____ NO ✓ See Comments
Sample(s) Received with Chain-of Custody--Dated & Signed: Yes ✓ NO____ See Comments	Sample Container(s) Received Intact: Yes ✓ NO____ See Comments

1	Matrix Received: 4 Water 8 Soil ___ Sludge ___ Liquid? ___ Vapor ___ Other:_____	
2	Sample(s) were received in appropriate container(s)	Yes ✓ NO____ See Comments
3	All sample(s) were tagged & labeled	Yes ✓ NO____ See Comments
4	Sample(s) ID labels match C-O-C ID's	Yes ✓ NO____ See Comments
5	Bottle count on C-O-C matches bottles received	Yes ✓ NO____ See Comm
6	Sample volume received meets KAP Technologies Guideline for analyses requested	Yes ✓ NO____ See Comments
7	Sample(s) were received with-in the required holding time(s)	Yes ✓ NO____ See Comments
8	VOA vials completely filled. (list any bubbles in comment section)	Yes ✓ NO____ See Comments
	Sample(s) Accepted by KAP TECHNOLOGIES, Inc.	Yes ✓ NO____ See Comments

Comments:

Checked In By/Date: Nicole Hogue 01·12·2009	LIMS Log-In By/Date: _____

Action taken by KAP to Comments: By:_____ Date:_____

KAP TECHNOLOGIES, Inc.
9391 Grogans Mill Rd., Suite A2 The Woodlands, TX 77380

Chain-of-Custody Record
Ph:281.367.0065 FX:281.367.6772

Chain-of-Custody (COC Pg.) 1 of 1

3272

PEI

Project Number: 2812003
Site Name: Broadhus
Project PO#:
Sampled By: (Please Print) Clinton R Burnham

TAT Time: ☒ Standard Non-Rush ☐ RUSH
Report Needed By:

E-Mail Report To:
1
2
3

Project Manager: Ross Doctoroff
PH: 7-476-9844 FAX: 7-476-9797

Remarks: PAH on highest TPH soil & GW
TRRP

	Sample Identification						BTEX and/or MTBE	VOCs - M8260	TPH (TX1005)	Metals RCRA-8	Metals RCRA-8+3	PAHs-8270SIM	SVOCs - M8270	TDS				COMMENTS	KAP LAB Sample ID:
1	SB1-2'	1/8			X	1	X		X										3272.01
2	SB1-15'				X	1	X		X										.02
3	SB2-2'				X	1	X		X										.03
4	SB2-15'				X	1	X		X										.04
5	SB3-2'				X	1	X		X										.05
6	SB3-15'				X	1	X		X										.06
7	SB4-2'				X	1	X		X										.07
8	SB4-15'				X	1	X		X										.08
9	MW-1			X		6	X		X					X					.09
10	MW-2			X		5	X		X										.10
11	MW-3			X		5	X		X										.11
12	MW-4			X		5	X		X										.12
13																			
14																			
15																			

Relinquished by: [signature]	Date: 1/12/9	Time: AM	Received by: [signature]	Date: 1/12/9	Time: AM
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by: [signature]	Date: 1/12/9	Time:			

Method of Shipment: ☒ Laboratory Pick-up ☐ OTC-Delivery From Client ☐ FedEX/UPS/LoneStar ☐ OTHER

Received by Laboratory: Nicole Hogue 1-12-09 16:00

PROBLEMS WITH SAMPLE SET; Refer to Sample Receipt Log record for Details: ☐

White Yellow - Laboratory Copies
Pink - Client Copy

EPAHO104001924

3175

Martin Midstream

EPAHO104001925

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **2/6/2009**

Dear **Nathan Kaufhold**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3175

Expiration Date 2/6/2011

Generator: Martin Midstream Fuel Services
Address: 15155 Jacinto Port Blvd.
Houston, TX 77015

Waste Information

Name of Waste: Empty Drums & Totes
TCEQ Waste Code #: RECYCLE
Container Type:
Detailed Description of Process Generating Waste:
Empty 55 gallon metal & poly drums & totes for recycle. May have a small amount of residual yellow oil liquid from last contained product: VISGA 46

Color: Varies **Odor:** None **pH:** 5-10
Physical State:
Incompatibilities: None Known
Safety Related Data/Special Handling:
Level D

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

GRP

PH#3175

GB
JR

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility 4904 Griggs Road, Houston, TX 77021 Phone (713) 676-1460 Fax: (713) 676-1460 U.S. EPA ID Number: TXD008950461 ISWR Number: 30900 TCEQ Industrial Solid Waste Permit Number: 30948	☐ CES Environmental Services - Port Arthur Facility 2420 S. Gulfway Dr., Port Arthur, TX 77641 Phone (713) 676-1460 Fax: (713) 676-1460 U.S. EPA ID Number: TXR000079307 ISWR Number: 88585

SECTION 1: Generator Information

Company: Martin Midstream Mega Lubricant
Address: 15155 Jacinto Port Blvd
City: Houston **State:** TX **Zip:** 77015
Contact: Nick Trejo **Title:**
Phone Number: 281-860-4307 **Fax Number:**
24/hr Phone Number:
US EPA ID No: TXCESQG
State ID No: CESQG **SIC Code:**

SECTION 2: Billing Information - ☑ **Same as Above**

Company:
Address:
City: **State:** **Zip:**
Contact: **Title:**
Phone Number: **Fax Number:**

SECTION 3: General Description of the Waste

Name of Waste: Empty Drums & Totes
Detailed Description of Process Generating Waste:
Empty 55 gallon metal & poly drums & totes for recycle. May have a small amount of residual yellow oil liquid from last contained product: VISGA 46.

Physical State: ☐ Liquid ☐ Sludge ☐ Powder ☑ Solid ☐ Filter Cake ☐ Combination

Color: Varies **Odor:** None

Specific Gravity (water=1): 2 **Density:** 15 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ Single-phase ☐ Multi-phase

Container Type: ☑ Drum ☑ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☑ Monthly ☐ Yearly ☐ One-Time
Quantity: 10 Units

[redacted]

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: RECYCLE

Proper US DOT Shipping Name: Recyclable metal & plastic

Class: N/A UN/NA: N/A PG : N/A RQ: N/A

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>210		5-10		BRL	mg/l	BRL	mg/l	100	%
Oil & Grease		TOC		Zinc		Copper		Nickel	
>500	mg/l	BRL	mg/l	BRL	mg/l	BRL	mg/l	BRL	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Metal Drums / Totes	0-100	%
Plastic Drums / Totes	0-100	%
Cardboard Totes w/ Plastic Liners	0-100	%
VISGA 46	0-5	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Standard PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. MSDS

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

None

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	Not Regulated
TCLP Volatiles:	Not Regulated
TCLP Semi-Volatiles:	Not Regulated
Reactivity:	Non-Reactive
Corrosivity:	Non-Corrosive
Ignitability:	>200

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory: Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory **: *Subpart C***

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Nick R. Trejo **Date:** 02-05-09

Printed Name/Title: Product Development Mngr - Nick R. Trejo

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: [illegible]
Date: 2-6-09 ☑ Approved ☐ Rejected
Approval Number: 3175

[redacted]

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$50/each
$70/hr + CFSC

2. Contamination Limit (maximum limit before surchages apply):

3. Surcharge Pricing:

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

Shred & recycle empty totes

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

TOTAL

Safety Data Sheet

PRODUCT LABELS

LABELLING (standard or EU):	Not concerned
R-phrases:	None
S-phrases:	None
TRANSPORT LABELLING:	Not applicable.

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY UNDERTAKING

Name of the product:	VISGA 46
Code No.:	HJC
Product application:	Hydraulic oil
Supplier:	TOTAL LUBRIFIANTS Le Diamant B 16, rue de la République 92922 Paris La Défense - France Tel: +33 (0)1 41 35 40 00 Fax: +33 (0)1 41 35 84 71
Emergency telephones:	ORFILA / Tel: 01.45.42.59.59

See local details at end of sheet:

2. COMPOSITION/INFORMATION ON INGREDIENTS

PREPARATION

Chemical nature: Petroleum-derived severely refined mineral-base product in which the polycyclic aromatic hydrocarbons (PCA or PAH) content, measured by IP 346, is less than 3%

Substances presenting a health hazard	EC No.	CAS No.	Content	Symbol(s)	R-phrases
Alkyl phenol			<0,25 %	N	R-50/53

See section 16 for explanations of R-phrases:

3. HAZARDS IDENTIFICATION

Health effects:	Under normal conditions of use, the product holds no danger of intoxication
Environmental impact:	Do not rejet this product into the environment
Physico-chemical hazards:	No specific risk of fire or explosion under normal contitions of use

4. FIRST AID MEASURES

IN CASE OF SERIOUS OR PERSISTENT MANIFESTATIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE.

Inhalation: Inhalation of heavy concentrations of vapour, fumes or spray, may cause mild irritation of the throat.
Transport the person into fresh air, keep warm and allow to rest.

Ingestion:	Possible risk of vomiting and diarrhoea. Do not induce vomiting to avoid the risk of aspiration into the respiratory tract. Give nothing to drink
Skin contact:	If the skin is exposed to high-pressure spray, the product may enter the human organism. In all such cases the affected person must be taken to hospital, even if no sign of injury can be detected. Immediately remove all soiled or stained clothing. Wash the affected area immediately and repeatedly with soap and water.
Eye contact:	Keep eyes open and rinse immediately and repeatedly with water for at least 15 minutes.
Aspiration:	If the product is believed to have entered the lungs (in case of vomiting, for example), take the person to hospital for immediate care.

5. FIRE FIGHTING MEASURES

Flash point:
See heading 9

Extinguishing media:	- suitable: Foam, carbon dioxide (CO2), powder. - not recommended: do not use water jets (stick jets) for extinguishing fire since they could help to spread the flames.
Protective measures for firefighters:	Insulated breathing apparatus must be worn in confined premises with heavy concentrations of fumes and gases.

6. ACCIDENTAL RELEASE MEASURES

See sections 8 and 13.

After spillage / leakage:	- On the soil: Surfaces on which the product has been spilled may become slippery. Do not allow the product to enter sewers or rivers or contaminate the soil. Recover with mechanical means such as pumps and skimmers. Contain and collect the spilled product with sand or any other inert absorbant material. - On water: Floating absorbant material, then mechanical recovery. If the product is spilled in a river or in the sewers, notify the authorities of the possible presence of floating items.

7. HANDLING AND STORAGE

HANDLING:

Prevention of user exposure:	Ventilate extensively if the formation of vapours, fumes, mists or aerosol is a risk. Make all the necessary arrangements in order to reduce exposure risk, notably to products in use or to wastes. Keep away from combustive substances; keep away from food and beverages.
Prevention of fire and explosion:	Empty containers may contain flammable or explosive vapours. There is a fire hazard associated with rags, paper or any other material used to remove spills which become soaked with product. Avoid accumulate of these: they are to be disposed off safely after use.

Precautions:	Avoid static electricity build up with connection to earth. Set up machinery and equipment so as to avoid the risk of accidental spills or splashes onto hot machine parts and electrical contacts (on joint failure, for example). . Oil leaks in a pressure circuit resulting in a fine inflammable spray (the flammability limit for oil mist is depressed when concentrations of about 45g/m3 are reached).
STORAGE:	
Technical measures:	Make the necessary arrangements to prevent water and soil pollution.
Storage precautions:	. Suitable: Store at room temperature, protected against contact with water and moisture, and away from any source of ignition. Keep containers closed when not in use . To be avoided: Do not store exposed to the elements.
Incompatible products:	Dangerous reaction with strong oxidizing agents.
Packaging materials:	. Recommended: Use only hydrocarbon-resistant containers, joints, pipes, etc. Keep in original container if possible. Otherwise, transfer all indications on the regulatory label to the new container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Technical measures:	Use the product in a properly ventilated atmosphere. When working on enclosed place (tanks, reservoirs...), make sure that atmosphere is not sufocating and/or wear recommend equipment.
Occupational exposure limit:	. oil mist : 10mg/m3, for 15 minutes . oil mist : 5mg/m3, for 8 hours
Hand protection:	Impermeable hydrocarbon-proof gloves. recommended material: nitrile , neoprene.
Eye protection:	Goggles, in case of risk of splashing.
Skin and body (other than the hands) protection:	As required, wear a face mask, hydrocarbon-proof clothing, and safety boots (when handling drums). Don't wear ring, watch or similar thing which will be able to hold the product and may give rise to some skin diseases.
Hygienic work practices:	Avoid prolonged or repeated contact with the skin, particularly as regards used or waste oil. Immediately remove all soiled or stained clothing. If the product comes into contact with the skin, wash the affected area immediately and copiously with soap and water. Use no abrasives, solvents or fuels. Do not use cloths stained with the product to dry hands. Dont put the product-soaked rags in the pockets of working clothes. Do not eat, drink or smoke while handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Liquid.
Colour:	Yellow.
Odour:	Characteristic.

Density/specific gravity:	878 Kg/m3 Temperature (°C) 15
Flash point:	> 210 ° C (ASTM D 93)
Température d'auto-inflammation:	> 250 ° C (ASTM E 659)
Comments on autoignition temperature:	This temperature may be significantly lower under particular conditions (slow oxidation on finely divided materials...). Pour point: < -36 °C (ASTM D 97)
Partition coefficient (log Pow):	Log Pow > 6 Temperature (°C) (20°C)
Viscosity:	46 mm2/s Temperature (°C) 40

10. STABILITY AND REACTIVITY

Stability:	The product is stable at normal storage, handling and use temperatures.
Conditions to avoid:	Heat (temperatures above flash point), sparks, ignition points, flames, static electricity
Materials to avoid:	Avoid contact with strong oxidizing
Hazardous decomp. products:	Incomplete combustion and thermolysis produce more or less toxic gases such as CO, CO2, various hydrocarbons, aldehydes and soot.

11. TOXICOLOGICAL INFORMATION

Acute toxicity / Local effect:

Inhalation, comments:	- Inhalation : Risk is improbable under normal conditions of use Inhalation of important concentration of vapour or aerosols may cause irritation of the upper respiratory tract.
Skin contact, comments:	- Contact with skin : Risk is improbable under normal conditions of use. If the skin is exposed to high-pressure spray, the product may enter the human organism. In all such cases the affected person must be taken to hospital, even if no sign of injury can be detected
Ingestion, comments:	- Ingestion : In case of ingestion of small quantities, no important effect observed. in case of ingestion of larger amounts: abdominal pain, diarrhea, ...

CHRONIC TOXICITY OR LONG-TERM TOXICITY:

Skin contact:	Characteristic skin affections (oil blisters) may develop following prolonged and repeated exposure through contact with stained clothing
Sensitization:	To our knowledge, the product does not a cause aggravated sensitivity.

12. ECOLOGICAL INFORMATION

Comments about ecotoxicity:	The virgin product is considered to present no danger for land-growing organisms. It is considered to present a little danger for aquatic life. no information available for used product Experimental data on the finished product are not available.
Mobility:	- Air: Low volatility at room temperature. - Water: Insoluble in water - Ground: Given its physical and chemical characteristics, the product generally shows little mobility in the ground.
Persistence and degradability:	No experimental information about the finished product. However the "mineral oil" fraction of the new product is intrinsically biodegradable. Some components of the product may not be biodegradable.

13. DISPOSAL CONSIDERATIONS

Waste disposal:	Dispose of in a safe manner, in accordance with local regulations. If need be, collection by an authorized waste contractor and regeneration or incineration in an approved installation
Waste class:	13 01 06 (hydraulic oils containing only mineral oil)).
Disposal of contaminated packaging:	Proceed in compliance with the prevailing regulations.
National regulations:	* France Notice of 11.11.1997 concerning the nomenclature for waste. List of wastes: JOCE L349 of 16.02.2001. Law No. 75-633 of 15.07.75 amended, relative to the elimination of wastes and the recovery of materials. Regulations concerning the collection of used oils: Decree 79-981 of 21.11.79 and rules of 28.01.99 relative to their collection and the conditions for their elimination. Law No. 88-1261 of 30.12.88 concerning the import, export and transit of wastes. Decree No. 77-254 of 08.03.77 relative to the regulation for the dumping of oils and lubricants into surface waters.

14. TRANSPORT INFORMATION

Not concerned by the regulatory below.

Road (ADR) / Rail (RID):

Class: Not restricted for transport.

Transport by barge (ADNR):

Marine (IMO-IMDG):

Air (ICAO/IATA):

15. REGULATORY INFORMATION

None

Risk phrases:	None
Safety phrases:	None
EU directives:	Hazardous preparations directive 1999/45/EC modified (Directive 2001/60/EC).

Social Security code:	- Art. L 461-6, Art. D 461-1, apendix A, No. 601. Table of occupational illnesses and diseases No. 36
Labor code:	- Art. R 241-50, decree of 07.11.1977.

16. OTHER INFORMATION

This sheet is in compliance with the standarts defined by the directives 91/155/CEE, 93/112/CEE, 2001/58/CE and the article 14 of the directive 1999/45/EC.
For France, in case of poisoning call the Antipoison Centre (if possible in your area) and/or the SAMU (15), see ORFILA number below - Tel : Angers 02.41.48.21.21 - Bordeaux 05.56.96.40.80 - Lille 03.20.44.44.44 - Lyon 04.72.11.69.11 - Marseille 04.91.75.25.25 - Nancy 03.83.32.36.36 - Paris 01.40.05.48.48 - Rennes 02.99.59.22.22 - Strasbourg 03.88.37.37.37 - Toulouse 05.61.77.74.47

Explanations of R-phrases in section 2:	R-50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Revision date:	2003-09-05
Supersedes the data sheet of:	2002-03-15
* Information revised since the previous version of the SDS:	
SDS No.:	vga46

This safety data sheet serves to complete but not to replace the technical product sheets. The information contained herein is given in good faith and is accurate to the best of knowledge at the date indicated above.It is understood by the user that any use of the product for purposes other than those for which it was designed entails potential risk.The information given herein in no way dispenses the user from knowing and applying all provisions regulating his activity.The user bears sole liability for the precautions required when using the product.The regulatory texts indicated herein are intended to aid the user to fulfil his obligations. This list is not to be considered complete and exhaustive.It is the user's responsibility to ensure that he is subject to no other obligations than those mentioned.

3176
Kinder Morgan

EPAHO104001939

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **2/6/2009**

Dear **Michael Jaskowiak**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3176

Expiration Date

Generator: Kinder Morgan - Galena Park Facility
Address: 906 Clinton Drive
Galena Park, TX 77547

Waste Information

Name of Waste: Tallow
TCEQ Waste Code #: 05036092
Container Type: Vacuum box
Detailed Description of Process Generating Waste:
Rendered animal fat
Color: light to clear to yellow **Odor:** mild, fatty odor **pH:** 5-10
Physical State:
Incompatibilities: None Known
Safety Related Data/Special Handling:
Level D

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

JRP

P#3176

JR
SW

CES Environmental Services, Inc.
4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit Number: 30948
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

SECTION 1: Generator Information

Company: Kinder Morgan
Address: 906 Clinton Drive
City: Galena Park **State:** TX **Zip:** 77547
Contact: Lance Wiley **Title:**
Phone Number: 713-724-4912 **Fax Number:**
24/hr Phone Number:
US EPA ID No: TXD026481253
State ID No: 30573 **SIC Code:**

SECTION 2: Billing Information - ☑ **Same as Above**

Company:
Address:
City: **State:** **Zip:**
Contact: **Title:**
Phone Number: **Fax Number:**

SECTION 3: General Description of the Waste

Name of Waste: Tallow
Detailed Description of Process Generating Waste:

Rendered animal fat

Physical State: ☐ Liquid ☑ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color: light to clear to yellow to brown **Odor:** mild, fatty odor

Specific Gravity (water=1): <1. **Density:** <.8 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☐ Single-phase ☑ Multi-phase

Container Type: ☐ Drum ☐ Tote ☐ Truck ☑ Other (explain)

Frequency: ☐ Weekly ☐ Monthly ☐ Yearly ☑ One-Time
Quantity: 40yds in vacuum box

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No
If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011
Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: 05036092

Proper US DOT Shipping Name: Non-Hazardous, Non-Regulated sludge
Class: _____ UN/NA: _____ PG: _____ RQ: _____

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>300		5-10		N/A	mg/l	N/A	mg/l	80	%
Oil & Grease		TOC		Zinc		Copper		Nickel	
0	mg/l	BRL	mg/l	BRL	mg/l	BRL	mg/l	BRL	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Rendered animal fats	99.995	%
BHA Antioxidant	.0005	%

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory*: *Subpart C

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Lance Wiley for Johnny Salinas **Date:** 2-5-09

Printed Name/Title: Lance Wiley / Johnny Salinas EHS Specialist

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: [signature]
Date: 2-6-09 ☑ Approved ☐ Rejected
Approval Number: 3176

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Level D

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. MSDS

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

Non Known

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	BRL
TCLP Volatiles:	BRL
TCLP Semi-Volatiles:	BRL
Reactivity:	Non-Reactive
Corrosivity:	Non-Corrosive
Ignitability:	Non-Ignitable

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory: Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$75yd
$450/load trans

2. Contamination Limit (maximum limit before surchages apply):

3. Surcharge Pricing:

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

Redirect to Republic Class II sludge

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

Redirect to Republic Class II Sludge

Solidified Solid Channelview

(281) 452-9803 Intra Service
1621 Ridlon
77530

Swift & Company – Material Safety Data Sheet No. M-1535-M

Manufacturer/Distributor	Material Name
Swift & Company 1770 Promontory Circle Greeley, CO 80634-9038 Tel. 970-506-8000	TALLOW (Rendered Animal Fats)

MATERIAL IDENTIFICATION – INGREDIENTS

TALLOW (Rendered Animal Fats – Formula: n.a. - CAS n.a.)

Ingredients: 99.995% Rendered animal fats and 0.0005% BHA Antioxidant (Tenox*)

Note: This product is an animal feed additive produced under the requirements of 21 USC of 21 USC 301 et seq.

HEALTH HAZARD INFORMATION

OSHA PEL - None ACGIH TWA - n.a.

Gosselin, Smith and Hodge report that in commerce tallow usually means the fatty tissue of cattle and sheep. Edible grades are white or light colored. Inedible grades may range from light colored to dark oils. Tallow is hydrolized in the bowel to glycerol and fatty acids. Hexadecyl, octadecyl. And especially octadecenyl groups predominate. The word "tallow" (and di-tallow, etc.) is sometimes used in quasi-chemical names to designate straight chain alkyl groups prepared from natural mixtures of fatty acids derived from tallow. This text assigns a theoretical oral human lethal dose of above 15 milligrams per kilogram (more than a quart or a pound) to tallow. Large dose ingestion may cause nausea, vomiting and/or diarrhea. Eye contact may cause transitory mechanical irritation which should be relieved by flushing the eyes with water. Prolonged or repeated product contact may cause skin irritation to sensitive or allergenic persons. This product may be labeled with the cautionary keyword 'CAUTION', and product users must read and follow any cautions and directions for use that are printed on the product label. Users should avoid breathing product fumes or vapors, and should wash thoroughly after product handling or use.

First Aid -	Ingestion	-Dilute with water/milk. Induce vomiting. Get medical attention. Take label information to doctor.
-	Inhalation	-Remove to fresh air. Restore breathing, and then get prompt medical attention.
-	Skin contact	-Wash from skin immediately with soap and water. Get medical attention for irritation.
-	Eye Contact	-Flush eyes with water for at least 15 minutes. Get medical attention for irritation.

PHYSICAL DATA

Boiling Point - > 250 F.	Melting Point – decomposes	Specific Gravity - < 1.0
Solubility—Water – depends on temp.	n.a. = not available/not applicable	Vapor Density (Air=1) – n.a.

Appearance/Odor: Varies from light and clear to yellow-brownish cloudy oils with a mild, fatty odor.

FIRE, EXPLOSION AND REACTIVITY DATA

Flash Point - > 300 F. Autoignition Temp. – n.a. Flammable Limits – lel-n.a. – uel-n.a.

Extinguishing media. Determined by surrounding fire. Use water fog, foam, CO2 or dry chemical. CONTAIN ANY RUNOFF.
This product is stable, will not polymerize, and may react with oxidizers.
This product may produce toxic or harmful combustion products when heated to decomposition.
Firefighters should wear self-contained breathing apparatus and full protective equipment in fire situations.

SPECIAL PROTECTION INFORMATION

This product may be harmful if swallowed in quantity. Children would be principal victims.
Eye contact with this product may cause transitory irritation which should be relieved by flushing with water.
Skin contact with this product may be irritating to sensitive or allergenic persons.
Gloves and eye protection are not required for normal product use, but their use is recommended.
Contact with hot product may cause burns to skin and eyes. Flush contact areas immediately with plenty of water.
Wash thoroughly after handling this product, and before eating or smoking.
Store this product in a secure place where children or unauthorized persons cannot get at it.

CAUTIONARY STATEMENTS FOR PERSONS HANDLING THIS PRODUCT (See product label for complete statement.)

CAUTION – Inhalation of product vapors may irritate the respiratory tract – May be irritating to eyes or skin.
May be harmful if swallowed in quantity. Avoid breathing product fumes or vapor.
Avoid contact with skin, eyes or clothing. Wash thoroughly after handling.
Keep containers closed when not in use. Keep out of the reach of children.

Note: This product is not for human consumption. Don't eat or drink it, or breathe its fumes or vapor.

*Tenox is a registered trademark of Eastman Chemical.

MATERIAL STORAGE INFORMATION

Store this product in a cool, dry place, away from sources of direct or high heat.
Keep containers closed when not in use. Protect product containers from damage.
Store this product in a secure place where children or unauthorized persons cannot get at it.

INFORMATION PERTINENT TO THIS PRODUCT

This material is produced as a consumer product, and it is assumed that product users have knowledge of the normal methods of product use. Product users are directed to consult the product label for information relating to the hazards of normal product use, and for other specific use or application information. Product users are cautioned to use this material in a manner that is consistent with the label instruction, and to store the product in a secure place, where children cannot inadvertently contact or ingest the product.

This product may be harmful if swallowed in quantity. Children would be principal victims.
Eye contact with this product may cause transitory irritation which should be relieved by flushing with water.
Skin contact with this product may be irritating to sensitive or allergenic persons.
Gloves and eye protection are not required for normal product use, but their use is recommended.
Contact with hot product may cause burns to skin and eyes. Flush contact areas immediately with plenty of water.
Wash thoroughly after handling this product, and before eating or smoking.
Store this product in a secure place where children or unauthorized persons cannot get at it.

SPILL, LEAK AND DISPOSAL PROCEDURES

Except for pesticides, solvents and petroleum products, spills occurring during normal product use should not create any significant environmental problems. If the product is environmentally hazardous, consult the container label for specific spill containment instructions. Accepted disposal practice is to triple rinse liquid containers before disposal. Recover spilled chemicals as follows: Sweep up granular products and place them in covered containers for disposal. Absorb spilled liquid products with an absorbent or ordinary dirt, and shovel the absorbed material into covered containers for disposal.

DISPOSAL: Follow container instructions or place recovered material in an approved chemical waste landfill or incinerator. Follow Federal, state and local regulations for disposal.

HYGENIC PRECAUTIONS, EMPLOYEE INSTRUCTION AND TRAINING

All persons who handle chemical must follow good hygienic practices (i.e., wash frequently, and wear clean clothing).
All product users should use protective equipment whenever atmospheric dust or chemical vapors are present.
All persons who may have occasion to use protective equipment should be trained in the use of that equipment.
Product users should avoid prolonged or repeated product contact, and should wash thoroughly after product handling.
All persons who use chemical products must read the product label and be able to understand the hazards listed thereon.
Cautionary keywords (see below) are used on labels to signify or describe general product hazards and/or characteristics.

CAUTIONARY KEYWORDS – NORMAL HAZARD DESCRIPTIONS

'DANGER' is used to describe products that are flammable, poisonous, corrosive, or highly toxic by ingestion or absorption.
'WARNING' is used on moderately toxic products, combustibles, or on products that may be irritating to the skin or eyes.
'CAUTION' is used on products of low toxicity or hazard. All chemical should be handled and used cautiously.

SUPPLEMENTAL SOURCES OF DATA SHEET INFORMATION – DISCLAIMER OF LIABILITY

The Safety Department of Swift & Company has supplemented manufacturers data with information from other sources in order to provide our employees and managers with adequate information on chemical hazards. The duty to inform users of all of the hazards of a chemical is properly that of the manufacturer or distributor, and Swift & Company expressly denies any liability in providing this supplemental handling or toxicological data to our managers, to our employees, or to our customers.

The following information sources were used to prepare this data sheet:

"Patty's Industrial Hygiene and Toxicology", 3rd Revised Edition, by Clayton and Clayton (Wiley-Interscience)
"Clinical Toxicology of Commercial Products", 5th Edition, by Gosselin Smith & Hodge (Williams & Wilkins)
"Dangerous Properties of Industrial Materials", 6th Edition, by N. Irving Sax (VanNostrand Reinhold)

Revised 10-15-02

3178
Port of Houston

EPAHO104001949

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **2/10/2009**

Dear **Roxana Herrera**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3178

Expiration Date 2/10/2011

Generator: Port of Houston Authority-Bayport Marine Dept.
Address: 12555 Port Road
Pasadena, TX 77507

Waste Information

Name of Waste: Floor Dry
TCEQ Waste Code #: CESQ4891
Container Type:
Detailed Description of Process Generating Waste:
Clean up of oil spills
Color: white /grey / black **Odor:** hydrocarbon **pH:** 5-7
Physical State:
Incompatibilities: None Known
Safety Related Data/Special Handling:
Level D

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

JR
GB

RUSH!!
arriving tomorrow

#3178

CES Environmental Services, Inc.

4904 Griggs Road Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

SECTION 1: Generator Information

Company : Port of Houston Authority-Bayport Marine Dept.
Address : 12555 Port Road 12555 Port Road
City, State, Zip : Pasadena TX 77507
Contact : Mike Reilly Title :
Phone No : (281) 291-6140 Fax :
24 / HR Phone :
U.S EPA I.D No :
State I.D : SIC Code na

SECTION 2: Billing Information

Company : Port of Houston Authority
Address : 111 East Loop North P.O. Box 2562
City, State, Zip : Houston TX 77029-4327
Contact : Roxana Herrera Title :
Phone No : (713) 670-2814 Fax : (713) 670-2427

SECTION 3: General Description of the Waste

Name of Waste : Floor dry

Detailed Description of the Process Generating Waste:

Clean up of oil spills

Physical State : ☐ Liquid ☐ Sludge ☐ Powder
☑ Solid ☐ Filter Cake ☐ Combination

Color : white/grey Odor : oil like

Specific Gravity (Water=1) : na Density : na lbs / gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☐ No

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834	2835	2836	2841	2842	2843	2844	2851
2861	2865	2869	2873	2874	2876	2879	2891	2892	2893	2896	2899	2911	3312	4953	4959	9511

Layers : ☑ Single-Phas ☐ Multi-Phase

Container Type : ☑ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Container Size : 55

Number Of Units : 10

Is this a USEPA "Hazardous Waste" per 40 CFR 261.3? ☐ Yes ☒ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", is it: ☐ D001 ☐ D002 ☐ D003

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007
☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristics for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☒ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☒ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code No : CESQ4891

Proper U.S. State Waste Code No : Non-RCRA/Non-DOT Regulated Material

Class : na UN/NA : na PG : na RQ : na

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
>200	neutral	0 mg/l	0 mg/l	100 %
Oil and Grease	**TOC**	**Zinc**	**Copper**	**Nickel**
>1500 mg/l	>1500 mg/l	0 mg/l	0 mg/l	0 mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The material / product consists of the following materials	Concentration Ranges are acceptable	Units or %
clay absorbent	80-98	%
oil (motor oil, hydraulic oil)	2-20	%
misc trash and debris	0-2	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.
level D

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.
none

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
oxidizers

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generators knowledge

TCLP Metals : x
TCLP Volatilies : x
TCLP Semi-Volatiles : x
Reactivity : x

Corrosivity : x

Ignitability : x

SECTION 9: Waste Receipt Classification Under 40 CFR 437

Is this material a wastewater or wastewater sludge ? ☐ YES ☑ NO

If 'YES', complete this section

PLEASE CHECK THE APPROPRIATE BOX: IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE

Matals Subcategory: ***Subpart A***

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phospha
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: ***Subpart B***

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation wastes
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory ***Subpart C***

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bering wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesive and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations

☐ Tank clean-out from organic, non-petroleum sources

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

☐ Metals Subcatego

☐ Oils Subcatego

☐ Organics Subcategory

SECTION 10: Additional Instruction

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data. I hereby cerity that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature : R. Herrere **Date :** 3/7/2008

Printed Name / Title : R. Herrere / Program Coordinator

CES USE ONLY (DO NOT WRITE IN THIS SPACE) **Process Facility Information :**

Compliance Officer : Prabhakar Thangudu

Date : ~~3/11/2008~~ **Status :** Approved Rejected

Approval Number : 3178 ~~HOU-2645~~

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$35/DM
$70/hw + FSC

2. Contamination Limit (maximum limit before surchages apply):

3. Surcharge Pricing:

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

Bulk & send offsite to Class 1 box

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

3179
Edigen

EPAHO1040001957

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Material / Product Approval Letter

Date **2/11/2009**

Dear **Daryl Guthrie**

Thank you for choosing CES Environmental Services, Inc. for your material / product recycling needs. The following material has been approved at our facility in Houston, TX. If the material received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3179

Expiration Date 2/11/2011

Producer: Edigen
Address: 16947 Ave A
Channelview, TX 77530

Material / Product Information

Name of Material / Product Power Additive
Container Type:

Detailed Description of Process Generating or Producing the Material / Product:
Off-Spec material contaminated w/ trace of water

Color: Amber **Odor:** Ester Like **pH:** 5-7
Physical State:

Incompatibilities: Oxidizers
Safety Related Data/Special Handling:
Level C

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

Products Sold.

GRP

GB
JR

CES Environmental Services, Inc.

4904 Griggs Road Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

(b) (4)

[redacted]

(b)(4)

[redacted]

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

(b) (4)

[redacted]

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

(b) (4)

[redacted]

3002

Material Safety Data Sheet

(b) (4)

[redacted]

This MSDS was prepared for C.L.E.A.N. Power Additives Inc. by MSDSWriter, L.L.C. All terms and conditions apply
Visit us at www.msdswriter.com

Material Safety Data Sheet

(b) (4)

[redacted]

This MSDS was prepared for C.L.E.A.N. Power Additives Inc. by MSDSWriter, L.L.C. All terms and conditions apply
Visit us at www.msdswriter.com

Material Safety Data Sheet

(b) (4)

[redacted]

This MSDS was prepared for C.L.E.A.N. Power Additives Inc. by MSDSWriter, L.L.C. All terms and conditions apply
Visit us at www.msdswriter.com

Material Safety Data Sheet

(b) (4)

[redacted]

This MSDS was prepared for C.L.E.A.N. Power Additives Inc. by MSDSWriter, L.L.C. All terms and conditions apply
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Material Safety Data Sheet

(b) (4)

[redacted]

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Visit us at www.msdswriter.com

Material Safety Data Sheet

(b) (4)

[redacted]

This MSDS was prepared for C.L.E.A.N. Power Additives Inc. by MSDSWriter, L.L.C. All terms and conditions apply
Visit us at www.msdswriter.com

Material Safety Data Sheet

(b) (4)

[redacted]

This MSDS was prepared for C.L.E.A.N. Power Additives Inc. by MSDSWriter, L.L.C. All terms and conditions apply
Visit us at www.msdswriter.com

Material Safety Data Sheet

(b) (4)

[redacted]

This MSDS was prepared for C.L.E.A.N. Power Additives Inc. by MSDSWriter, L.L.C. All terms and conditions apply
Visit us at www.msdswriter.com

Material Safety Data Sheet

(b) (4)

[redacted]

This MSDS was prepared for C.L.E.A.N. Power Additives Inc. by MSDSWriter, L.L.C. All terms and conditions apply
Visit us at www.msdswriter.com

Material Safety Data Sheet

(b) (4)

[redacted]

This MSDS was prepared for C.L.E.A.N. Power Additives Inc. by MSDSWriter, L.L.C. All terms and conditions apply
Visit us at www.msdswriter.com

3180
ConocoPhillips

EPAHO104001974

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **2/11/2009**

Dear **Michael Jaskowiak/Angela Brown**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3180

Expiration Date 2/11/2011

Generator: ConocoPhillips Specialty Products Inc
Address: 1331 Independence
Bryan, TX 77803

Waste Information

Name of Waste: Extreme power
TCEQ Waste Code #: 10082071
Container Type:
Detailed Description of Process Generating Waste:
out of date, off spec material
Color: white **Odor:** slight ester **pH:** 6.5-7.5
Physical State:
Incompatibilities: strong oxidizers
Safety Related Data/Special Handling:
Level D, gloves, Face Shield

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

Rejected for waste water processing.
The TOC can be over 400,000.
The entire PFI needs to be changed.
GRP
High TOC-Material

DC/mm
2.4.09

CES Environmental Services, Inc.
4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit Number: 30948
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

Organic liquid

SECTION 1: Generator Information

Company: ConocoPhillips Specialty Products, Inc.
Address: 1331 Independence
City: Bryan **State:** TX **Zip:** 77803
Contact: John Devine **Title:** HSE Resource CSPI
Phone Number: 979-821-5429 **Fax Number:** 979-821-5432
24/hr Phone Number: 979-866-9181
US EPA ID No: TXR000011551
State ID No: 84350 **SIC Code:** 2899

SECTION 2: Billing Information - ☐ **Same as Above**

Company: Rineco
Address: PO Box 729 - Haskell
City: Benton **State:** AR **Zip:** 72118
Contact: Douglas Highsmith **Title:** Non-Fuels Chemist
Phone Number: 800-377-4692 **Fax Number:** 501-778-8505

SECTION 3: General Description of the Waste

Name of Waste: Extreme Power
Detailed Description of Process Generating Waste:

Out of date/ Off Spec Material

Physical State: ☑ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color: white **Odor:** slight ester

Specific Gravity (water=1): .75 **Density:** 8.3 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ Single-phase ☐ Multi-phase

Container Type: ☐ Drum ☐ Tote ☑ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☑ Monthly ☐ Yearly ☐ One-Time
Quantity: 40000 lbs

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: 10082071

Proper US DOT Shipping Name: Non RCRA/Non DOT Regulated Material

Class: NA UN/NA: NA PG: NA RQ: NA

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
141-200F	6.5-7.5	0 mg/l	0 mg/l	0 %

Oil & Grease	TOC	Zinc	Copper	Nickel
0 mg/l	0 mg/l	0 mg/l	0 mg/l	0 mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Sodium Lauryl Sulfate	1-2	%
Alcohols, C12-14-Secondary, Ethoxylated	2-6	%
Ethylene Glycol	10-40	%
water	52-87	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Level D, gloves, face shield

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. MSDS

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

strong oxidizers

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals: X
TCLP Volatiles: X
TCLP Semi-Volatiles: X
Reactivity: X
Corrosivity: X
Ignitability: X

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO
If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory: Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory **: *Subpart C***

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☑ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☑ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** 1/12/2009

Printed Name/Title: Douglas Highsmith/Non-Fuels Chemist

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: _____
Date: 2-11-2009 ☑ Approved ☐ Rejected
Approval Number: _____

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

Freight: $70.00/1K
Disposal: $0.20/gallon

2. Contamination Limit (maximum limit before surchages apply):

TOC: 30,000
Solids: 2%

3. Surcharge Pricing:

TOC: $0.03/gallon/5000 TOC > 30,000
Solids: $0.01/gallon/% greater than 2%

4. Special Testing Requirements:

Flash, TOC, pH, phenol; for TOC > 30,000 this will need to be directed System 1.

5. Treatment and Handling Protocol:

~~Wastewater treat - may need filter press~~
Reduced to System 1 if needed due to TOC > than 100,000

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

NA

8. Management for Product Recovered/Recycled (if applicable)

NA

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

To: Dana Carter
Cc: Matt Bowman, Gary Peterson, Prabhaker, Joe Camp, Clint Hopkins

Date: 1/28/09

From: Miles Root

Lab Memo: 09-009

(b) (4)

[redacted]

$0.17 30,000 TOC

$.25/gal

ConocoPhillips

ExtremePower™

Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name:	ExtremePower™
MSDS Code:	778896
Intended Use:	Flow Improver
Responsible Party:	ConocoPhillips 600 N. Dairy Ashford Houston, Texas 77079-1175
Customer Service:	800-897-2774
Technical Information:	800-897-2774
MSDS Information:	Phone: 800-762-0942 Email: MSDS@conocophillips.com Internet: http://w3.conocophillips.com/NetMSDS/
Emergency Telephone Numbers:	Chemtrec: 800-424-9300 (24 Hours) California Poison Control System: 800-356-3219

2. HAZARDS IDENTIFICATION

Emergency Overview

CAUTION!
Eye and Skin Irritant
Probable Reproductive Hazard
Target Organ Hazard

NFPA

Appearance: White
Physical Form: Liquid
Odor: Slight ester

Potential Health Effects

Eye: Eye irritant. Contact may cause stinging, watering, redness, and swelling.

Skin: Skin irritant. Contact may cause redness, itching, a burning sensation, and skin damage. Prolonged or repeated contact can defat the skin, causing drying and cracking of the skin, and possibly dermatitis (inflammation). Contact may result in skin absorption but symptoms of toxicity are not anticipated by this route alone under normal conditions of use.

Inhalation (Breathing): Expected to have a low degree of toxicity by inhalation.

Ingestion (Swallowing): Moderate degree of toxicity by ingestion.

Signs and Symptoms: Effects of overexposure may include irritation of the digestive tract, irritation of the respiratory tract, coughing, nausea, vomiting, diarrhea, abdominal pain, irregular heartbeats (arrhythmias), pulmonary edema (accumulation of fluids in the lungs), visual disturbances, signs of nervous system depression (e.g., headache, drowsiness, dizziness, loss of coordination, disorientation and fatigue), convulsions, and coma.

Pre-Existing Medical Conditions: Conditions aggravated by exposure may include skin disorders, eye disorders, kidney disorders, liver disorders and pregnancy.

See Section 11 for additional Toxicity Information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS	Concentration (wt %)
Additives and Non-hazardous Materials	Proprietary	52 - 87
Ethylene Glycol	107-21-1	10 - 40
Alcohols, C12-14-Secondary, Ethoxylated	84133-50-6	2 - 6
Sodium Lauryl Sulfate	151-21-3	1 - 2

4. FIRST AID MEASURES

Eye: If irritation or redness develops from exposure, flush eyes with clean water. For direct contact, hold eyelids apart and flush the affected eye(s) with clean water for at least 15 minutes. Seek medical attention.

Skin: Remove contaminated shoes and clothing, and flush affected area(s) with large amounts of water. If skin surface is damaged, apply a clean dressing and seek medical attention. If skin surface is not damaged, cleanse affected area(s) thoroughly by washing with mild soap and water or a waterless hand cleaner. If irritation or redness develops, seek medical attention.

Inhalation (Breathing): First aid is not normally required. If breathing difficulties develop, move victim away from source of exposure and into fresh air. Seek immediate medical attention.

Ingestion (Swallowing): If swallowed, seek emergency medical attention. If victim is drowsy or unconscious and vomiting, place on the left side with the head down and do not give anything by mouth. If victim is conscious and alert and ingestion occurred within the last hour, vomiting should be induced for ingestions of several swallows (2 ounces in an adult) preferably under direction from a physician or poison center. Do not leave victim unattended and observe closely for adequacy of breathing.

5. FIRE-FIGHTING MEASURES

NFPA 704 Hazard Class

Health: 1 **Flammability:** 1 **Instability:** 0 (0-Minimal, 1-Slight, 2-Moderate, 3-Serious, 4-Severe)

Unusual Fire & Explosion Hazards: This material may burn, but will not ignite readily. Vapors are heavier than air and can accumulate in low areas. If container is not properly cooled, it can rupture in the heat of a fire.

Extinguishing Media: Dry chemical, carbon dioxide, foam, or water spray is recommended. Water or foam may cause frothing of materials heated above 212°F. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces.

Fire Fighting Instructions: For fires beyond the incipient stage, emergency responders in the immediate hazard area should wear bunker gear. When the potential chemical hazard is unknown, in enclosed or confined spaces, or when explicitly required by DOT, a self contained breathing apparatus should be worn. In addition, wear other appropriate protective equipment as conditions warrant (see Section 8).

Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done with minimal risk. Move undamaged containers from immediate hazard area if it can be done with minimal risk. Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Cool equipment exposed to fire with water, if it can be done with minimal risk. Avoid spreading burning liquid with water used for cooling purposes.

See Section 9 for Flammable Properties including Flash Point and Flammable (Explosive) Limits

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: This material may burn, but will not ignite readily. Keep all sources of ignition away from spill/release. The use of explosion-proof electrical equipment is recommended. Stay upwind and away from spill/release. Notify persons down wind of the spill/release, isolate immediate hazard area and keep unauthorized personnel out. Wear appropriate protective equipment, including respiratory protection, as conditions warrant (see Section 8). See Sections 2 and 7 for additional information on hazards and precautionary measures.

Environmental Precautions: Stop spill/release if it can be done with minimal risk. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems, and natural waterways. If spill/release in excess of EPA reportable quantity (see Section 15) is made into the environment, immediately notify the National Response Center (phone number 800-424-8802). Use water sparingly to minimize environmental contamination and reduce disposal requirements.

Methods for Containment and Clean-Up: Notify fire authorities and appropriate federal, state, and local agencies. Immediate cleanup of any spill is recommended. Dike far ahead of spill for later recovery or disposal. Absorb spill with inert material such as sand or vermiculite, and place in suitable container for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling: Do not eat, drink, or smoke when using this product. Wash thoroughly after handling. Wear protective gloves. Wear eye/face protection. Do not breathe vapors or mists. Use good personal hygiene practices and wear appropriate personal protective equipment.

Do not enter confined spaces such as tanks or pits without following proper entry procedures such as ASTM D-4276 and 29CFR 1910.146. Do not wear contaminated clothing or shoes.

"Empty" containers retain residue and may be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury or death. "Empty" drums should be completely drained, properly bunged, and promptly shipped to the supplier or a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations. Before working on or in tanks which contain or have contained this material, refer to OSHA regulations, ANSI Z49.1, and other references pertaining to cleaning, repairing, welding, or other contemplated operations. Spills will produce extremely slippery surfaces.

Conditions for safe storage: Keep container(s) tightly closed. Use and store this material in cool, dry, well-ventilated areas away from heat and all sources of ignition. Store only in approved containers. Keep away from any incompatible material (see Section 10). Protect container(s) against physical damage.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Component	ACGIH	OSHA	Other:
Ethylene Glycol	100 mg/m^3 CEIL Aerosol	---	---

Note: State, local or other agencies or advisory groups may have established more stringent limits. Consult an industrial hygienist or similar professional, or your local agencies, for further information.

Engineering controls: If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure limits, additional engineering controls may be required.

Personal Protective Equipment (PPE):

Eye/Face: The use of eye protection that meets or exceeds ANSI Z.87.1 is recommended to protect against potential eye contact, irritation, or injury. Depending on conditions of use, a face shield may be necessary.

Skin: The use of gloves impervious to the specific material handled is advised to prevent skin contact. Users should check with manufacturers to confirm the performance of their products. Suggested protective materials: Nitrile

Respiratory: Respiratory protection is not normally required under intended conditions of use. Emergencies or conditions that could result in significant airborne exposures may require the use of NIOSH approved respiratory protection. An industrial hygienist or other appropriate health and safety professional should be consulted for specific guidance under these situations.

A respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed whenever workplace conditions warrant a respirator's use.

Other Protective Equipment: Eye wash and quick-drench shower facilities should be available in the work area. Thoroughly clean shoes and wash contaminated clothing before reuse.

Suggestions provided in this section for exposure control and specific types of protective equipment are based on readily available information. Users should consult with the specific manufacturer to confirm the performance of their protective equipment. Specific situations may require consultation with industrial hygiene, safety, or engineering professionals.

9. PHYSICAL AND CHEMICAL PROPERTIES

Note: Unless otherwise stated, values are determined at 20°C (68°F) and 760 mm Hg (1 atm). Data represent typical values and are not intended to be specifications.

Appearance:	White
Physical Form:	Liquid
Odor:	Slight ester
Odor Threshold:	No data
pH:	6.5-7.5
Vapor Pressure:	24 mm Hg, 0.46 psi (estimate)
Vapor Density (air=1):	0.75 g/L
Boiling Point/Range:	212°F / 100°C
Melting/Freezing Point:	No data
Solubility in Water:	Miscible
Partition Coefficient (n-octanol/water) (Kow):	No data
Specific Gravity:	1 @ 60°F (15.6°C)
Bulk Density:	8.3 lbs/gal
Viscosity:	10 mPas
Percent Volatile:	55%
Evaporation Rate (nBuAc=1):	Same as water
Flash Point:	>200°F / >93°C
Test Method:	Pensky-Martens Closed Cup (PMCC), ASTM D93, EPA 1010
LEL (vol % in air):	No data
UEL (vol % in air):	No data
Autoignition Temperature:	No data

10. STABILITY AND REACTIVITY

Stability: Stable under normal ambient and anticipated conditions of storage and handling.

Conditions to Avoid: Avoid all possible sources of ignition.

Materials to Avoid (Incompatible Materials): Avoid contact with strong oxidizing agents.

Hazardous Decomposition Products: Combustion can yield carbon oxides.

Hazardous Polymerization: Not known to occur.

11. TOXICOLOGICAL INFORMATION

Chronic Data:

Ethylene Glycol

Target Organs: Ingestion of ethylene glycol by humans results in kidney damage (renal epithelial damage and oxalate crystals in the tubules). Administration of ethylene glycol resulted in hepatocellular hyaline degeneration in male mice fed diets containing 12,500 or 25,000 ppm ethylene glycol and female mice fed diets containing 50,000 ppm ethylene glycol.

Reproductive: Ethylene glycol caused malformations in the offspring of mice and rats when administered by gavage or in the drinking water during organogenesis. It was not teratogenic when fed in the diet, by dermal application of up to 3550 mg/kg/day or by nose-only inhalation at up to 2500 mg/m^3. No effects on fertility or reproductive performance were seen in a three-generation study in rats exposed orally.

Mutagenic Effects:

Sodium Lauryl Sulfate

Reproductive: There is limited evidence of developmental effects associated with both dermal and oral administration of sodium lauryl sulfate in laboratory animals.

Acute Data:

Component	Oral LD50	Dermal LD50	Inhalation LC50
Ethylene Glycol	1.5 g/kg (est. human)	9,530 mg/kg(rabbit)	No data
Alcohols, C12-14-Secondary, Ethoxylated	>3 g/kg (Rat)	>2 g/kg (Rabbit)	No data
Sodium Lauryl Sulfate	0.8-1.1 g/kg (rat)	>10 g/kg (rabbit)	No data

12. ECOLOGICAL INFORMATION

Not evaluated.

13. DISPOSAL CONSIDERATIONS

The generator of a waste is always responsible for making proper hazardous waste determinations and needs to consider state and local requirements in addition to federal regulations.

This material, if discarded as produced, would not be a federally regulated RCRA "listed" hazardous waste and is not believed to exhibit characteristics of hazardous waste. See Sections 7 and 8 for information on handling, storage and personal protection and Section 9 for physical/chemical properties. It is possible that the material as produced contains constituents which are not required to be listed in the MSDS but could affect the hazardous waste determination. Additionally, use which results in chemical or physical change of this material could subject it to regulation as a hazardous waste.

Container contents should be completely used and containers should be emptied prior to discard.

14. TRANSPORTATION INFORMATION

U.S. Department of Transportation (DOT)

Shipping Description: ***Shipping description is only for shipments that contain a CERCLA Reportable Quantity in a single container, othewise not regulated. See Section 15 for RQ amount.***
Environmentally hazardous substance, liquid, n.o.s. (Ethylene glycol), 9, UN3082, III, RQ
Non-Bulk Package Marking: Not regulated
Non-Bulk Package Labeling: Not regulated
Bulk Package/Placard Marking: None / 3082 ***or*** Class 9 / 3082
Packaging - References: None; None; 49 CFR 173.241
Hazardous Substance: Yes. See Section 15 for RQ's.
Emergency Response Guide: 171

International Maritime Dangerous Goods (IMDG)

Shipping Description: Not regulated
Note: Federal compliance requirements may apply. See 49 CFR 171.12.

International Civil Aviation Org. / International Air Transport Assoc. (ICAO/IATA)

UN/ID #: Not regulated
Note: Federal compliance requirements may apply. See 49 CFR 171.11.

	LTD. QTY	Passenger Aircraft	Cargo Aircraft Only

14. TRANSPORTATION INFORMATION

Packaging Instruction #:	---	---	---
Max. Net Qty. Per Package:	---	---	---

15. REGULATORY INFORMATION

CERCLA/SARA - Section 302 Extremely Hazardous Substances and TPQs (in pounds):
This material does not contain any chemicals subject to the reporting requirements of SARA 302 and 40 CFR 372.

CERCLA/SARA - Section 311/312 (Title III Hazard Categories)

Acute Health:	Yes
Chronic Health:	Yes
Fire Hazard:	No
Pressure Hazard:	No
Reactive Hazard:	No

CERCLA/SARA - Section 313 and 40 CFR 372:
This material contains the following chemicals subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR 372:

Component	Concentration (wt %)	de minimis
Ethylene Glycol	10 - 40	1.0%

EPA (CERCLA) Reportable Quantity (in pounds):
This material contains the following chemicals subject to the reporting requirements of 40 CFR 302.4:

Component	RQ
Ethylene Glycol	5000 lb

California Proposition 65:
This material does not contain any chemicals which are known to the State of California to cause cancer, birth defects or other reproductive harm at concentrations that trigger the warning requirements of California Proposition 65.

Canadian Regulations:
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the Regulations.

WHMIS Hazard Class
D2A
D2B

National Chemical Inventories:
All components are either listed on the US TSCA Inventory, or are not regulated under TSCA.
All components are either on the DSL, or are exempt from DSL listing requirements.

U.S. Export Control Classification Number: EAR99

16. OTHER INFORMATION

Issue Date:	14-Dec-2007
Status:	Final
Revised Sections or Basis for Revision:	New MSDS
MSDS Code:	778896

MSDS Legend:
ACGIH = American Conference of Governmental Industrial Hygienists; CAS = Chemical Abstracts Service Registry; CEILING = Ceiling Limit (15 minutes); CERCLA = The Comprehensive Environmental Response, Compensation, and Liability Act; EPA = Environmental Protection Agency; IARC = International Agency for Research on Cancer; LEL = Lower Explosive Limit; NE = Not Established; NFPA = National Fire Protection Association; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration; PEL = Permissible Exposure Limit (OSHA); SARA = Superfund Amendments and Reauthorization Act; STEL = Short Term Exposure Limit (15 minutes); TLV = Threshold Limit Value (ACGIH); TWA = Time Weighted Average (8 hours); UEL = Upper Explosive Limit; WHMIS = Worker Hazardous Materials Information System (Canada)

Disclaimer of Expressed and implied Warranties:
The information presented in this Material Safety Data Sheet is based on data believed to be accurate as of the date this Material Safety Data Sheet was prepared. HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OR COMPLETENESS OF THE INFORMATION PROVIDED ABOVE, THE RESULTS TO BE OBTAINED FROM THE USE OF THIS INFORMATION OR THE PRODUCT, THE SAFETY OF THIS PRODUCT, OR THE HAZARDS RELATED TO ITS USE. No responsibility is assumed for any damage or injury resulting from abnormal use or from any failure to adhere to recommended practices. The information provided above, and the product, are furnished on the condition that the person receiving them shall make their own determination as to the suitability of the product for their particular purpose and on the condition that they assume the risk of their use. In addition, no authorization is given nor implied to practice any patented invention without a license.

3181

RRT South

EPAHO104001991

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **2/13/2009**

Dear **Bill Pratt**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3181

Expiration Date 2/13/2011

Generator: RRT South Services, LLC
Address: 357 Yale Street
Houston, TX 77007

Waste Information

Name of Waste: Mop Water
TCEQ Waste Code #: CESQ1191
Container Type:
Detailed Description of Process Generating Waste:
mop water from cleaning the floor of an electronic warehouse
Color: Dark Brown **Odor:** none **pH:** 3-11
Physical State:
Incompatibilities: strong oxidizers
Safety Related Data/Special Handling:
standard

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility 4904 Griggs Road, Houston, TX 77021 Phone (713) 676-1460 Fax: (713) 676-1676 U.S. EPA ID Number: TXD008950461 ISWR Number: 30900 TCEQ Industrial Solid Waste Permit Number: 30948	☐ CES Environmental Services - Port Arthur Facility 2420 S. Gulfway Dr., Port Arthur, TX 77641 Phone (713) 676-1460 Fax: (713) 676-1460 U.S. EPA ID Number: TXR000079307 ISWR Number: 88585

SECTION 1: Generator Information

Company: RRT South Services, LLC
Address: 357 Yale Street
City: Houston **State:** TX **Zip:** 77007
Contact: Bill Pratt **Title:** Director
Phone Number: 602-451-4745 **Fax Number:** 512-296-2139
24/hr Phone Number: 602-451-4745
US EPA ID No:
State ID No: **SIC Code:** 1623, 5051

SECTION 2: Billing Information - ☐ **Same as Above**

Company: RRT
Address: 547 SW 13th Street #200
City: Bend **State:** OR **Zip:** 97702
Contact: Michelle Cutone **Title:**
Phone Number: 541-330-0466 **Fax Number:** 541-330-0492

SECTION 3: General Description of the Waste

Name of Waste: Mop water
Detailed Description of Process Generating Waste:

mop water from cleaning the floor of an electronic warehouse

Physical State: ☑ **Liquid** ☐ **Sludge** ☐ **Powder** ☐ **Solid** ☐ **Filter Cake** ☑ **Combination**

Color: Dk. Brown **Odor:** none

Specific Gravity (water=1): 1 **Density:** 8.34 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ **Single-phase** ☐ **Multi-phase**

Container Type: ☑ **Drum** ☐ **Tote** ☐ **Truck** ☐ **Other (explain)**

Frequency: ☐ **Weekly** ☐ **Monthly** ☐ **Yearly** ☑ **One-Time**
Quantity: 4

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Please test to confirm - Lead was handled at the facility

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: CESQ1191

Proper US DOT Shipping Name: Non-RCRA/Non DOT regulated wastewater

Class: na **UN/NA:** na **PG :** na **RQ:** na

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>140		3-11		0	mg/l	0	mg/l	0-2	%
Oil & Grease		**TOC**		**Zinc**		**Copper**		**Nickel**	
<1500	mg/l		mg/l	–	mg/l	–	mg/l	0	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Biodegradable Floor cleaner/degreaser	~8:1	

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

standard PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. generator knowledge

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

oxidizers

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	
TCLP Volatiles:	x
TCLP Semi-Volatiles:	x
Reactivity:	x
Corrosivity:	x
Ignitability:	x

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☑ YES ☐ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory: Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☑ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- [ ] Interceptor wastes
- [ ] Off-specification fuels
- [ ] Underground storage remediation waste
- [ ] Tank clean-out from petroleum or oily sources
- [ ] Non-contact used glycols
- [ ] Aqueous and oil mixtures from parts cleaning operations
- [ ] Wastewater from oil bearing paint washes

Organics Subcategory **: *Subpart C***

- [ ] Landfill leachate
- [ ] Contaminated groundwater clean-up from non-petroleum sources
- [ ] Solvent-bearing wastes
- [ ] Off-specification organic product
- [ ] Still bottoms
- [ ] Byproduct waste glycol
- [ ] Wastewater from paint washes
- [ ] Wastewater from adhesives and/or epoxies formulation
- [ ] Wastewater from organic chemical product operations
- [ ] Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- [x] Metals Subcategory
- [ ] Oils Subcategory
- [ ] Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on [x] generator knowledge and/or [ ] analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: William Pratt **Date:** 2/13/2009

Printed Name/Title: William E. Pratt

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: [signature]
Date: 2-13-09 [x] Approved [ ] Rejected
Approval Number:

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$65/drum

2. Contamination Limit (maximum limit before surchages apply):

- if material is below metals take at CES
- if above metals, send to system I

3. Surcharge Pricing:

NA

4. Special Testing Requirements:

metals. Please alert Prabhakar/Matt if an issue.

5. Treatment and Handling Protocol:

CES if below metals
System I if above metal limits for discharge

6. Treated Wastewater Discharge Subcategory:

☑ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

Morgan McCarley

From: Bill Pratt [bpratt@rrtna.com]
Sent: Friday, February 13, 2009 1:24 PM
To: Morgan McCarley
Subject: RE: mop water from electronic warehouse

Ah, please do! Yes.

William (Bill) Pratt
Director of Special Projects / Safety Manager
Resource Recycling Technologies
North America, LLC
512.732.1863 Fax
602.451.4745 Cell

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From: Morgan McCarley [mailto:mmccarley@cesenvironmental.com]
Sent: Friday, February 13, 2009 11:21 AM
To: Bill Pratt
Subject: RE: mop water from electronic warehouse

Would you like to authorize me to sign for you?

From: Bill Pratt <bpratt@rrtna.com>
Sent: Friday, February 13, 2009 1:18 PM
To: Morgan McCarley <mmccarley@cesenvironmental.com>
Subject: RE: mop water from electronic warehouse

Morgan,
Here you go. I couldn't put my electronic signature on this form and I'm not in a location where I can fax.

William (Bill) Pratt
Director of Special Projects / Safety Manager
Resource Recycling Technologies
North America, LLC
512.732.1863 Fax
602.451.4745 Cell

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From: Morgan McCarley [mailto:mmccarley@cesenvironmental.com]
Sent: Friday, February 13, 2009 9:25 AM
To: Bill Pratt
Subject: mop water from electronic warehouse

Bill-

EPAHO104001999

Alright, here we go. I need some information from you in order to get this material approved for pick up on Monday. We'll make it happen, no problem. Please fill out the incomplete info on the attached form. Let me know if you have any questions.

Please get this to me ASAP, so I can get approval.

Thanks-

Morgan McCarley
CSR/Inside sales
CES Environmental, Inc.
office: 713-800-7912
cell: 281-691-3296
fax: 713-748-8664
mmccarley@cesenvironmental.com

3182

Dunlap consulting

EPAHO104002001

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **2/17/2009**

Dear **Steve Sams**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3182

Expiration Date 2/16/2011

Generator: Dunlap Consulting
Address: 11342 Angelique
Houston, TX 77065

Waste Information

Name of Waste: Antifreeze
TCEQ Waste Code #: Recycle
Container Type:
Detailed Description of Process Generating Waste:
Flushing of heater lines in the warehouse
Color: Yellow **Odor:** mild **pH:** na
Physical State:
Incompatibilities: NA
Safety Related Data/Special Handling:
Standard PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

3182

JB/AL

We need to know what kind of glycol this. We sell ethylene glycol + not propylene glycol.
GRP GRP

CES Environmental Services, Inc.
4904 Griggs Road Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

SECTION 1: Generator Information

Company:	DUNLAP CONSULTING		
Address:	11342 ANGELIQUE		
City, State, Zip:	HOUSTON, TEXAS 77065		
Contact:	STEVE SAMS	**Title:**	AUTH. BROKER FOR GENERATOR
Phone No:	281-838-3400	**Fax No:**	281-424-7748
24/hr Phone:	281-838-3400		
U.S. EPA I.D. No:	TXCESQG		
State I.D.	CESQG	**SIC Code:**	N/A

SECTION 2: Billing Information – ☐ Same as Above

Company:	PHOENIX POLLUTION CONTROL & ENVIRONMENTAL SERVICES, INC.		
Address:	4808 FAIRMONT PARKWAY #274		
City, State, Zip:	PASADENA, TEXAS 77505		
Contact:	STEVE SAMS	**Title:**	AUTH. BROKER FOR GENERATOR
Phone No:	281-838-3400	**Fax No:**	281-424-7748

SECTION 3: General Description of the Waste

Name of Waste: ANTIFREEZE
Detailed Description of Process Generating Waste: FLUSHING OF THE HEATER LINES IN THE WAREHOUSE

Physical State: ☒ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color: YELLOW Odor: MILD

Specific Gravity (water=1): N/A Density: N/A lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☐ Drum ☐ Tote ☒ Truck ☐ Other (explain)
Container Size: ____ ____ 70 BBL ____

Frequency: ☐ Weekly ☐ Monthly ☐ Quarterly ☒ Yearly
Number of Units (containers): 1000 GALLONS **Other:** ____
Texas State Waste Code No: N/A
Proper U.S. DOT Shipping Name: ANTIFREEZE
Class: N/A **UN/NA:** N/A **PG:** N/A **RQ:** N/A

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
N/A	N/A	N/Amg/l	N/Amg/l	N/A%

Oil&Grease	TOC	Zinc	Copper	Nickel
N/Amg/l	N/Amg/l	N/Amg/l	N/Amg/l	N/Amg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The waste consists of the following materials	Concentration Ranges are acceptable	Units or %
ANTIFREEZE	100	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.
PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.
N/A

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
N/A

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generator knowledge:

TCLP Metals: X
TCLP Volatiles: X
TCLP Semi-Volatiles: X
Reactivity: X
Corrosivity: X
Ignitability: X

SECTION 9: Generator's Certification

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ Date: 02-13-09

Printed Name/Title: STEVE SIMS / AUTH. BROKER FOR GENERATOR.

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Compliance Officer: _____	
Date: _____ Approved Rejected	
Approval Number: _____	

SECTION 10: Waste Receipt Classification Under 40 CFR 437

Is this material a wastewater or wastewater sludge? ☒ YES ☐ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory: Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☒ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory: Subpart C

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

☐ Metals Subcategory

☒ Oils Subcategory

☐ Organics Subcategory

SECTION 11: Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pricing (including freight):**

$.20/gal

2. **Contamination Limits (maximum limit before surcharges apply):**

3. **Surcharge Pricing:**

4. **Special Testing Requirements:**

% glycol

5. **Treatment and Handling Protocol:**

glycol recycling

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

7. **Tests for Product Recovered/Recycled (if applicable):**

8. **Management for Product Recovered/Recycled (if applicable):**

3183

Hydril

EPAHO104002009

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **2/18/2009**

Dear **Carmen Ortega**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3183

Expiration Date 2/18/2011

Generator: Hydril Company LP (HTC)
Address: 3300 Sam Houston Pkwy E
Houston, TX 77032

Waste Information

Name of Waste: Sandblast Media
TCEQ Waste Code #: 00213892
Container Type:
Detailed Description of Process Generating Waste:
Non hazardous spent sandblast media from blasting operations.
Color: Varies **Odor:** none **pH:** neutral
Physical State:
Incompatibilities: none known
Safety Related Data/Special Handling:
Standard PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

the charge on this is $17/yard. It appears the CES cost for Class 2 in the shared drive is greater than this cost. JB/AL

AG-SECT - COST
HR

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility 4904 Griggs Road, Houston, TX 77021 Phone (713) 676-1460 Fax: (713) 676-1676 U.S. EPA ID Number: TXD008950461 ISWR Number: 30900 TCEQ Industrial Solid Waste Permit Number: 30948	☐ CES Environmental Services - Port Arthur Facility 2420 S. Gulfway Dr., Port Arthur, TX 77641 Phone (713) 676-1460 Fax: (713) 676-1460 U.S. EPA ID Number: TXR000079307 ISWR Number: 88585

SECTION 1: Generator Information

Company: Hydril Company LP (HTC)
Address: 3300 North Sam Houston Parkway E
City: Houston **State:** TX **Zip:** 77032
Contact: Kelvin Parker **Title:**
Phone Number: 281.449.2000 **Fax Number:**
24/hr Phone Number: 832.677.5582
US EPA ID No: TXD981609027
State ID No: 33785 **SIC Code:** na

SECTION 2: Billing Information - ☑ **Same as Above**

Company:
Address:
City: **State:** **Zip:**
Contact: **Title:**
Phone Number: **Fax Number:**

SECTION 3: General Description of the Waste

Name of Waste: Sandblast Media
Detailed Description of Process Generating Waste:

Non Hazardous spent sandblast media from blasting operations

Physical State: ☐ Liquid ☐ Sludge ☐ Powder ☑ Solid ☐ Filter Cake ☐ Combination

Color: varies **Odor:** none

Specific Gravity (water=1): na **Density:** na lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ Single-phase ☐ Multi-phase

Container Type: ☐ Drum ☐ Tote ☑ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☑ Monthly ☐ Yearly ☐ One-Time
Quantity: 20 yards

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No
If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: 00213892

Proper US DOT Shipping Name: Non RCRA Non DOT regulated Material (Sandblast Media)
Class: na UN/NA: na PG : na RQ: na

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>150		NEUTRAL		0	mg/l	0	mg/l	100	%
Oil & Grease		TOC		Zinc		Copper		Nickel	
<1500	mg/l	NA	mg/l	NA	mg/l	NA	mg/l	NA	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Sandblast media	100	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Standard

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. Lab report 9010567.01

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

none known

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	
TCLP Volatiles:	below limits
TCLP Semi-Volatiles:	below limits
Reactivity:	non reactive
Corrosivity:	non corrosive
Ignitability:	non ignitable

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO
If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory : Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory : Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory*: *Subpart C

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☑ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: [signature] **Date:** 2-6-09

Printed Name/Title: KELVIN PARKER EH+S SPECIALIST

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: [signature]
Date: 2-18-09 ☑ Approved ☐ Rejected
Approval Number: 3183

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$17/yard + Trans + FSC

2. Contamination Limit (maximum limit before surchages apply):

No Free liquids

3. Surcharge Pricing:

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

Redirect to class 2 solids (BFI-McCarty)

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

Laboratory Analysis Report

Total Number of Pages: 9

Job ID : 09010567

10100 East Freeway, Suite 100, Houston, TX 77029 tel: 713-453-6060, fax: 713-453-6091, http://www.ablabs.com

Client Project Name :
0109-55 / Hydril

Report To :	Client Name:	CES Environmental	P.O.#.: 0109-55
	Attn:	Al Longoria	Sample Collected By: D.Tafilaj
	Client Address:	4904 Griggs Rd	Date Collected: 01/27/09
	City, State, Zip:	Houston, Texas, 77021	

A&B Labs has analyzed the following samples...

Client Sample ID	Matrix	A&B Sample ID
0109-55 Hydril 3300	Solid	09010567.01

Sonia West

Released By: Sonia West

Title: Senior Project Manager

Date: 2/5/2009

This Laboratory is NELAP (T104704213-08B-TX) accredited. Effective: 07/01/2008; Expires: 06/03/2009

Scope: Non-Potable Water, Drinking Water, Air, Solid, Hazardous Waste

I am the laboratory manager, or his/her designee, and I am responsible for the release of this data package. This laboratory data package has been reviewed and is complete and technically compliant with the requirements of the methods used, except where noted in the attached exception reports. I affirm, to the best of my knowledge that all problems/anomalies observed by this laboratory (and if applicable, any and all laboratories subcontracted through this laboratory) that might affect the quality of the data, have been identified in the Laboratory Review Checklist, and that no information or data have been knowingly withheld that would affect the quality of the data.

This report cannot be reproduced, except in full, without prior written permission of A&B Labs. Results shown relate only to the items tested. Samples are assumed to be in acceptable condition unless otherwise noted. Blank correction is not made unless otherwise noted. Air concentrations reported are based on field sampling information provided by client.

Date Received : 01/28/2009 09:45

EPAHO104002017

LABORATORY TERM AND QUALIFIER DEFINITION REPORT

Job ID : 09010567

Date: 2/5/2009

General Term Definition

Back-Wt	Back Weight	Post-Wt	Post Weight
BRL	Below Reporting Limit	ppm	parts per million
cfu	colony-forming units	Pre-Wt	Previous Weight
Conc.	Concentration	Q	Qualifier
D.F.	Dilution Factor	RegLimit	Regulatory Limit
Front-Wt	Front Weight	RPD	Relative Percent Difference
LCS	Laboratory Check Standard	RptLimit	Reporting Limit
LCSD	Laboratory Check Standard Duplicate	surr	Surrogate
MS	Matrix Spike	T	Time
MSD	Matrix Spike Duplicate	TNTC	Too numerous to count
MW	Molecular Weight		

Qualifier Definition

M2	Matrix Spike/Matrix Spike Duplicate recovery is below laboratory control limits due to matrix interference.

LABORATORY TEST RESULTS

Job ID : 09010567

Date 2/5/2009

Client Name: CES Environmental

Attn: Al Longoria

Project Name: 0109-55 / Hydril

Client Sample ID: 0109-55 Hydril 3300

Date Collected: 01/27/09

Time Collected: 12:00

Other Information:

Job Sample ID: 09010567.01

Sample Matrix Solid

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 6010C	TCLP Metals								
	Antimony	BRL	mg/L	1	0.1	1		01/29/09 13:10	PGm
	Arsenic	BRL	mg/L	1	0.04	1.8		01/29/09 13:10	PGm
	Barium	0.994	mg/L	1	0.04	100.0		01/29/09 13:10	PGm
	Beryllium	BRL	mg/L	1	0.04	0.08		01/29/09 13:10	PGm
	Cadmium	BRL	mg/L	1	0.04	0.5		01/29/09 13:10	PGm
	Chromium	0.464	mg/L	1	0.04	5.0		01/29/09 13:10	PGm
	Lead	BRL	mg/L	1	0.04	1.5		01/29/09 13:10	PGm
	Nickel	0.575	mg/L	1	0.04	70		01/29/09 13:10	PGm
	Selenium	BRL	mg/L	1	0.1	1.0		01/29/09 13:10	PGm
	Silver	BRL	mg/L	1	0.04	5.0		01/29/09 13:10	PGm
SW-846 7470A	TCLP Metals, Mercury								
	Mercury	BRL	mg/L	1	0.0005	0.2		01/30/09 11:40	TK
TX 1005	Total Petroleum Hydrocarbons								
	C6-C12	BRL	mg/Kg	1	14.7			01/28/09 15:24	WS
	>C12-C28	84.4	mg/Kg	1	18.4			01/28/09 15:24	WS
	>C28-C35	42.1	mg/Kg	1	19.1			01/28/09 15:24	WS
	Total C6-C35	126.5	mg/Kg	1				01/28/09 15:24	WS
	1-Chlorooctane(surr)	99.7	%	1	50-149			01/28/09 15:24	WS
	Chlorooctadecane(surr)	110	%	1	50-149			01/28/09 15:24	WS

QUALITY CONTROL CERTIFICATE

Job ID : 09010567 **Date :** 2/5/2009

Analysis : **TCLP Metals** **Method :** **SW-846 6010C** **Reporting Units :** **mg/L**

QC Batch ID : Qb09012914 **Created Date :** 01/29/09 **Created By :** Pguirguis

Samples in This QC Batch : 09010567.01

Digestion :	PB09012923	**Prep Method :**	SW-846 3010A	**Prep Date :**	01/29/09 11:00	**Prep By :**	Pguirguis
TCLP Prep :	PB09012901	**Prep Method :**	SW-846 1311	**Prep Date :**	01/28/09 16:00	**Prep By :**	Ksudha

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Antimony	7440-36-0	BRL	mg/L	1	0.1		
Arsenic	7440-38-2	BRL	mg/L	1	0.04		
Barium	7440-39-3	BRL	mg/L	1	0.04		
Beryllium	7440-41-7	BRL	mg/L	1	0.04		
Cadmium	7440-43-9	BRL	mg/L	1	0.04		
Chromium	7440-47-3	BRL	mg/L	1	0.04		
Lead	7439-92-1	BRL	mg/L	1	0.04		
Nickel	7440-02-0	BRL	mg/L	1	0.04		
Selenium	7782-49-2	BRL	mg/L	1	0.1		
Silver	7440-22-4	BRL	mg/L	1	0.04		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Antimony	2	2.16	108	2	2.14	107	0.9	20	80-120	
Arsenic	2	2.14	107	2	2.14	107	0	20	80-120	
Barium	2	1.99	99.5	2	2.00	100	0.5	20	80-120	
Beryllium	2	2.00	100	2	2.00	100	0	20	80-120	
Cadmium	2	1.92	96	2	1.93	96.5	0.5	20	80-120	
Chromium	2	1.97	98.5	2	1.98	99	0.5	20	80-120	
Lead	2	2.01	101	2	2.01	101	0	20	80-120	
Nickel	2	1.96	98	2	1.97	98.5	0.5	20	80-120	
Selenium	2	2.13	107	2	2.14	107	0.5	20	80-120	
Silver	2	2.07	104	2	2.08	104	0.5	20	80-120	

QC Type: MS and MSD
QC Sample ID: 09010567.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Antimony	BRL	2	2.13	103						70-130	
Arsenic	BRL	2	2.09	105						45-138	
Barium	0.994	2	2.94	97.3						39-135	
Beryllium	BRL	2	1.97	98.5						70-130	
Cadmium	BRL	2	1.92	94.5						56-125	
Chromium	0.464	2	2.42	97.8						52-125	
Lead	BRL	2	1.96	98						55-125	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 09010567 **Date :** 2/5/2009

Analysis : TCLP Metals **Method : SW-846 6010C** **Reporting Units : mg/L**

QC Batch ID : Qb09012914 **Created Date :** 01/29/09 **Created By :** Pguirguis

Samples in This QC Batch : 09010567.01

QC Type: MS and MSD
QC Sample ID: 09010567.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Nickel	0.575	2	2.51	96.8						70-130	
Selenium	BRL	2	2.01	101						70-130	
Silver	BRL	2	2.08	104						26-148	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 09010567 **Date :** 2/5/2009

Analysis : **TCLP Metals, Mercury** **Method :** **SW-846 7470A** **Reporting Units :** **mg/L**

QC Batch ID : Qb09013037 **Created Date :** 01/30/09 **Created By :** Tkhuc

Samples in This QC Batch : 09010567.01

Digestion :	PB09013014	**Prep Method :**	SW-846 7470A	**Prep Date :**	01/30/09 10:00	**Prep By :**	Tkhuc
TCLP Prep :	PB09012901	**Prep Method :**	SW-846 1311	**Prep Date :**	01/28/09 16:00	**Prep By :**	Ksudha

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Mercury	7439-97-6	BRL	mg/L	1	0.0005		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Mercury	0.005	0.00506	101	0.005	0.00513	103	1.4	35	71-143	

QC Type: MS and MSD
QC Sample ID: 09010567.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Mercury	BRL	0.005	0.00508	100						61-175	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 09010567 **Date :** 2/5/2009

Analysis : **Total Petroleum Hydrocarbons** **Method :** **TX 1005** **Reporting Units :** **mg/Kg**

QC Batch ID : Qb09020435 **Created Date :** 02/04/09 **Created By :** Dshen

Samples in This QC Batch : 09010567.01

Sample Preparation : PB09020432 **Prep Method :** TX 1005 **Prep Date :** 01/28/09 12:00 **Prep By :** Dshen

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
C6-C12		BRL	mg/Kg	1	14.7		
>C12-C28		BRL	mg/Kg	1	18.4		
>C28-C35		BRL	mg/Kg	1	19.1		
Total C6-C35		BRL	mg/Kg	1			

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
C6-C12	500	526	105	500	545	109	3.6	20	75-125	
>C12-C28	500	577	115	500	583	117	1	20	75-125	
>C28-C35	500	488	97.6	500	455	91	7	20	75-125	

QC Type: MS and MSD
QC Sample ID: 09010567.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
C6-C12	BRL	500	337	66.5						75-125	M2
>C12-C28	84.4	500	450	73.1						75-125	M2
>C28-C35	42.1	500	395	70.6						75-125	M2

Refer to the Definition page for terms.

A & B Labs — *Chain of Custody*

The Chain of Custody is a Legal Document

Page 1 of 1

10100 East Fwy (I-10) Ste. 100
Houston, TX 77029
713-453-6060
1-877-478-6060 Toll Free
713-453-6091 Fax
ablabs.com

A&B JOB ID # 09010567

5. Project #

1. REPORT TO:
Company: CES ENVIRONMENTAL
Address: 4904 Griggs Road
Houston, TX 77021
Contact: Al Longoria
Phone: (713)676-1460
Fax: X (713)676-1676
E-mail: X alongoria@cesenvironmental.com

2. INVOICE TO:
Company: SAME
Address:
Contact:
Phone:
Fax: ☐
E-mail: ☐

3. PO # 0109-55

4. Turnaround Time (Business Days)
☐ 1 Day* ☐ Other
☐ 2 Days*
☐ 3 Days* *Surcharge applies
☒ 7 Days - Standard

6. Project Name/Location: HYDRIL

7. Reporting Requirement:
☐ TRRP Limits only ☐ TRRP Rpt. Package ☐ See Attached ☐ Standard Level II

8. Sampler's Name & Company (PLEASE PRINT): D. TAFILAJ / CES ENVIRONMENTAL
Sampler's Signature & Date: [signature] 1/27

13. 14. Containers*
15. Preservatives**
16. PH-Lab Only

LAB USE ONLY	9. Sample ID and Description	10. Sampling Date	Time	11. Comp.	Grab	12. Matrix Water	Soil	Sludge	Oil	Air	Other	No. of Containers	17. Analyses/Methods TCLP 11 METALS	TPH						18. REMARKS
01A	0109-55 HYDRIL 3300	1/27	12:00		X								X	X						

19. RELINQUISHED BY	DATE	TIME	20. RECEIVED BY	DATE	TIME
1 [signature]	1/28	9:45			
2					
3			21. RECEIVED BY LABORATORY [signature]	1/28/09	945

*Containers: VOA - 40 ml vial; A/G - Amber/Glass 1 Liter; 4 oz/8 oz - glass wide mouth; P/O - Plastic/other

**Preservatives: C - Cool; H - HCl; N - HNO_3; S - H_2SO_4; OH - NaOH; T - $Na_2S_2O_3$; X - Other

METHOD OF SHIPMENT

BILL OF LADING/TRACKING #

LAB USE ONLY SAMPLING _____ RENTAL _____ P/U _____

22. KNOWN HAZARDS/COMMENTS

Temperature: 20.0 °C

Intact: Y or N. Initials [initials]

A&B cannot accept verbal changes
Please FAX written changes to 713-453-6091

Samples will be disposed of after 30 days
A&B reserves the right to return samples

EPAHO104002024

Sample Condition Checklist

Date : **02/05/09**

A&B JobID : **09010567**	Date Received : **01/28/2009**	Time Received : **9:45AM**
Client Name : **CES Environmental**		
Temperature : **20.0°C**	Sample pH : **N/A**	

	Check Points	Yes	No
1.	**Cooler seal present and signed.**	N/A	
2.	**Sample(s) in a cooler.**		X
3.	**If yes, ice in cooler.**		X
4.	**Sample(s) received with chain-of-custody.**	X	
5.	**C-O-C signed and dated.**	X	
6.	**Sample(s) received with signed sample custody seal.**	N/A	
7.	**Sample containers arrived intact. (If no comment).**	X	
8.	**Matrix :** Water ☐ Soil ☐ Liquid ☐ Sludge ☐ Solid ☑ Cassette ☐ Tube ☐ Bulk ☐ Badge ☐ Food ☐ Other ☐		
9.	**Sample(s) were received in appropriate container(s).**	X	
10.	**Sample(s) were received with proper preservative**		
11.	**All samples were logged or labeled.**	X	
12.	**Sample ID labels match C-O-C ID's**	X	
13.	**Bottle count on C-O-C matches bottles found.**	X	
14.	**Sample volume is sufficient for analyses requested.**	X	
15.	**Samples were received within the hold time.**	X	
16.	**VOA vials completely filled.**	N/A	
17.	**Sample accepted.**	X	

Comments : Include actions taken to resolve discrepancies/problem:

Received by : Kisom

Check in by/date : Kisom / 01/28/2009

3184

Shawcor

EPAHO104002026

CES Environmental
Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **2/19/2009**

Dear **Rick Cheatheam**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3184

Expiration Date 2/19/2011

Generator: Shawcor Pipe Protection @ XXCell
Address: 7306 South Lake Houston Pwy.
Houston, TX 77049

Waste Information

Name of Waste: RCRA Empty Product Containers
TCEQ Waste Code #: 00023082
Container Type:
Detailed Description of Process Generating Waste:
containers last containing phenol and cresol products
Color: varies **Odor:** amine **pH:** na
Physical State:
Incompatibilities: none known
Safety Related Data/Special Handling:
standard Level D

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

If any of these drums last contained any D code cresol, D023, D024, D025 or D026 then crushing of these drums + disposal into a solids box could very render the solids box of solid TCLP Hazardous. At this point this is on hold for approval GRP 2-18-09

DB/MM

RCRA empty 40CFR261.7

CES Environmental Services, Inc.

☒ CES Environmental Services – Houston Facility
4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

☒ CES Environmental Services – Port Arthur Facility
2420 S. Gulfway Drive, Port Arthur, TX 77641
Phone: (713) 676-1460 Fax: (713) 676-1676
U.S. EPA ID No: TXR000079307 ISWR No: 88585

SECTION 1: Material Producer Information

Company:	XXCell/ Shawcor Pipe Protection		
Address:	7306 South Lake Houston Parkway		
City, State, Zip:	Houston, TX 77049		
Contact:	Rick Cheateam	**Title:**	HSE Supervisor
Phone No:	281-997-5608	**Fax No:**	281-412-5874
24/hr Phone:	713-992-8547		
U.S. EPA I.D. No:	TXR000079125		
State I.D.	88504	**SIC Code:**	na

SECTION 2: Billing Information – ☐ Same as Above

Company:	Shawcor Pipe Protection, LLC		
Address:	4502 Knapp Rd		
City, State, Zip:	Pearland, TX 77581		
Contact:	Same as Above	**Title:**	
Phone No:		**Fax No:**	

SECTION 3: General Description of the Material / Product

Name of Material / Product: RCRA Empty Containers last contained products with Phenol and Cresol
Detailed Description of Process Generating or Producing the Material / Product: RCRA empty product drums

Physical State: ☐ Liquid ☐ Sludge ☐ Powder ☒ Solid ☐ Filter Cake ☐ Combination

Color: Varies **Odor:** Amine

Specific Gravity (water=1): 1-2 **Density:** 10 lbs/gal

Does this material contain any total phenolic compounds? ☒ Yes ☐ No

Does this material contain any para substituted phenolic compounds? ☒ Yes ☐ No

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☒ Drum ☐ Tote ☐ Truck ☐ Other (explain)
Container Size: 55 gal

Frequency: ☐ Weekly ☐ Monthly ☒ Quarterly ☐ Yearly
Number of Units (containers): 23 **Other:** ____

00023082

Proper U.S. DOT Shipping Name: Non-RCRA, Non DOT Regulated RCRA Empty Drums

Class: Na **UN/NA:** Na **PG:** Na **RQ:** Na

EPAHO104002028

Flash Point	pH			Solids
Na	Na	N/A	N/A	100%

Oil&Grease	TOC	Zinc	Copper	Nickel
0mg/l	Namg/l	Namg/l	Namg/l	Namg/l

SECTION 4: Physical and Chemical Data

COMPONENTS AVAILABLE	CONCENTRATION	Units
The material / product consists of the following materials	Ranges are acceptable	or %
RCRA Empty Metal Drums	0-100	%
RCRA Empty Poly Drums	0-100	%

SECTION 5: Safety Related Data

If the handling of this material / product requires the use of special protective equipment, please explain.
Level D PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.
MSDS sheets on last contained

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
None

SECTION 8: Material Producer's Certification

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Richard A Cheatheam **Date:** 2/17/09

Printed Name/Title: RICHARD A. CHEATHEAM, HSE SUPERVISOR

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Technical Manager: [signature]	#12/dm
Date: 2-18-09 Approved Rejected	DO NOT WASH OUT / SHRED FOR CLASS I BOX
Approval Number: #3184	

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pricing (including freight):**

$12/dm

2. **Contamination Limits (maximum limit before surcharges apply):**

Non conforming to profile

3. **Surcharge Pricing:**

None

4. **Special Testing Requirements:**

None-Confirm the drums are RCRA empty

5. **Treatment and Handling Protocol:**

DO NOT WASH OUT AND SEND TO WATER TREATMENT SYSTEM-CONTAINS PNENOL AND CRESOLS
CRUSH DRUMS OR SHRED DRUMS AND SEND OUT WITH CLASS 1 WASTE SOLIDS.

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

EPAHO104002030

7. **Tests for Product Recovered/Recycled (if applicable):**

None

8. **Management for Product Recovered/Recycled (if applicable);**

None

Huntsman Advanced Materials Americas Inc.

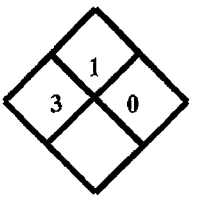
P.O. Box 4980
The Woodlands, TX 77387-4980

8 am to 5 pm Phone: (800) 257-5547
24-Hour Emergency Phone: (800) 328-8501
International Emergency Phone: (409) 727-0831
Asia Pacific Emergency Phone: (65) 6336-6011

HUNTSMAN

Effective Date: 9/21/06 **Material Safety Data Sheet** MSDS No: 11974

1. PRODUCT IDENTIFICATION



NFPA RATING

Health:	3*
Flammability:	1
Reactivity:	0
Personal Protection:	

HMIS RATING

Trade Name: Aradur 955-1 US

Chemical Family: Aliphatic Polyaminoamide

Synonyms:
Hardener HY 955-1

Intended Use or Product Type: Epoxy curing agent

2. COMPOSITION / INFORMATION ON INGREDIENTS

OSHA Hazardous Ingredients: ACGIH TWA for diethylenetriamine has a skin notation. Manufacturers' TLV for bisphenol A is for exposure to respirable dust.

OSHA	CAS No.	CHEMICAL IDENTITY	EXPOSURE LIMITS					CARCINOGEN STATUS		
			ACGIH		OSHA		MFR.	IARC	NTP	OSHA
			TWA	STEL	PEL	STEL				
*	111-40-0 Common Name:	1,2-Ethanediamine, N-(2-aminoethyl)- Diethylenetriamine	1 ppm	NE	1 ppm	NE	NE	NR	NR	NR
*	Confidential	Polyethylenepolyamine	NE	NE	NE	NE	NE	NR	NR	NR
*	140-31-8 Common Name:	1-Piperazineethanamine Aminoethylpiperazine	NE	NE	NE	NE	NE	NR	NR	NR
*	80-05-7 Common Name:	Phenol, 4,4'-(1-methylethylidene)bis- Bisphenol A	NE	NE	NE	NE	TLV 5 mg/m3	NR	NR	NR

EPAHO104002032

NE = Not Established NR = Not Reviewed * = OSHA Hazardous Ingredient

3. HAZARDS IDENTIFICATION

Emergency Overview: Corrosive - causes skin and eye burns. Causes severe irritation if inhaled and can cause allergic respiratory reaction and allergic skin reaction. Can be harmful if absorbed through skin and may be harmful if swallowed.

Primary Route(s) of Entry: Dermal, inhalation.

Acute Exposure: Corrosive. Causes skin and eye burns.

Chronic: Overexposure may have effects on developing fetus, lung, kidney, and liver. Possible mutagen.

4. FIRST AID MEASURES

Ingestion: Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

Skin: Immediately wash with soap and water. Remove contaminated clothing and launder before reuse. Destroy contaminated shoes. Seek immediate medical attention.

Inhalation: Remove to fresh air. Seek immediate medical attention.

Eyes: Immediately flush eyes with water for at least 15 minutes. Seek immediate medical attention.

Overexposure Effects: Corrosive - causes skin and eye burns. Causes severe irritation if inhaled and can cause allergic respiratory reaction and allergic skin reaction. Can be harmful if absorbed through skin and may be harmful if swallowed.

Medical Conditions Aggravated by Exposure: Eye, skin and respiratory conditions. Allergies, asthma, impaired reproductive functions.

Additional Information: Promptly remove wet contaminated non-impervious clothing. Wash before reuse.

5. FIRE FIGHTING MEASURES

Flash Point:	265°F (129 °C)
Flash Point Method Used:	PMCC
Flammable Limits in Air (Lower - % by volume):	Not Established
Flammable Limits in Air (Upper - % by volume):	Not Established
Autoignition:	~ 300°C (~ 572 °F)

Fire Fighting Extinguishing Media: Carbon dioxide, foam, dry chemical, water spray.

Fire Fighting Equipment: Use self-contained breathing apparatus.

Fire and Explosion Hazards: Decomposition and combustion products may be toxic.

EPAHO104002033

6. ACCIDENTAL RELEASE MEASURES

Accidental Release Measures: Avoid all personal contact. Take up with absorbent material. Shovel into closable containers. Flush contaminated area with water.

7. HANDLING AND STORAGE

Signal Word: Danger!

Precautions: Corrosive - causes skin and eye burns. Causes severe irritation if inhaled and can cause allergic respiratory reaction and allergic skin reaction. Can be harmful if absorbed through skin and may be harmful if swallowed. Do not breathe vapor or mist. Do not get in eyes, on skin, or on clothing. Avoid tasting or swallowing. Keep container closed when not in use. Use with adequate ventilation. Wash thoroughly after handling. Notice! Overexposure may have effects on developing fetus, lung, kidney, and liver. Possible mutagen.

Storage Information: Store in tightly closed water impermeable containers to prevent moisture absorption and contamination.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal Protective Equipment: Wear appropriate equipment to prevent probability of skin or eye contact.

Skin Protection: Wear impervious gloves.

Respiratory Protection: Organic chemical cartridge respirator, if needed.

Eye Protection: Wear splash-proof chemical goggles or complete face shield.

Engineering Controls: Good general mechanical ventilation recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Color:	Amber
Odor:	Amine
Physical State:	Liquid
Solubility in Water:	Slight
Vapor Pressure:	< 1 mmHg at 20°C (68 °F)
Specific Gravity:	0.95 at 20°C(68°F)
Boiling Point:	Not Determined
Evaporation Rate:	Not Determined
Vapor Density:	6.53
pH:	Not Determined

10. STABILITY AND REACTIVITY

Stability: Stable.

Incompatibility: Strong oxidizers and acids. Epoxy resins under uncontrolled conditions.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide and nitrogen oxides.

EPAHO104002034

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Oral Effects (LD50): Component(s) are slightly toxic, 500 - 5000 mg/kg (rat).
Diethylenetriamine= 1080 - 2330 mg/kg (Rat)
Aminoethylpiperazine= 2140 mg/kg (rat)

Acute Dermal Toxicity (LD50): Component(s) are toxic, 200 - 1000 mg/kg (rabbit).
Diethylenetriamine= 672 - 1240 mg/kg (rabbit)
Aminoethylpiperazine= 880 mg/kg (rabbit)

Acute Inhalation Exposure Effects: Severe respiratory irritant.

Sensitization: Causes allergic skin and respiratory sensitivity in some people.

Skin Irritation: Corrosive- causes burns.

Eye Irritation: Corrosive- causes burns.

12. ECOLOGICAL INFORMATION

Additional Information: No ecological information available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose in accordance with federal, state and local regulations.

14. TRANSPORT INFORMATION

DOT:

Proper Shipping Name:	Polyamines, liquid, corrosive, n.o.s.
Technical Shipping Name (If n.o.s.):	Diethylene triamine, N-aminoethyl piperazine
Hazard Class:	8
ID Number:	UN 2735
Packing Group:	PG II
Label:	Corrosive

15. REGULATORY INFORMATION

US Federal Regulations:

Occupational Safety and Health Act (OSHA): This Material Safety Data Sheet (MSDS) has been prepared in compliance with the federal OSHA Hazard Communication Standard 29 CFR 1910.1200. This product is considered to be a hazardous chemical under that standard.

EPAHO104002035

Resource Conservation and Recovery Act (RCRA): Not a hazardous waste under RCRA (40 CFR 261) but handle with care due to corrosive effect on skin and eyes.

SARA Title III: Section 313 Toxic Chemical List (TCL): This product contains a toxic chemical(s) for routine annual toxic chemical release reporting under section 313 (40 CFR 372). This information must be included in all MSDS's copied or distributed for this material.

Chemical Name: Phenol, 4,4'-(1-methylethylidene)bis-
Common Name: Bisphenol A
Percent in Composition: 10 % by wt
Comment:

TSCA Section 8(b) - Inventory Status: All chemical components of this product are in compliance with TSCA inventory requirements.

TSCA Section 12(b) - Export Notification: This product does not contain any chemical(s) that are subject to a Section 12(b) export notification.

International Regulations:

Canadian Inventory Status: All components included on the Domestic Substances List (DSL).

State Regulations:

California Proposition 65: This product does not contain any chemicals currently on the California list of Known Carcinogens and Reproductive Toxins.

Pennsylvania Right-to-Know: The following is required composition information:

Chemical Name: Bisphenol A/Amine Copolymer
CAS Number: Confidential
Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: Phenol, 4,4'-(1-methylethylidene)bis-
Common Name: Bisphenol A
CAS Number: 80-05-7
Comment: Environmental Hazardous Substance

Chemical Name: 1,2-Ethanediamine, N-(2-aminoethyl)-
Common Name: Diethylenetriamine
CAS Number: 111-40-0
Comment: Hazardous Substance

Chemical Name: Tall Oil Fatty Acid Polymer
CAS Number: Confidential
Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: 1-Piperazineethanamine
Common Name: Aminoethylpiperazine
CAS Number: 140-31-8
Comment: Hazardous Substance

Chemical Name: Polyethylenepolyamine
CAS Number: Confidential

EPAHO104002036

Comment: Hazardous Substance

16. OTHER INFORMATION

MSDS No:	11974
Approved By:	Dianne Blessing
Title:	EHS Specialist

Disclaimer: The information and recommendations contained herein are based upon tests in controlled laboratory conditions, are believed to be correct, and are provided for the sole purpose of hazard communication as part of Huntsman's product safety program. This product has not been tested for, and therefore is not recommended or suitable for, uses for which prolonged contact with mucous membranes, abraded skin, or blood is intended or likely, or for uses for which implantation within the human body is intended, and Huntsman assumes no liability for any such uses.

The information and recommendations contained herein are not intended to constitute performance information concerning the product, which is available in separate technical data sheets available from Huntsman upon request. Users are urged, and are urged to urge others who may come in contact with the product, to obtain and consult data sheets prior to purchase, use, transportation or storage of the product.

HUNTSMAN MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY, QUALITY, OR FITNESS FOR A PARTICULAR PURPOSE. HUNTSMAN'S LIABILITY IS STRICTLY LIMITED TO REIMBURSEMENT OF BUYER'S PURCHASE PRICE, OR IN HUNTSMAN'S DISCRETION REPLACEMENT, OF THE PRODUCT IN RESPECT OF WHICH SUCH CLAIM IS MADE. HUNTSMAN'S LIABILITY IS STRICTLY LIMITED BY LEGAL NOTICES IN TECHNICAL DATA SHEETS, PRODUCT LITERATURE, AND/OR SALE DOCUMENTS. The foregoing DISCLAIMERS and LIMITATION OF LIABILITY supercede inconsistent or contradictory provisions in Buyer's documents.

USER SHOULD CONSULT A LEGAL ADVISOR OR THE APPROPRIATE GOVERNMENTAL AGENCY TO DETERMINE THE APPLICABILITY OR EFFECT OF ANY LAW OR REGULATION WITH RESPECT TO THE PRODUCT. HUNTSMAN DOES NOT UNDERTAKE TO FURNISH ADVICE ON SUCH MATTERS.

NO PERSON OR ORGANIZATION EXCEPT A DULY AUTHORIZED HUNTSMAN EMPLOYEE IS AUTHORIZED TO PROVIDE OR MAKE AVAILABLE DATA SHEETS FOR HUNTSMAN PRODUCTS. DATA SHEETS FROM UNAUTHORIZED SOURCES MAY CONTAIN INFORMATION THAT IS NO LONGER CURRENT OR ACCURATE. NO PART OF THIS DATA SHEET MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM, OR BY ANY MEANS, WITHOUT PERMISSION IN WRITING FROM HUNTSMAN. ALL REQUESTS FOR PERMISSION TO REPRODUCE MATERIAL FROM THIS DATA SHEET SHOULD BE DIRECTED TO HUNTSMAN, MANAGER, PRODUCT SAFETY AT THE ABOVE ADDRESS.

EPAHO104002037

3185
T&T Delivery

EPAHO104002038

7E
8-4-09
T-35
LAB

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **2/19/2009**

Dear **Steve Sams**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3185

Expiration Date 2/19/2011

Generator: T & T Delivery Services
Address: 405 Red Oak
Crosby, TX 77532

Waste Information

Name of Waste: Oil and Oil Dry
TCEQ Waste Code #: Recycle
Container Type:
Detailed Description of Process Generating Waste:
Vehicle accident
Color: brown black **Odor:** mild **pH:** na
Physical State:
Incompatibilities: none known
Safety Related Data/Special Handling:
Standard PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

Recycle
GP

JB/AL

Recycle

CES Environmental Services, Inc.

4904 Griggs Road Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

SECTION 1: Generator Information

Company: T & T Delivery Services
Address: 405 Redoak
City, State, Zip: Crosby Tx. 77532
Contact: Steve Sams Title: Auth. Broker For Generator
Phone No: 281-838-3400 Fax No: 281-424-7748
24/hr Phone: 281-838-3400
U.S. EPA I.D. No: N/A
State I.D. N/A SIC Code: N/A

SECTION 2: Billing Information – ☐ Same as Above

Company: Phoenix Pollution Control & Environmental Services, Inc.
Address: 4808 Fairmont Parkway #274
City, State, Zip: Pasadena Tx. 77505
Contact: Steve Sams Title: Auth. Broker For Generator
Phone No: 281-838-3400 Fax No: 281-424-7748

SECTION 3: General Description of the Waste

Name of Waste: Oil and Oil Dry
Detailed Description of Process Generating Waste: Vehicle Accident

Physical State: ☐ Liquid ☐ Sludge ☐ Powder
☒ Solid ☐ Filter Cake ☐ Combination

Color: Brown-Black Odor: Mild

Specific Gravity (water=1): N/A Density: N/A lbs/gal

Layers: ☐ Single-phase ☒ Multi-phase

Container Type: ☒ Drum ☐ Tote ☐ Truck ☐ Other (explain)
Container Size: 55 Gal

Frequency: ☐ Weekly ☐ Monthly ☐ Quarterly ☐ Yearly
Number of Units (containers): 2 Other: One Time
Texas State Waste Code No: N/A
Proper U.S. DOT Shipping Name: N/A
Class: N/A UN/NA: N/A PG: N/A RQ: N/A

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
N/A	N/A	N/A mg/l	N/A mg/l	100 %

Oil&Grease	TOC	Zinc	Copper	Nickel
N/A mg/l	N/A mg/l	N/A mg/l	N/A mg/l	N/A mg/l

Feb 19 09 08:49a Phoenix Pollution Control 2814247748 p.2

EPAHO104002041

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The waste consists of the following materials	Concentration Ranges are acceptable	Units or %
Oil Dry		90%
Oil		10%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.
PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.
N/A

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
N/A

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generator knowledge:

TCLP Metals: X
TCLP Volatiles: X
TCLP Semi-Volatiles: X
Reactivity: X
Corrosivity: X
Ignitability: X

SECTION 9: Generator's Certification

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ Date: 02-18-09

Printed Name/Title: Steve Sams / Auth. Broker For Generator

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: _____ Additional Information: _____

Date: 2-19-09 Approved Rejected

Approval Number: _____

Feb 19 09 08:49a Phoenix Pollution Control 2814247748 p.3

EPAHO104002042

SECTION 10: Waste Receipt Classification Under 40 CFR 437

Is this material a wastewater or wastewater sludge? ☒ YES ☐ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory: Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☒ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory: Subpart C

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

Feb 19 09 08:49a Phoenix Pollution Control 2814247748 p.4

EPAHO104002043

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

☐ Metals Subcategory

☒ Oils Subcategory

☐ Organics Subcategory

SECTION 11: Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

Feb 19 09 08:50a Phoenix Pollution Control 2814247748 p.5

EPAHO104002044

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$ 50 drum

2. Contamination Limit (maximum limit before surchages apply):

no free liquids

3. Surcharge Pricing:

$ 65 drum if it has free liquids

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

recycle

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

3161
Superbag Corp

EPAHQ104002047

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **1/29/2009**

Dear **Slavador Olveda**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3161

Expiration Date 1/29/2011

Generator: Superbag Corp
Address: 9291 Baythorne Drive
Houston, TX 77041

Waste Information

Name of Waste: Used oil, ammonia water mixed with water based inks
TCEQ Waste Code #: CESQ2191
Container Type:
Detailed Description of Process Generating Waste:
Inks are used to print on plastic film, ammonia is used to dilute the inks, oil replaced on various machine components

Color: varies **Odor:** hydrocarbon **pH:** neutral
Physical State:
Incompatibilities: strong acids, most common metals, strong oxidizing agents, mercury, chlorine,bromine, iodine, calcium silver oxide, hypochlorite, bronze, brass, copper and aluminum
Safety Related Data/Special Handling:
std

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility 4004 Griggs Road, Houston, TX 77021 Phone (713) 676-1460 Fax: (713) 676-1460 U.S. EPA ID Number: TXD008950461 ISWR Number: 30900 TCEQ Industrial Solid Waste Permit Number: 30948	☐ CES Environmental Services - Port Arthur Facility 2420 S. Gulfway Dr., Port Arthur, TX 77641 Phone (713) 676-1460 Fax: (713) 676-1460 U.S. EPA ID Number: TXR000079307 ISWR Number: 88 185

SECTION 1: Generator Information

Company: Superbag Corp.
Address: 9291 Baythorne Dr.
City: Houston **State:** Tx. **Zip:** 77041
Contact: Salvador Olveda **Title:** Plant Manager
Phone Number: 713-462-1037 **Fax Number:** 713-690-7891
24/hr Phone Number:
US EPA ID No:
State ID No: **SIC Code:**

SECTION 2: Billing Information - ☐ **Same as Above**

Company: Superbag Corp.
Address: 9291 Baythorne Dr.
City: Houston **State:** Tx. **Zip:** 77041
Contact: Marilyn Pabon **Title:** Accounts Payable
Phone Number: 713-462-1037 **Fax Number:** 713-462-8145

SECTION 3: General Description of the Waste

Name of Waste: Used oil, ammonia water mixed with water based inks
Detailed Description of Process Generating Waste:

inks are used to print on plastic film, ammonia is used to dilute the inks, oil is replaced on various machine components

Physical State: ☑ Liquid ☑ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color: varies **Odor:** hydrocarbon

Specific Gravity (water=1): .9-1 **Density:** 8.3-8.34 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☐ Single-phase ☑ Multi-phase

Container Type: ☑ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☐ Monthly ☐ Yearly ☑ One-Time
Quantity: 40 drums

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011
Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: CESQ2191

Proper US DOT Shipping Name: Non RCRA Non DOT Regulated Material
Class: NA UN/NA: NA PG : NA RQ: NA

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>140		NEUTRAL		NA	mg/l	NA	mg/l	<1	%
Oil & Grease		TOC		Zinc		Copper		Nickel	
<1500	mg/l	<1000	mg/l	NA	mg/l	NA	mg/l	NA	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Aqua Ammonia	5-15	%
Ink (various colors)	10-20	%
Hydraulic fluid	30-40	%
Water	20-35	%

SECTION 5: Safety Related Data
If the handling of this waste requires the use of special protective equipment, please explain.
Standard

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. MSDS

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

strong acids, most common metals, strong oxidizing agents, mercury, chlorine, bromine, iodine, calcium, silver oxide, hypochlorite, bronze, brass, copper,and aluminum

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge.

TCLP Metals:	X
TCLP Volatiles:	X
TCLP Semi-Volatiles:	X
Reactivity:	X
Corrosivity:	X
Ignitability:	X

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory: Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: Subpart B

- ☐ Used oils
- ☑ Oil-water emulsions or mixtures
- ☑ Lubricants
- ☑ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory*: *Subpart C

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ By product waste glycol
- ☑ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☐ generator knowledge and/or ☐ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: S. Oliveda **Date:** 01/06/09

Printed Name/Title: Salvador Oiveda

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: [signature]
Date: 1-29-09 ☑ Approved ☐ Rejected
Approval Number: 3161

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$65.00/drum plus freight and fsc

2. Contamination Limit (maximum limit before surchages apply):

None

3. Surcharge Pricing:

None

4. Special Testing Requirements:

pH ~~on each drum~~ and
reactivity on composite sample

5. Treatment and Handling Protocol:

Put in class 1 liquids box, some drums may go into heat tank to recover oils

Treat / Break emulsion if possible . . . If not, put in Box

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

NA

8. Management for Product Recovered/Recycled (if applicable)

NA

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

To: Dana Carter
Cc: Matt Bowman, Gary Peterson, Prabhaker, Joe Camp, Clint Hopkins

Date: 1/23/09

From: Miles Root

Lab Memo: 09-004

Subject: **Superbag Corp Evaluation 0109-47**

A sample of oily sludge from Superbag Corp, Houston, has been evaluated for disposal into a class 1 liquids box. This sample is evaluation 0109-47 and is a sample of oily sludge from a process that uses oil, inks, ammonia and water. The potential volume of this source is 40 drums.

The pH of this material is 6. Its odor is noticeable at close range, but does not carry far. While odor is subjective, I would classify this odor as on the mild side and definitely not offensive. It does not have the piercing odor of ammonia one would suspect from looking at its MSDS. I do not believe that odor will be an issue when this material is disposed into a class 1 liquids box. The pH is very acceptable.

Service Pro Hydraulic Fluid
AW-68

Material Safety Data Sheet

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***** END OF MSDS *****

SOUTHERN IONICS INCORPORATED
MATERIAL SAFETY DATA SHEET

MSDS. NO. 097
Effective Date: October 4, 2002
Revised Date: July 26, 2006

PRODUCT NAME: AQUA-CAT ™ AQUA AMMONIA

Transportation Emergencies, Call (800) 424-9300 (CHEMTREC)
Health Emergencies, contact Your Local Poison Center
Caution: Causes irritation. Avoid contact with skin, eyes or clothing.

Product Name: AQUA-CAT ™ Aqua Ammonia **Formula: See below**
Chemical Name: Ammonium Hydroxide, Ammonia Solution
CAS Number: 1336-21-6

Typical Composition	CAS Reg #'s	%
Ammonia (NH_3)	1336-21-6	19-30.5
Water	7732-18-5	Balance

Exposure Standard: ACGIH has established a TLV of 25 ppm as NH_3. OSHA has established a PEL of 50 ppm as NH_3.

NFPA Hazard Ratings: Health = 3 Flammability = 1 Reactivity = 0
0 = Least; 1 = Slight; 2 = Moderate; 3 = High; 4 = Extreme;

Appearance and Odor: Clear, colorless liquid with pungent odor.

Boiling Point: 86.0 °F – 120.6 °F @ 14.7 PSIA

Melting Point: N/A

Vapor Density (air = 1): 0.6 @ 32°F

Vapor Pressure: 268 – 720 mm Hg @ 80°F

Solubility in water: 100%

Specific Gravity (H_2O = 1): 0.9275 (19% Solution) – 0.9078 (25% Solution) – 0.8930 (30.5% Solution) - @ 60°F

pH: >13

Other (i.e. wt. per gallon): 7.74 (19% Solution) – 7.58 (25% Solution) – 7.45 (30.5% Solution) lbs/gallon

Flash Point:	N/A
Lower Explosive Limit:	16% by volume Ammonia gas
Upper Explosive Limit:	25% by volume Ammonia gas
Autoignition Temperature:	850 °C; 1560 °F
Extinguishing Media:	Water spray or fog type streams. Chemical or CO2 should be used on small fires only.
Special Firefighting Procedures:	Stop the flow of liquid. Use water to keep fire exposed containers cool and to protect men affecting the shut off. Wear self-contained breathing apparatus and full protective clothing. Approach fire upwind and evacuate area downwind if needed.
Unusual Fire and Explosion Hazards:	The presence of oil or other combustible materials will increase the fire hazard. Th explosive (flammable) range of ammonia is broadened by a mixture of oxygen replacing air, and by temperature pressure higher than atmospheric.

Stability:	Stable
Conditions to Avoid:	Heat, open flames, and electrical equipment and fixtures which are not vapor proof or grounded.
Incompatibility:	Strong acids, most common metals, strong oxidizing agents, mercury, chlorine, bromine, iodine, calcium, silver oxide, hypochlorite, bronze, brass, copper, and aluminum.
Hazardous Decomposition Products:	Ammonia is highly reactive, easily undergoing oxidation, substitution, and additional reactions. Combustion of ammonia will yield small amounts of nitrogen and water.
Hazardous Polymerization:	Will not occur.

Ventilation: Local exhaust is essential. Spark-proof fans desirable with mechanical ventilation. Ducts should be located at ceiling level and lead upwards to the outside. Local exhaust must be adequate to reduce ammonia concentration below 25 ppm.

Eye: Tight fitting chemical safety and splash-proof goggles and/or a splash-proof face shield must be worn if there is a likelihood of exposure. Persons subject to ammonia exposure must not wear contact lenses.

Skin: Rubber boots, gloves, apron, and coat. Use of protective oil will reduce skin irritation from ammonia.

Respiratory: Unless ventilation is adequate to keep airborne concentrations below the exposure standard, wear approved respiratory protection such as an ammonia canister mask or an approved air supplied respiratory. Canister or cartridge type masks must not be used above their exposure limits. From 0-200 ppm, a cartridge type ½ mask respirator is needed. From 200-500 ppm a type "N" gas mask with full face piece is needed. Over 500 ppm a self-contained breathing apparatus (SCBA) is required.

Other: Avoid contact with skin and avoid breathing vapors. Do not eat, drink, or smoke in work area. Wash hands before eating, drinking, or using restroom. Eye wash fountain and safety shower should be available in the working area.

PHYSIOLOGICAL & HEALTH EFFECTS

Routes of Entry

Eyes: Vapor is irritating to the eyes. Liquid will cause burns.

Skin: **Absorption;** ammonia, because if its alkalinity and water solubility, tends to break down and disrupt the outer cell layers, permitting rapid penetration. Even so, ammonia is not a systemic poison and the effects will be limited to local effects. **Contact;** Causes smarting of the skin and first-degree burns on short exposure. May cause second-degree burns on long exposure.

Inhalation: If inhaled, will cause nausea, vomiting, breathing difficulty, and convulsions. Shock or loss of consciousness may result. Brief exposure to 5000 ppm may be fatal.

Ingestion: Ingestion causes burning pain in mouth, throat, stomach, and thorax, constriction of throat, and coughing. This is soon followed by vomiting of blood or by passage of loose stools containing blood. Ingestion of 3-4 ml may be fatal.

Toxicity: Acute oral toxicity LD50 for rat is 350 mg/kg for ammonia. IDLH Value*:300 ppm *The Immediately Dangerous to Life and Health Value.

Signs & Symptoms of Exposure: Burning of the eyes, conjunctivitis, skin irritations, swelling of the eyelids and lips, dry red mouth and tongue, burning in the throat, and coughing. In more severe cases of exposure, difficulty in breathing, signs and symptoms of lung congestion, and, ultimately, death from respiratory failure due to pulmonary edema may occur.

Effects of Overexposure: Irritation and possible burns of the skin and mucous membranes. Headache, salivation, nausea, and vomiting. Difficult or labored breathing and cough with bloody mucous discharge. Bronchitis, laryngitis, hemoptysis, and pulmonary edema or pneumonitis. Ulceration of the conjunctiva and cornea, and corneal and lenticular opacities. Damage to the eyes may be permanent.

EMERGENCY & FIRST AID PROCEDURES

Eyes: Immediately flush with flowing water for at least 15 minutes with the eyelids held apart.

Skin: Apply water immediately to exposed areas of skin and continue for at least 15 minutes. Remove contaminated clothing while continuing to apply water. Do not apply salves or ointments to affected areas. OBTAIN MEDICAL ATTENTION.

Inhalation: Remove victim to fresh air. Give oxygen if breathing is difficult. If breathing has stopped, start artificial respiration. Keep victim calm and resting. OBTAIN MEDICAL ATTENTION.

Ingestion: **DO NOT INDUCE VOMITING.** If person is conscious, give large quantities of water and, if possible, diluted vinegar, lemon juice, orange juice, or other citric juices to neutralize the ammonia. Delay may cause perforation of esophagus or stomach. OBTAIN MEDICAL ATTENTION.

Steps to Be Taken in Case Material is Released or Spilled:
Stop the flow. Wear self-contained breathing apparatus and full protective clothing. Approach spill from upwind and evacuate area downwind. Prevent runoff from entering streams, drinking water supply or sewers. Dike to contain spill.

Precautions if Spilled or Released: Harmful to aquatic life in very low concentrations. May be dangerous if it enters water intakes. Notify local health and wildlife officials. Do not contaminate any body of water by direct application, cleaning of equipment or disposal.

Neutralizing Chemicals: Dilute phosphoric or sulfuric acid. Vinegar will effectively neutralize small spills.

Waste Disposal Methods: Consult Federal, State, and Local authorities for proper disposal procedures.

Reportable Quantities: 1000 lbs.

DOT Proper Shipping Name: Ammonia Solution or Ammonia Hydroxide, with more than 10% but not more than 35% as ammonia.

DOT Classification: 8

UN/NA Identification Number: UN 2672

Packing Group: III

Other Labels: Corrosive

Handling and Storage Precautions: Avoid heating containers of aqua ammonia. Avoid storing in close proximity to strong acids. Avoid contact with skin and eyes. Avoid inhalation of vapors.

Aqua Ammonia manufactured at Lake Charles, LA is NSF-60 certified. Maximum use in potable water is 10 mg/l.

SALES OFFICE

For Product Information:
TEL: 662-494-3055
FAX: 662-494-2828

Post Office Drawer 1217
West Point, MS 39773

To Place An Order:
TEL: 800-953-3585
FAX: 800-953-3588

IMPORTANT
The information on this Material Safety Data Sheet is believed to be accurate but is not warranted to be so. Protective equipment, health effects, and other related safety measures are based on intended and anticipated product use. Recipients are advised to confirm in advance of need that the information is applicable and suitable to their circumstances.

Service Pro Hydraulic Fluid
AW-46

Material Safety Data Sheet

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***** END OF MSDS *****

ISO 320

Material Safety Data Sheet

ENDURATEX EP 32, 68, 100, 150, 220, 320

PETRO-CANADA

1. Product and company identification

Common name	: ENDURATEX EP 32, 68, 100, 150, 220, 320
Code	: ENT32, 490-235; ENT68, 490-236; ENT100, 490-237; ENT150, 490-238; ENT220, 490-239; ENT320, 490-240
Material uses	: ENDURATEX EP oils are heavy duty extreme pressure gear oils for use in enclosed industrial gear drives operating under normal, heavy, or shock loading conditions. They are also recommended for lubricating plain or anti-friction bearings running under heavy or shock loading conditions.
Manufacturer	: PETRO-CANADA P.O. Box 2844 150 – 6th Avenue South-West Calgary, Alberta T2P 3E3
In case of emergency	: **Petro-Canada: 403-296-3000** ***Canutec Transportation:*** **613-996-6666** **Poison Control Centre: Consult local telephone directory for emergency number(s).**

2. Hazards identification

Physical state	: Viscous liquid.
Odor	: Mild petroleum oil like.
OSHA/HCS status	: While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.
Emergency overview	: No specific hazard.
Routes of entry	: Dermal contact. Eye contact. Inhalation. Ingestion.
Potential acute health effects	
Eyes	: Slightly irritating to the eyes.
Skin	: Slightly irritating to the skin.
Inhalation	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
Medical conditions aggravated by over-exposure	: Repeated skin exposure can produce local skin destruction or dermatitis. Repeated or prolonged contact with spray or mist may produce chronic eye irritation and severe skin irritation.

See toxicological information (section 11)

3. Composition/information on ingredients

Name	CAS number	%
Mixture of severely hydrotreated and hydrocracked and/or solvent-refined base oil (petroleum).	Mixture.	-

The base oil may be a mixture of the following CAS#s: 8042-47-5, 64741-95-3, 64742-01-4, 64742-46-7, 64742-47-8, 64742-52-5, 64742-54-7, 64742-62-7, 72623-83-7, 72623-84-8, 72623-85-9, 72623-86-0, 72623-87-1, 178603-64-0, 178603-65-1, 178603-66-2, 445411-73-4

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4. First aid measures

Eye contact	: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.
Skin contact	: Wash skin thoroughly with soap and water or use recognized skin cleanser. Get medical attention if irritation occurs. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Inhalation	: If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.
Ingestion	: Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If potentially dangerous quantities of this material have been swallowed, call a physician immediately.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training.

5. Fire-fighting measures

Flammability of the product	: May be combustible at high temperature.
Products of combustion	: Carbon oxides (CO, CO2), nitrogen oxides (NOx), sulphur oxides (SOx), smoke and irritating vapours as products of incomplete combustion.
Extinguishing media	
Suitable	: Use an extinguishing agent suitable for the surrounding fire.
Not suitable	: None known.
Special exposure hazards	: No specific hazard.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Special remarks on fire hazards	: Low fire hazard. This material must be heated before ignition will occur.
Special remarks on explosion hazards	: Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

6. Accidental release measures

Personal precautions	: Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment.
Environmental precautions	: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
Methods for cleaning up	: If emergency personnel are unavailable, contain spilled material. For small spills, add absorbent (soil may be used in the absence of other suitable materials), scoop up material and place in a sealable, liquid-proof container for disposal. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal.

7. Handling and storage

Handling	: Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk. Evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, acids.
Storage	: Keep container tightly closed. Store away from incompatible materials (see section 10). Keep container in a cool, well-ventilated area.

8. Exposure controls/personal protection

Product name	Exposure limits
Mixture of severely hydrotreated and hydrocracked and/or solvent-refined base oil (petroleum).	ACGIH TLV (United States). Notes: (oil mist) TWA: 5 mg/m³ 8 hour(s). STEL: 10 mg/m³ 15 minute(s).

Consult local authorities for acceptable exposure limits.

Continued on Next Page

8. Exposure controls/personal protection

Engineering measures : No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

Personal protection

Eyes : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

Skin : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Recommended: organic vapor filter

Hands : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Recommended: neoprene, nitrile, polyvinyl alcohol (PVA), Viton.

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

9. Physical and chemical properties

Physical state : Viscous liquid.

Flash point : Open cup:≥224°C (435.2°F) (Cleveland.).

Auto-ignition temperature : Not available.

Flammable limits : Not available.

Color : Amber.

Odor : Mild petroleum oil like.

pH : Not applicable.

Boiling/condensation point : Not available.

Pour point : **32:** -51°C (-60°F); **68:** -39°C (-38°F); **100:** -33°C (-27°F); **150:** -33°C (-27°F); **220:** -27°C (-17°F); **320:** -21°C (-6°F)

Melting/freezing point : Not available.

Relative density : 0.847 to 0.8945 kg/L @ 15°C (59°F)

Vapor pressure : Not available.

Vapor density : Not available.

Volatility : Not available.

Odor threshold : Not available.

Evaporation rate : Not available.

Viscosity : **32:** 32 cSt @ 40°C (104°F), 6 cSt @ 100°C (212°F), VI=136; **68:** 68 cSt @ 40°C (104°F), 9.08 cSt @ 100°C (212°F), VI=109; **100:** 101 cSt @ 40°C (104°F), 11.27 cSt @ 100°C (212°F), VI=97; **150:** 150 cSt @ 40°C (104°F), 14.7 cSt @ 100°C (212°F), VI=97; **220:** 220 cSt @ 40°C (104°F), 19.01 cSt @ 100°C (212°F), VI=97; **320:** 320 cSt @ 40°C (104°F), 23.75 cSt @ 100°C (212°F), VI=94

Solubility : Insoluble in water.

LogK$_{ow}$: Not available.

Softening Point : Not available.

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9 . Physical and chemical properties

Dropping Point	: Not available.
Penetration	: Not available.
Physical/chemical properties comments	: Not available.

10 . Stability and reactivity

Stability and reactivity	: The product is stable.
Conditions of instability	: Not available.
Incompatibility with various substances	: Reactive with oxidizing agents.
Hazardous decomposition products	: May release COx, NOx, SOx, H2S, POx, SiOx, aldehydes, alkyl mercaptans, methacrylate monomers, smoke and irritating vapours when heated to decomposition.
Hazardous polymerization	: Will not occur.

11 . Toxicological information

Toxicity data

Product/ingredient name	Test	Result	Route	Species
Mixture of severely hydrotreated and hydrocracked base oil (petroleum).	LD50	>5000 mg/kg	Oral	Rat
	LD50	>2000 mg/kg	Dermal	Rabbit
	LC50	>2500 mg/m³ (4 hour(s))	Inhalation	Rat

Specific effects

Carcinogenic effects	: Not listed as carcinogenic by OSHA, NTP or IARC.
Mutagenic effects	: No known significant effects or critical hazards.
Teratogenicity / Reproductive toxicity	: No known significant effects or critical hazards.

Sensitization

Ingestion	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Eyes	: Slightly irritating to the eyes.
Skin	: Slightly irritating to the skin.
Synergistic products	: Not available.

12 . Ecological information

Ecotoxicity data

Product/ingredient name	Species	Period	Result

Environmental precautions	: No known significant effects or critical hazards.
Bioconcentration factor	Not available.
BOD and COD	Not available.
Biodegradable/OECD	Not available.
Mobility	Not available.
Special remarks on the products of biodegradation	Not available.

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13 . Disposal considerations

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

14 . Transport information

Regulatory Information	UN number	Proper shipping name	Class	PG*	Label	Additional Information
TDG Classification	Not regulated.	-	-	-		-
DOT Classification	Not available.	Not available.	Not available.	-		-

PG* : Packing group

15 . Regulatory information

United States

HCS Classification : Not regulated.

Canada

WHMIS (Canada) : Not controlled under WHMIS (Canada).

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

EU regulations

Risk phrases : This product is not classified according to EU legislation.

International regulations

International lists

CANADA INVENTORY (DSL) : Listed

CHINA INVENTORY (IECS) : Listed

EC INVENTORY (EINECS/ELINCS) : Listed

TSCA 8(b) Inventory : Listed

16 . Other information

Hazardous Material Information System (U.S.A.) :

Health	1
Fire hazard	1
Reactivity	0
Personal protection	B

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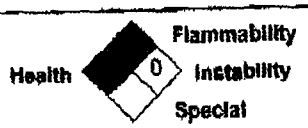
16 . Other information

National Fire Protection Association (U.S.A.) :



References	: Available upon request. TM/MC Marque de commerce de Petro-Canada - Trademark
Date of printing	: 9/23/2008.
Date of issue	: 9/23/2008.
Date of previous issue	: 7/28/2006.
Responsible name	: Product Safety - JDW
Version	: 4
For Copy of (M)SDS	: Internet: lubricants.petro-canada.ca/msds Lubricants: Western Canada, telephone: 1-800-661-1199; fax: (780) 464-9564 Ontario & Central Canada, telephone: 1-800-268-5850 and (905) 822-4222; fax: 1-800-201-6285 Quebec & Eastern Canada, telephone: 1-800-576-1686; fax: 1-800-201-6285 For Product Safety Information: (905) 804-4752

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.
Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

EPAHO104002080

FlintGroup

14909 N. Beck Road
Plymouth, MI 48180

For Product Questions call:	(214) 638-6700
For Health and Safety Questions call:	(734) 781-4568
After Hours Emergency Health/Safety Questions:	(800) 391-0698 Prosar (US/Canada)
24 Hour Emergency Spill Contact call:	(800) 424-9300 Chemtrec (US/Canada)

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SOCHEM

EPAHO104002085

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Material / Product Approval Letter

Date **1/29/2009**

Dear **Sal Amato**

Thank you for choosing CES Environmental Services, Inc. for your material / product recycling needs. The following material has been approved at our facility in Houston, TX. If the material received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # PA-3163

Expiration Date 1/29/2011

Producer: Sochem
Address:

Material / Product Information

Name of Material / Product Sulfidic Caustic Solutions > 15%
Container Type:

Detailed Description of Process Generating or Producing the Material / Product:
Spent Caustic used to scrub sulfids from fuel products

Color: brown to red **Odor:** sulphur h2s smell **pH:** 10-12
Physical State:
Incompatibilities:
Safety Related Data/Special Handling:
PPE H2S monitor

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

#3163

JR
MB

CES Environmental Services, Inc.

4904 Griggs Road Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

SECTION 1: Material Producer Information

Company : Sochem
Address : P.O. Box 1912
City, State, Zip :
Contact : Sal Amato **Title :**
Phone No : (225) 644-3180 **Fax :**
24 / HR Phone :
U.S EPA I.D No :
State I.D : **SIC Code**

SECTION 2: Billing Information

Company : Sochem
Address : P.O. Box 1912
City, State, Zip :
Contact : Sal Amato **Title :**
Phone No : (225) 644-3180 **Fax :**

SECTION 3: General Description of the Material / Product

Name of Mateiral / Product : Sulfidic Caustic Solutions > 15%

Detailed Description of the Process Generating or Producing the Material / Product:

Spent Caustic used to scrub sulfids from fuel products

Physical State : ☒ Liquid ☒ Sludge ☒ Powder
☒ Solid ☒ Filter Cake ☒ Combination

Color : brown to red **Odor :** sulphur h2s smell

Specific Gravity (Water=1) : 1.32 **Density :** 11 lbs / gal

Does this material contain any total phenolic compounds? ☐ Yes ☐ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Layers : ☒ Single-Phas ☒ Multi-Phase

Container Type : ☒ Drum ☒ Tote ☒ Truck ☒ Other (explain)

Container Size : 4500 g

Number Of Units : 2

Proper U.S. DOT Shipping Name : sodium hydroxide solution, 8, un1824, II

Class : 8 **UN/NA :** 1824 **PG :** 2 **RQ :**

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
>140	10-12	NA mg/l	NA mg/l	NA %
Oil and Grease	**TOC**	**Zinc**	**Copper**	**Nickel**
NA mg/l	NA mg/l	NA mg/l	NA mg/l	NA mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The material / product consists of the following materials	Concentration Ranges are acceptable	Units or %
water	70-85	%
sodium hydroxide	15-30	%

SECTION 5: Safety Related Data

If the handling of this material / product requires the use of special protective equipment, please explain.
PPE H2S monitor

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):

SECTION 8: Material Producer's Certification

The information contained herein is based on ☐ generator knowledge and/or ☐ analytical data. I hereby cerity that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature : _____ **Date :** _____

Printed Name / Title : /

CES USE ONLY (DO NOT WRITE IN THIS SPACE) **Process Facility Information :**

Compliance Officer : Matt Bowman

Date : 1/28/2009 **Status :** Approved Rejected

Approval Number : PA-3163

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$100/Dry ton – paying

2. Contamination Limit (maximum limit before surchages apply):

3. Surcharge Pricing:

4. Special Testing Requirements:

Titration, Density & PH

5. Treatment and Handling Protocol:

Raw Stock for NASH

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)