UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF ENFORCEMENT

EPA-330/2-94-023

MULTI-MEDIA COMPLIANCE INVESTIGATION
(Volume 2 - Appendices)

SHELL OIL COMPANY
Wood River Manufacturing Complex
Roxana, Illinois

April 1994

Linda TeKrony
Anne Bevington
Willis Collins
Ken Garing
Jim Seidel
Sergio Siao
Daren Vanlerberghe

Pollution Prevention

CAA

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CAA

APPENDIX

EXIT CONFERENCE ATTENDANCE LISTS

NAME	COMPANY	Number
KEN GARING	EPA-NEIC	(303) 236-5124
Daren Vanderberghe	EPA-NEIC	(303) 236-5124
Clyde Wiseman	Shell	(618) 255-3375
Lynda Tekrony	EPA-NEIC	(303) 236-5124
Anne Billington	EPA-NEIC	(303) 236-5124
Gary Spears	Shell	618-255-3375
Joe Brewster	Shell	618-255-2478
LARRY HEUCATTER	SHELL	618 255-2448
Jeff Weerhabe	Shell	255-2369
Chris Cahnovsky	IEPA	346-5120
JOHN Justice	IEPA	618/346-5120
Jay Ranton	Shell	618 255 2737
Colleen Hutchings	Shell	618-255-2265
ERIC PETERSEN	Shell	618-255-3190
Randy Zerkel	Shell	618-255-2734
ROBERT MILLER	SHELL	(618) 255-2405
KENT PECCOLA	Shell	(618) 255-2758
Robert Gillette	Shell	(618) 255-2755
Gina Nicholson	Shell	618-255-2512
Jeff Benkenck	State of Ill EPA	618-346-5120
SERGIO SIAO	EPA-NEIC	(303) 236-5124
Gayle Johnson	Shell	(618) 255 2201

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APPENDIX A

AIR PERMITS

Illinois Environmental Protection Agency · P. O. Box 19276, Springfield, IL 62794-9276

217/782-2113

JUL 27 1992
RECEIVED
C. Bach

OPERATING PERMIT

PERMITTEE

Shell Oil Company
Attn: J.N. Brewster
P.O. Box 262
Wood River, IL 62095

Application No.: 72110615
Applicant's Designation: WRR-1
Subject: Distilling Unit No. 1
Date Issued: July 22, 1992
Location: SA-11A and Route 111, Roxana

I.D. No.: 119090AAA
Date Received: May 4, 1992

Expiration Date: June 30, 1997

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of storage tanks, closed-vent process equipment, and two process heaters as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. Emissions of organic material from Crude Oil Storage Tank No. C-45 previously approved under application #83080058 shall not exceed 15 tons/year. This limit is based on the maximum emission rate (3.4 pounds per hour) and the maximum hours of operation indicated in the construction permit application.

2a. Emission Limits

The sulfur dioxide emissions from the Gas Plants and Rectified Absorber Unit process heaters or boilers combined shall not exceed 159 lb/hr, on a 3-hour block average basis, pursuant to §214.382(c)(3)(C) and (d).

b. Analysis

i. The flasher pitch burned in these heaters or boilers shall not contain more than 3% sulfur by weight as determined by the appropriate ASTM method. A representative sample shall be taken and analyzed each day.

ii. The refinery fuel gas burned shall not contain more than 39 grains H_2S/100 dscf. A representative sample of the gas shall be taken and analyzed every 8 hours by the Tutweiler procedure, in accordance with Section 214.382(c)(2), if the sulfur content of the gas is not analyzed by a continuous H_2S monitor meeting the requirements of New Source Performance Standards (40 CFR 60.105(a)(4) and the applicable requirements of Performance Specification No. 7 of Appendix B).

c. Recordkeeping

i. The Permittee shall keep records of the amount of pitch and refinery fuel gas burned per hour and lb/hr of sulfur dioxide emitted from each heater and boiler so as to demonstrate compliance with §214.382(c).

ii. The Permittee shall keep detailed records of the analyses performed pursuant to paragraph (b).

iii. The records, as required by c(i-ii), shall be entered in a log or computerized system each day, to address compliance on a 3-hour block average basis.

iv. These records and the log shall be retained for three years from the date of an entry and shall be available for inspection upon request by the Agency.

d. Quarterly Report

Shell shall submit a quarterly report, listing the total sulfur dioxide emissions each month for the entire manufacturing complex, and the highest and second highest daily emission rates, for each month during the quarter.

3. Operation in excess of applicable sulfur dioxide emission standards is allowed during malfunction and breakdown of the sulfur recovery system provided that:

a. The permittee shall immediately notify the Agency's regional office:

Illinois Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, IL 62234

by phone (618/346-5120) of any malfunction of any component of the permittee's sulfur recovery system which may result in a violation of the sulfur dioxide regulations.

b. Whenever the Shell sulfur plant has not recovered at least 75% of the total sulfur available from Amoco, Clark, and the permittee, for a four hour period, the permittee shall institute SO_2 emission reduction procedures. The procedures shall reduce uncontrolled SO_2 emission to no more than 16.0 ton/hr. These procedures shall include:

i. All necessary changes in refinery operations, and;

ii. Any other reasonable action to reduce emissions.

This condition supersedes standard condition No. 9 and 9.a. for malfunction and breakdown of the sulfur recovery system. The permittee shall maintain the records required by standard condition No. 9.b.

If you have any questions on this, please call Dan Punzak at 217/782-2113.

Donald E. Sutton

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:DGP:mab/335N/sp/22-24

cc: Region 3

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
2200 CHURCHILL ROAD
SPRINGFIELD, ILLINOIS 62706

STANDARD CONDITIONS FOR OPERATING PERMITS

July 1, 1985

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) grants the Environmental Protection Agency authority to impose conditions on permits which it issues.

The following conditions are applicable unless superseded by special permit condition(s).

1. The issuance of this permit does not release the permittee from compliance with state and federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or with applicable local laws, ordinances and regulations.

2. The Agency has issued this permit based upon the information submitted by the permittee in the permit application. Any misinformation, false statement or mispresentation in the application shall be grounds for revocation under 35 Ill. Adm. Code 201.207.

3. a. The permittee shall not authorize, cause, direct or allow any modification, as defined in 35 Ill. Adm. Code 201.102, of equipment, operations or practices which are reflected in the permit application as submitted unless a new application or request for revision of the existing permit is filed with the Agency and unless a new permit or revision of the existing permit(s) is issued for such modification.

   b. This permit only covers emission sources and control equipment while physically present at the indicated plant location(s). Unless the permit specifically provides for equipment relocation, this permit is void for an item of equipment on the day it is removed from the permitted location(s) or if all equipment is removed, notwithstanding the expiration date specified on the permit.

4. The permittee shall allow any duly authorized agent of the Agency, upon the presentation of credentials, at reasonable times:

   a. to enter the permittee's property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit,

   b. to have access to and to copy any records required to be kept under the terms and conditions of this permit,

   c. to inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit,

   d. to obtain and remove samples of any discharge or emission of pollutants, and

   e. to enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring or recording any activity, discharge or emission authorized by this permit.

5. The issuance of this permit:

   a. shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are located,

   b. does not release the permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the facilities,

GPN

Illinois Environmental Protection Agency · P. O. Box 19276, Springfield, IL 62794-9276

217/782-2113

OPERATING PERMIT

AUG 2 1993
RECEIVED
C. Bach

PERMITTEE

Shell Oil Company
Attn: J. W. Brewster
Post Office Box 262
Wood River, Illinois 62095

Application No.: 72110616
Applicant's Designation: WRR-2
Subject: Distilling Unit No. 2
Date Issued: July 29, 1993
Location: SA-11A and Route 111, Roxana

I.D. No.: 119090AAA
Date Received: July 2, 1993

Expiration Date: July 31, 1996

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of closed-vent process equipment and five process heaters as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. Emission Limits

The sulfur dioxide emissions from the five process heaters or boilers combined shall not exceed 1260 lb/hr, on a 3-hour block average basis, pursuant to §214.382(c)(3)(B) and (d).

b. Analysis

i. The flasher pitch burned in these heaters or boilers shall not contain more than 3% sulfur by weight as determined by the appropriate ASTM method. A representative sample shall be taken and analyzed each day.

ii. The refinery fuel gas burned shall not contain more than 39 grains H_2S/100 dscf. A representative sample of the gas shall be taken and analyzed every 8 hours by the Tutweiler procedure.

c. Recordkeeping

i. The Permittee shall keep records of the amount of pitch and refinery fuel gas burned per hour and lb/hr of sulfur dioxide emitted from each heater and boiler so as to demonstrate compliance with §214.382(c).

ii. The Permittee shall keep detailed records of the analyses performed pursuant to paragraph (b).

iii. The records, as required by c(i-ii), shall be entered in a log or computerized system each day, to address compliance on a 3-hour block average basis.

iv. These records and the log shall be retained for two years from the date of an entry and shall be available for inspection upon request by the Agency.

d. Quarterly Report

Shell shall submit a quarterly report, listing the total sulfur dioxide emissions each month for the entire manufacturing complex, and the highest and second highest daily emission rates, for each month during the quarter.

2. Operation in excess of applicable sulfur dioxide emission standards is allowed during malfunction and breakdown of the sulfur recovery system provided that:

a. The permittee shall immediately notify the Agency's regional office:

Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234

by phone (618/346-5120) of any malfunction of any component of the permittee's sulfur recovery system which may result in a violation of the sulfur dioxide regulations.

b. Whenever the Shell sulfur plant has not recovered at least 75% of the total sulfur available from Amoco, Clark, and the permittee, for a four hour period, the permittee shall institute SO_2 emission reduction procedures. The procedures shall reduce uncontrolled SO_2 emission to no more than 16.0 ton/hr. These procedures shall include:

i. All necessary changes in refinery operations, and;
ii. Any other reasonable action to reduce emissions.

c. This condition supersedes standard condition No. 9 and 9.a for malfunction and breakdown of the sulfur recovery system. The permittee shall maintain the records required by standard condition No. 9.b.

3. The Permittee shall notify the Agency's regional office by telephone as soon as possible during normal working hours upon the occurrence of excess emissions due to malfunctions, or breakdowns. The Permittee shall comply with all reasonable and safe directives of the regional office regarding such malfunctions and breakdowns. Within five (5) working days of such occurrence the Permittee shall give a written follow-up notice to the Agency's regional office providing an explanation of the occurrence, the length of time during which operation continued under such conditions, measures taken by the Permittee to minimize excess emissions and correct deficiencies, and when normal operation resumed.

If you have any questions on this, please call Bradford S. Kohlmeyer at 217/782-2113.

Donald E. Sutton/MS

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:BSK:jab/550M/55-57

cc: Region 3

Illinois Environmental Protection Agency · P. O. Box 19276, Springfield, IL 62794-9276

217/782-2113

OPERATING PERMIT

RECEIVED JUL 12 1990

PERMITTEE

Shell Oil Company
Attn: J.W. Brewster
Post Office Box 262
Wood River, Illinois 62095

Application No.: 72110617
Applicant's Designation: WRR-3
Subject: **Gasoline Treaters**
Date Issued: June 25, 1990
Location: SA-11A and Route 111, Roxana

I.D. No.: 119090AAA
Date Received: April 27, 1990

Expiration Date: May 31, 1995

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of closed-system processing equipment and four storage tanks as described in the above-referenced application. This Permit is subject to standard conditions attached hereto.

Terry A. Sweitzer, P.E.
Manager, Permit Section
Division of Air Pollution Control

TAS:DGP:ds:0306L/48,sp

cc: Region 3

Illinois Environmental Protection Agency · P. O. Box 19276, Springfield, IL 62794-9276

217/782-2113

OPERATING PERMIT

RECEIVED JUL 27 1992

PERMITTEE

Shell Oil Company
Attn: J.N. Brewster
P.O. Box 262
Wood River, IL 62095

Application No.: 72110618
Applicant's Designation: WRR-4
Subject: **Rectified Absorber Unit** (WRR-4)
Date Issued: July 22, 1992
Location: SA-11A and Route 111, Roxana

I.D. No.: 119090AAA
Date Received: May 4, 1992

Expiration Date: June 30, 1997

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of closed-vent process equipment and two process heaters as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. Emission Limits

The sulfur dioxide emissions from the Gas Plants and Rectified Absorber Unit process heaters or boilers combined shall not exceed 159 lb/hr, on a 3-hour block average basis, pursuant to §214.382(c)(3)(C) and (d).

b. Analysis

i. The flasher pitch burned in these heaters or boilers shall not contain more than 3% sulfur by weight as determined by the appropriate ASTM method. A representative sample shall be taken and analyzed each day.

ii. The refinery fuel gas burned shall not contain more than 39 grains H_2S/100 dscf. A representative sample of the gas shall be taken and analyzed every 8 hours by the Tutweiler procedure, in accordance with Section 214.382(c)(2), if the sulfur content of the gas is not analyzed by a continuous H_2S monitor meeting the requirements of New Source Performance Standards (40 CFR 60.105(a)(4) and the applicable requirements of Performance Specification No. 7 of Appendix B).

c. Recordkeeping

i. The Permittee shall keep records of the amount of pitch and refinery fuel gas burned per hour and lb/hr of sulfur dioxide emitted from each heater and boiler so as to demonstrate compliance with §214.382(c).

ii. The Permittee shall keep detailed records of the analyses performed pursuant to paragraph (b).

iii. The records, as required by c(i-ii), shall be entered in a log or computerized system each day, to address compliance on a 3-hour block average basis.

iv. These records and the log shall be retained for three years from the date of an entry and shall be available for inspection upon request by the Agency.

d. Quarterly Report

Shell shall submit a quarterly report, listing the total sulfur dioxide emissions each month for the entire manufacturing complex, and the highest and second highest daily emission rates, for each month during the quarter.

2. Operation in excess of applicable sulfur dioxide emission standards is allowed during malfunction and breakdown of the sulfur recovery system provided that:

a. The permittee shall immediately notify the Agency's regional office:

Illinois Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, IL 62234

by phone (618/346-5120) of any malfunction of any component of the permittee's sulfur recovery system which may result in a violation of the sulfur dioxide regulations.

b. Whenever the Shell sulfur plant has not recovered at least 75% of the total sulfur available from Amoco, Clark, and the permittee, for a four hour period, the permittee shall institute SO_2 emission reduction procedures. The procedures shall reduce uncontrolled SO_2 emission to no more than 16.0 ton/hr. These procedures shall include:

i. All necessary changes in refinery operations, and;

ii. Any other reasonable action to reduce emissions.

This condition supersedes standard condition No. 9 and 9.a. for malfunction and breakdown of the sulfur recovery system. The permittee shall maintain the records required by standard condition No. 9.b.

If you have any questions on this, please call Dan Punzak at 217/782-2113.

Donald E. Sutton

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:DGP:mab/335N/sp/19-21

cc: Region 3

217/782-2113

OPERATING PERMIT

JUL 27 1992
RECEIVED
C. Bach

PERMITTEE

Shell Oil Company
Attn: J.N. Brewster
P.O. Box 262
Wood River, IL 62095

Application No.: 72110619
Applicant's Designation: WRR-5
Subject: Gas Plants (WRR-5)
Date Issued: July 22, 1992
Location: SA-11A and Route 111, Roxana

I.D. No.: 119090AAA
Date Received: May 4, 1992

Expiration Date: June 30, 1997

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of process equipment with flare, separator box and one process heater as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. Emission Limits

The sulfur dioxide emissions from the Gas Plants and Rectified Absorber Unit process heaters or boilers combined shall not exceed 159 lb/hr, on a 3-hour block average basis, pursuant to §214.382(c)(3)(C) and (d).

b. Analysis

i. The flasher pitch burned in these heaters or boilers shall not contain more than 3% sulfur by weight as determined by the appropriate ASTM method. A representative sample shall be taken and analyzed each day.

ii. The refinery fuel gas burned shall not contain more than 39 grains H_2S/100 dscf. A representative sample of the gas shall be taken and analyzed every 8 hours by the Tutweiler procedure, in accordance with Section 214.382(c)(2), if the sulfur content of the gas is not analyzed by a continuous H_2S monitor meeting the requirements of New Source Performance Standards (40 CFR 60.105(a)(4) and the applicable requirements of Performance Specification No. 7 of Appendix B).

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c. Recordkeeping

i. The Permittee shall keep records of the amount of pitch and refinery fuel gas burned per hour and lb/hr of sulfur dioxide emitted from each heater and boiler so as to demonstrate compliance with §214.382(c).

ii. The Permittee shall keep detailed records of the analyses performed pursuant to paragraph (b).

iii. The records, as required by c(i-ii), shall be entered in a log or computerized system each day, to address compliance on a 3-hour block average basis.

iv. These records and the log shall be retained for three years from the date of an entry and shall be available for inspection upon request by the Agency.

d. Quarterly Report

Shell shall submit a quarterly report, listing the total sulfur dioxide emissions each month for the entire manufacturing complex, and the highest and second highest daily emission rates, for each month during the quarter.

2. Operation in excess of applicable sulfur dioxide emission standards is allowed during malfunction and breakdown of the sulfur recovery system provided that:

a. The permittee shall immediately notify the Agency's regional office:

Illinois Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, IL 62234

by phone (618/346-5120) of any malfunction of any component of the permittee's sulfur recovery system which may result in a violation of the sulfur dioxide regulations.

b. Whenever the Shell sulfur plant has not recovered at least 75% of the total sulfur available from Amoco, Clark, and the permittee, for a four hour period, the permittee shall institute SO_2 emission reduction procedures. The procedures shall reduce uncontrolled SO_2 emission to no more than 16.0 ton/hr. These procedures shall include:

i. All necessary changes in refinery operations, and;

ii. Any other reasonable action to reduce emissions.

This condition supersedes standard condition No. 9 and 9.a. for malfunction and breakdown of the sulfur recovery system. The permittee shall maintain the records required by standard condition No. 9.b.

If you have any questions on this, please call Dan Punzak at 217/782-2113.

Donald E. Sutton

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:DGP:mab/335N/sp/16-18

cc: Region 3

State of Illinois
ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director

2200 Churchill Road, Springfield, IL 62794-9276

OPERATING PERMIT - NSPS SOURCE

RECEIVED 19 1993 C. Bach

PERMITTEE

Shell Oil Company
Attention: J. N. Brewster
SA-11A and Route 111 (P.O. Box 262)
Wood River, Illinois 62095

Application No: 72110620
Applicants Designation: WRR-6
Date Issued: August 16, 1993
Subject: Vacuum Flashing Unit
Location: SA-11A and Route 111, Roxana

I.D. No.: 119090AAA
Date Received: August 3, 1993
Expiration Date: August 31, 1995

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of closed-vent process equipment, separator box, one storage tank, and five process heaters as described in the above referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1 a. The vacuum flashing unit process heaters on the north and south distilling units (VF-1-NM and VF-1-S) are subject to a New Source Performance Standard (NSPS) for petroleum refineries, 40 CFR 60, Subparts A and J. The Illinois EPA is administering NSPS in Illinois on behalf of the United States EPA under a delegation agreement.

b. The hydrogen sulfide concentration in the fuel gas to the vacuum flashing unit process heaters shall not exceed 0.10 grains per dry standard cubic foot, pursuant to the New Source Performance Standard, $) CFR 60, Subpart J.

c. At all times, the Permittee shall also, to the extent practicable, maintain and operate the vacuum flashing unit, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.

d. The Permittee shall operate a continuous emission monitor (CEM) for hydrogen sulfide concentration in the fuel gas used to fire process heaters VF-1-NM and VF-1-S. The CEM shall meet the requirements of 40 CFR 60.105(a)(3) or (a)(4) and the applicable requirements of Performance Specification No. 7 of Appendix B.

2 a. The Permittee shall fulfill applicable notification, recordkeeping, and reporting requirements of the NSPS, 40 CFR 60.7.

b. Any required reports and notifications concerning equipment operation, performance testing or a continuous monitoring system shall be sent to the Agency's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control - Regional Office
2009 Mall Street
Collinsville, Illinois 62234

3 a. Operation in excess of applicable sulfur dioxide emission standards is allowed during malfunction and breakdown of the sulfur recovery system provided that:

b. The Permittee shall immediately notify the Agency's regional office by phone (618/346-5120) of any malfunction of any component of the Permittee's sulfur recovery system which may result in a violation of the sulfur dioxide regulations.

c. Whenever the Shell sulfur plant has not recovered at least 75% of the total sulfur available from Amoco, Clark, and the Permittee, for a four hour period, the Permittee shall institute SO_2 emission reduction procedures. The procedures shall reduce uncontrolled SO_2 emissions to no more than 16.0 ton/hr. These procedures shall include:

i) All necessary changes in refinery operations, and;

ii) Any other reasonable action to reduce emissions.

d. The Permittee shall maintain the records required by standard condition 9.b.

4 a. For equipment subject to NSPS:

i) The Permittee shall immediately notify the Agency's regional office by phone of any malfunction or breakdown, or other occurrence with respect to its sulfur recovery system that results in any violation of the SO_2 emission standards.

b. For such equipment the Permittee shall comply with all reasonable and safe directives of the regional office upon malfunctions or breakdowns or other occurrences.

c. For such equipment the Permittee shall maintain records of malfunctions and breakdowns and other occurrences resulting in excess emissions. As a minimum, these records shall include the information identified in Condition 5.

5. Within five (5) working days of a malfunction or breakdown or other occurrences resulting in excess emissions the Permittee shall give a written follow-up notice to the Agency's regional office providing:

i. an explanation of the occurrence

ii. the length of time during which operation continued under such conditions and an estimate of the quantity of emissions

iii. the measures used to reduce the quantity of emission and length of time during which such operations occurred

iv. the steps to be taken to prevent similar malfunctions or breakdowns, or occurrences, and

v. when normal operation resumed.

6 a. Emission limits for all process heaters in the vacuum flasher unit

The sulfur dioxide emissions from the vacuum flasher unit process heaters combined shall not exceed 378 lb/hr, on a 3-hour block average basis, pursuant to 35 Ill. Adm. Code 214. 382(c)(3)(D) and (d).

b. Analysis

i. The flasher pitch burned in these heaters or boilers shall not contain more than 3% sulfur by weight as determined by the appropriate ASTM method. A representative sample shall be taken and analyzed each day.

State of Illinois
ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director 2200 Churchill Road, Springfield, IL 62794-9276

ii. The refinery fuel gas burned shall not contain more than 39 grains H_2S/100 dscf. A representative sample of the gas shall be taken and analyzed every 8 hours by the Tutweiler procedure, if the sulfur content of the gas is not analyzed by a continuous H_2S monitor meeting the requirements of New Source Performance Standards (40 CFR 60.105(a)(4) and the applicable requirements of Performance Specification No. 7 of Appendix B).

c. Recordkeeping

i. The Permittee shall keep records of the amount of pitch and refinery fuel gas burned per hour and lb/hr of sulfur dioxide emitted from each heater and boiler so as to demonstrate compliance with 35 Ill. Adm. Code 214.382(c).

ii. The Permittee shall keep detailed records of the analyses performed pursuant to paragraph (b).

iii. The records, as required by c(i-ii), shall be entered in a log or computerized system each day, to address compliance on a 3-hour block average basis.

iv. These records and the log shall be retained for two years from the date of an entry and shall be available for inspection upon request by the Agency.

d. Quarterly Reports

Shell shall submit a quarterly report, listing the total sulfur dioxide emissions each month for the entire manufacturing complex, and the highest and second highest daily emission rates, for each month during the quarter.

If you have any questions concerning this letter, please contact Bradford S. Kohlmeyer at 217/782-2113.

Donald E. Sutton/mc

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:bsk

CC: Region 3

217/782-2113

OPERATING PERMIT

MAY 20 1993
RECEIVED

PERMITTEE

Shell Oil Company
Attn: J.N. Brewster
SA-11A and Route 111
P.O. Box 262
Wood River, IL 62095

Application No.: 72110621
Applicant's Designation: WRR-7
Subject: catalytic Cracking Unit #1
Date Issued: May 17, 1993
Location: SA-11A and Route 111, Roxana

I.D. No.: 119090AAA
Date Received: May 3, 1993
Expiration Date: May 17, 1998

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of catalytic cracking unit controlled by multiclones, electrostatic precipitator, and carbon monoxide boiler, oil-water separator box, air preheater, and storage tanks as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. Operation in excess of applicable particulate and carbon monoxide standards is allowed during startup for time periods and circumstances as limited below. All measures will be taken to minimize the quantity of emissions, the length of time of each startup, and the number of startups. Each startup shall be conducted in accordance with Procedures contained in the permit application dated January 5, 1990 and May 14, 1990.

   Particulate Emissions

   a. The particulate emission standard may be exceeded for up to 48 hours.

   b. Ammonia injection shall be used for conditioning the electrostatic precipitator (ESP) until the ESP is fully energized in order to increase the ESP efficiency.

   c. The ESP shall be warmed to the maximum possible temperature prior to feed introduction.

   Carbon Monoxide (CO) Emissions

   a. The CO emission standard may be exceeded for up to 24 hours or until the CO boiler is in service.

2. Operation in excess of applicable sulfur dioxide emission standards is allowed during malfunction and breakdown of the sulfur recovery system provided that:

   a. The Permittee shall immediately notify the Agency's regional office:

      Environmental Protection Agency
      Division of Air Pollution Control
      2009 Mall Street
      Collinsville, Illinois 62234

      by phone (618/346-5120) of any malfunction of any component of the Permittee's sulfur recovery system which may result in a violation of the sulfur dioxide regulations.

   b. Whenever the Shell sulfur plant has not recovered at least 75% of the total sulfur available from Amoco, Clark, and the Permittee, for a four hour period, the Permittee shall institute SO_2 emission reduction procedures. The procedures shall reduce uncontrolled SO_2 emission to no more than 16.0 ton/hr. These procedures shall include:

      i. All necessary changes in refinery operations, and;

      ii. Any other reasonable action to reduce emissions.

   c. This condition supersedes standard condition No. 9 and 9.a for malfunction and breakdown of the sulfur recovery system. The Permittee shall maintain the records required by standard condition No. 9.b.

3. Operation in excess of the applicable emission standards during malfunction and breakdown of the CO boiler and/or electrostatic precipitator is allowed for a maximum of 72 hours. The Permittee shall take all measures necessary to minimize the quantity of emissions and the length of the malfunction or breakdown. The Agency on a case-by-case basis may allow the malfunction and breakdown period to exceed 72 hours.

   The Permittee shall notify the Collinsvile Regional Office as soon as possible after it has been determined that this time frame will be exceeded. At the time of this notification, the Permittee shall inform the Regional Office of the estimated amounts of emissions during this continued malfunction or breakdown.

4. The Permittee shall notify the Agency's regional office by telephone as soon as possible during normal working hours upon the occurrence of excess emissions due to malfunctions, or breakdowns. The Permittee shall comply with all reasonable and safe directives of the regional office regarding such malfunctions and breakdowns. Within five (5) working days of such occurrence, the Permittee shall give a written follow-up notice to the Agency's regional office providing an explanation of the occurrence, the length of time during which operation continued under such conditions, measures taken by the Permittee to minimize excess emissions and correct deficiencies, and when normal operation resumed.

5a. The Permittee shall maintain records of excess emissions during malfunctions and breakdowns. As a minimum, these records shall include:

i. date and duration of malfunction or breakdown;
ii. a full and detailed explanation of the cause for such emissions;
iii. the contaminants emitted and an estimate of the quantity of emissions;
iv. the measures used to reduce the quantity of emissions and the duration of the occurrence; and
v. the steps taken to prevent similar malfunctions or breakdowns or reduce their frequency and severity.

b. These records shall be retained for at least two years following an event, maintained at a readily accessible location at the plant, and be available to representatives of the Agency during normal working and/or operating hours.

6. The Permittee shall maintain and operate a continuous opacity monitoring system on the above-referenced equipment. On or before the 30th day of each calendar quarter, the Permittee shall submit to the Agency a report for the last preceding calendar quarter of any and all opacity measurements which exceed 30 percent, averaged over a six minute period.

These "excess opacity" reports shall provide, for each such incident, the percent opacity measured as well as the date and span of such incident. These reports shall also specify for each incident whether it occurred during startup, shut-down, or malfunction. If a malfunction is indicated in the report, all corrective actions taken, if any, shall be reported. The reports shall also specify, for each calendar quarter, the date of those periods during which the continuous monitoring system was not in operation.

If you have any questions on this, please call Bradford S. Kohlmeyer at 217/782-2113.

Donald E. Sutton, mz

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:BSK:mab/500M/sp/111-113

cc: Region 3

MAY 20 1993
RECEIVED
C. Bach

OPERATING PERMIT

PERMITTEE

Shell Oil Company
Attn: J.N. Brewster
SA-11A and Route 111
P.O. Box 262
Wood River, IL 62095

Application No.: 72110622
Applicant's Designation: WRR-8
Subject: catalytic Cracking Unit #2
Date Issued: May 17, 1993
Location: SA-11A and Route 111, Roxana

I.D. No.: 119090AAA
Date Received: May 3, 1993
Expiration Date: May 17, 1998

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of catalytic cracking unit controlled by multiclones, electrostatic precipitator, and carbon monoxide boiler, oil-water separator box, air preheater, and storage tanks as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. Operation in excess of applicable particulate and carbon monoxide standards is allowed during startup for time periods and circumstances as limited below. All measures will be taken to minimize the quantity of emissions, the length of time of each startup, and the number of startups. Each startup shall be conducted in accordance with Procedures contained in the permit application dated January 5, 1990 and May 14, 1990.

Particulate Emissions

a. The particulate emission standard may be exceeded for up to 48 hours.

b. Ammonia injection shall be used for conditioning the electrostatic precipitator (ESP) until the ESP is fully energized in order to increase the ESP efficiency.

c. The ESP shall be warmed to the maximum possible temperature prior to feed introduction.

Carbon Monoxide (CO) Emissions

a. The CO emission standard may be exceeded for up to 24 hours or until the CO boiler is in service.

2. Operation in excess of applicable sulfur dioxide emission standards is allowed during malfunction and breakdown of the sulfur recovery system provided that:

a. The Permittee shall immediately notify the Agency's regional office:

Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234

by phone (618/346-5120) of any malfunction of any component of the Permittee's sulfur recovery system which may result in a violation of the sulfur dioxide regulations.

b. Whenever the Shell sulfur plant has not recovered at least 75% of the total sulfur available from Amoco, Clark, and the Permittee, for a four hour period, the Permittee shall institute SO_2 emission reduction procedures. The procedures shall reduce uncontrolled SO_2 emission to no more than 16.0 ton/hr. These procedures shall include:

i. All necessary changes in refinery operations, and;

ii. Any other reasonable action to reduce emissions.

c. This condition supersedes standard condition No. 9 and 9.a for malfunction and breakdown of the sulfur recovery system. The Permittee shall maintain the records required by standard condition No. 9.b.

3. Operation in excess of the applicable emission standards during malfunction and breakdown of the CO boiler and/or electrostatic precipitator is allowed for a maximum of 72 hours. The Permittee shall take all measures necessary to minimize the quantity of emissions and the length of the malfunction or breakdown. The Agency on a case-by-case basis may allow the malfunction and breakdown period to exceed 72 hours.

The Permittee shall notify the Collinsvile Regional Office as soon as possible after it has been determined that this time frame will be exceeded. At the time of this notification, the Permittee shall inform the Regional Office of the estimated amounts of emissions during this continued malfunction or breakdown.

4. The Permittee shall notify the Agency's regional office by telephone as soon as possible during normal working hours upon the occurrence of excess emissions due to malfunctions, or breakdowns. The Permittee shall comply with all reasonable and safe directives of the regional office regarding such malfunctions and breakdowns. Within five (5) working days of such occurrence, the Permittee shall give a written follow-up notice to the Agency's regional office providing an explanation of the occurrence, the length of time during which operation continued under such conditions, measures taken by the Permittee to minimize excess emissions and correct deficiencies, and when normal operation resumed.

5a. The Permittee shall maintain records of excess emissions during malfunctions and breakdowns. As a minimum, these records shall include:

i. date and duration of malfunction or breakdown;
ii. a full and detailed explanation of the cause for such emissions;
iii. the contaminants emitted and an estimate of the quantity of emissions;
iv. the measures used to reduce the quantity of emissions and the duration of the occurrence; and
v. the steps taken to prevent similar malfunctions or breakdowns or reduce their frequency and severity.

b. These records shall be retained for at least two years following an event, maintained at a readily accessible location at the plant, and be available to representatives of the Agency during normal working and/or operating hours.

6. The Permittee shall maintain and operate a continuous opacity monitoring system on the above-referenced equipment. On or before the 30th day of each calendar quarter, the Permittee shall submit to the Agency a report for the last preceding calendar quarter of any and all opacity measurements which exceed 30 percent, averaged over a six minute period.

These "excess opacity" reports shall provide, for each such incident, the percent opacity measured as well as the date and span of such incident. These reports shall also specify for each incident whether it occurred during startup, shut-down, or malfunction. If a malfunction is indicated in the report, all corrective actions taken, if any, shall be reported. The reports shall also specify, for each calendar quarter, the date of those periods during which the continuous monitoring system was not in operation.

If you have any questions on this, please call Bradford S. Kohlmeyer at 217/782-2113.

Donald E. Sutton/mg

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:BSK:mab/500M/sp/108-110

cc: Region 3

Illinois Environmental Protection Agency · P. O. Box 19276, Springfield, IL 62794-9276

217/782-2113

OPERATING PERMIT

AUG 1 1991 RECEIVED

C. Bach

PERMITTEE

Shell Oil Company
Attn: J. N. Brewster
Post Office Box 262
Wood River, Illinois 62095

Application No.: 72110623
Applicant's Designation: WRR-9
Subject: Oil Recovery Facilities
Date Issued: July 29, 1991
Location: SA-11A and Route 111, Roxana

I.D. No.: 119090AAA
Date Received: April 30, 1991

Expiration Date: June 30, 1996

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of tanks and vent stack as described in the above-referenced application. This Permit is subject to standard conditions attached hereto.

It should be noted that this permit has been revised to delete some slop oil tanks as stated in the application.

Donald E. Sutton

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:DGP:jab/550M/4

cc: Region 3

Illinois Environmental Protection Agency · P. O. Box 19276, Springfield, IL 62794-9276

217/782-2113

OPERATING PERMIT -- NSPS SOURCE

Rec'd 2/25/92

PERMITTEE

Shell Oil Company
Attn: J.N. Brewster
P.O. Box 262
Wood River, IL 62095

File

Application No.: 72110624
Applicant's Designation: WRR-10&40
Subject: Catalytic Dewaxing Unit and Lube Oil Deasphalting Unit
Date Issued: February 18, 1992
Location: SA-11A and Route 111, Roxana

I.D. No.: 119090AAA
Date Received: December 24, 1991
Expiration Date: April 30, 1995

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment for deasphalting unit consisting of closed vent process equipment, hot well vent, storage tanks, two gas fired heaters and one catalytic dewaxing unit consisting of closed-vent process equipment and one process heater (F-1) as described in the above referenced application. This Permit is subject to standard conditions attached hereto and the following special conditions:

1a. This Catalytic Dewaxing Unit is subject to a New Source Performance Standard (NSPS) for petroleum refineries, 40 CFR 60, Subparts A, J and GGG. The Illinois EPA is administering NSPS in Illinois on behalf of the United States EPA under a delegation agreement.

b. The hydrogen sulfide concentration in the fuel gas to the F-1 Charge Heater shall not exceed 0.10 grains per dry standard cubic foot, pursuant to the New Source Performance Standard, 40 CFR 60, Subpart J.

c. Components in volatile organic material service shall be designed, inspected, monitored, tested and repaired, to control equipment leaks of volatile organic compounds, in accordance with the New Source Performance Standard, 40 CFR 60, Subpart GGG.

d. At all times, the Permittee shall also, to the extent practicable, maintain and operate the F-1 Charge Heater, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.

e. The Permittee shall operate a continuous emission monitor (CEM) for hydrogen sulfide concentration in the fuel gas to the F-1 Charge Heater. The CEM shall meet the requirements of 40 CFR 60.105(a)(3) or (a)(4) and the applicable requirements of Performance Specification No. 7 of Appendix B.

2a. The Permittee shall fulfill applicable notification, recordkeeping, and reporting requirements of the NSPS, 40 CFR 60.7 and 60.592(e) (refer to 60.486 and 60.487).

b. Any required reports and notifications concerning equipment operation, performance testing or a continuous monitoring system shall be sent to the Agency's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control - Regional Office
2009 Mall Street
Collinsville, Illinois 62234

3a. Operation in excess of applicable sulfur dioxide emission standards of 35 Ill. Adm. Code Part 214 is allowed during malfunction and breakdown of the sulfur recovery system, pursuant to Part 201, Subpart I. This condition supersedes standard condition 9.

b. The permittee shall immediately notify the Agency's regional office:

Illinois Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, IL 62234

by phone (618/346-5120) of any malfunction of any component of the permittee's sulfur recovery system which may result in a violation of the sulfur dioxide regulations.

c. Whenever the Shell sulfur plant has not recovered at least 75% of the total sulfur available from Amoco, Clark, and the permittee, for a four hour period, the permittee shall institute SO_2 emission reduction procedures. The procedures shall reduce uncontrolled SO_2 emission to no more than 16.0 ton/hr. These procedures shall include:

i) All necessary changes in refinery operations, and;
ii) Any other reasonable action to reduce emissions.

d. The Permittee shall maintain the records required by standard condition 9.b.

4a. For equipment subject to NSPS:

i. The permittee shall immediately notify the Agency's regional office by phone of any malfunction or breakdown, ot orhter occurrence with respect to its sulfur recovery system that results in any violation of the SO_2 emission standards.

ii. The Permittee shall notify the Agency's regional office by telephone as soon as possible during normal working hours upon the release of excess emissions due to malfunctions or breakdowns, or other occurrences.

b. For such equipment the Permittee shall comply with all reasonable and safe directives of the regional office upon malfunctions or breakdowns or other occurrences.

c. For such equipment the permittee shall maintain records of malfunctions and breakdowns and other occurrences resulting in excess emissions. As a minimum, these records shall include the information identified in Condition 5.

5. Within five (5) working days of a malfunction or breakdown or other occurrences resulting in excess emissions the Permittee shall give a written follow-up notice to the Agency's regional office providing

i. an explanation of the occurrence

ii. the length of time during which operation continued under such conditions and an estimate of the quantity of emissions

iii. the measures used to reduce the quantity of emission and length of time during which such operations occurred.

iv. the steps to be taken to prevent similar malfunctions or breakdowns, or occurrences, and

v. when normal operation resumed.

6. Any required reports and notifications concerning equipment operation, performance testing or a continuous monitoring system shall be sent to the Agency's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
2009 Mall St.
Collinsville, Illinois 62234

7. Annual emissions from catalytic dewaxing unit shall not exceed the amounts specified in the Table below.

Emission Source	Firing Rate (mmbtu/hr)	Emissions (Tons/Year) PM	SO2	NOX	VOM	CO
F-1 Charge Heater	20.5	0.4	2.5	12.6	.3	3.1
Equipment Leaks					20.2	

The limits for the charge heater are based on standard emission factors, firing of refinery fuel-gas containing the maximum hydrogen sulfide allowed by the NSPS, and the maximum hours of operation (8760 hours/year) indicated in the permit application. The limit for equipment leaks is based on standard emission factors applied to the number and type of components contained in the unit as indicated in the permit application.

Donald E. Sutton

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:DGP:mab/1030M/sp/60-63

cc: IEPA, FOS, Region 3
USEPA

217/782-2113

OPERATING PERMIT

Rec'd 3-16-92

PERMITTEE

Shell Oil Company
Attn: J.N. Brewster
SA-11A and Route 111
P.O. Box 262
Wood River, IL 62095

Application No.: 72110625 I.D. No.: 119090AAA
Applicant's Designation: WRR-11 Date Received: January 21, 1992
Subject: Lube Fractionation and Extraction Unit
Date Issued: March 11, 1992 Expiration Date: September 25, 1994
Location: SA-11A and Route 111, Roxana

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of storage tanks, closed vent process equipment, three gas-fired process heaters, six new heat exchangers, one new vessel and eight new pumps as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. Operation in excess of applicable sulfur dioxide emission standards is allowed during malfunction and breakdown of the sulfur recovery system provided that:

   a. The permittee shall immediately notify the Agency's regional office:

      Environmental Protection Agency
      Division of Air Pollution Control
      2009 Mall Street
      Collinsville, Illinois 62234

      by phone (618/346-5120) of any malfunction of any component of the permittee's sulfur recovery system which may result in a violation of the sulfur dioxide regulations.

   b. Whenever the Shell sulfur plant has not recovered at least 75% of the total sulfur available from Amoco, Clark, and the permittee, for a four hour period, the permittee shall institute SO_2 emission reduction procedures. The procedures shall reduce uncontrolled SO_2 emission to no more than 16.0 ton/hr. These procedures shall include:

i) All necessary changes in refinery operations, and;

ii) Any other reasonable action to reduce emissions.

This condition supersedes standard condition No. 9 and 9.a for malfunction and breakdown of the sulfur recovery system. The permittee shall maintain the records required by standard condition No. 9.b.

2. This permit is issued based upon replacement of eight existing pumps with eight new pumps without any increase in emissions above those previously allowed. The heat exchangers and new vessel are not vented to the atmosphere.

It should be noted that this permit has been revised to include operation of the equipment described in construction permit 92010039.

In addition, it should also be noted that the emission sources covered by this permit may be subject to revised regulations promulgated by the Illinois Pollution Control Board for emission sources emitting volatile organic material. It will be necessary to comply with their requirements by May 15, 1992.

Donald E. Sutton /mab

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:IDN:mab/1089M/sp/28-29

cc: Region 3

217/782-2113

OPERATING PERMIT

DEC 6 1990 RECEIVED C. Bach

PERMITTEE

Shell Oil Company
Attn: J.N. Brewster
P.O. Box 262
Wood River, IL 62095

Application No.: 72110627
Applicant's Designation: WRR-12
Subject: Lube Oil Hydrotreater
Date Issued: November 28, 1990
Location: SA-11A and Route 111, Roxana

I.D. No.: 119090AAA
Date Received: September 19,1990

Expiration Date: November 25, 1995

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of closed-vent process equipment and one gas-fired process heater as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. Operation in excess of applicable sulfur dioxide emission standards is allowed during malfunction and breakdown of the sulfur recovery system provided that:

   a. The permittee shall immediately notify the Agency's regional office:

      Environmental Protection Agency
      Division of Air Pollution Control
      2009 Mall Street
      Collinsville, Illinois 62234

      by phone (618/346-5120) of any malfunction of any component of the permittee's sulfur recovery system which may result in a violation of the sulfur dioxide regulations.

   b. Whenever the Shell sulfur plant has not recovered at least 75% of the total sulfur available from Amoco, Clark, and the permittee, for a four hour period, the permittee shall institute SO_2 emission reduction procedures. The procedures shall reduce uncontrolled SO_2 emission to no more than 16.0 ton/hr. These procedures shall include:

      i) All necessary changes in refinery operations, and;

      ii) Any other reasonable action to reduce emissions.

This condition supersedes standard condition No. 9 and 9.a for malfunction and breakdown of the sulfur recovery system. The permittee shall maintain the records required by standard condition No. 9.b.

2. The Permittee shall notify the Agency's regional office by telephone as soon as possible during normal working hours upon the occurrence of excess emissions due to malfunctions, or breakdowns. The Permittee shall comply with all reasonable and safe directives of the regional office regarding such malfunctions and breakdowns. Within five (5) working days of such occurrence the Permittee shall give a written follow-up notice to the Agency's regional office providing an explanation of the occurrence, the length of time during which operation continued under such conditions, measures taken by the Permittee to minimize excess emissions and correct deficiencies, and when normal operation resumed.

   a. The permittee shall maintain records of excess emissions during malfunctions and breakdowns. As a minimum, these records shall include:

      (i) date and duration of malfunction or breakdown;

      (ii) a full and detailed explanation of the cause for such emissions;

      (iii) the contaminants emitted and an estimate of the quantity of emissions;

      (iv) the measures used to reduce the quantity of emissions and the duration of the occurrence; and

      (v) the steps taken to prevent similar malfunctions or breakdowns or reduce their frequency and severity.

   b. These records shall be retained for at least two years following an event, maintained at a readily accessible location at the plant, and be available to representatives of the Agency during normal working and/or operating hours.

Bharat Mathur, P.E.
Acting Manager, Permit Section
Division of Air Pollution Control

BM:DGP:jmm/sp0715L/52-53

cc: Region 3

217/782-2113

OPERATING PERMIT

OCT 22 1992
RECEIVED

PERMITTEE

Shell Oil Company
Attn: J.N. Brewster-Manager Environmental Conservation
P.O. Box 262
Wood River, IL 62095

Application No.: 72110626
Applicant's Designation: WRR-13
Subject: **Asphalt Processing Unit** (WRR-13)
Date Issued: October 19, 1992
Location: SA-11A and Route 111, Roxana

I.D. No.: 119090AAA
Date Received: August 26, 1992
Expiration Date: October 13, 1997

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of two gas-fired heaters and 86 storage tanks as described in the above-referenced application. This Permit is subject to standard conditions attached hereto.

It should be noted that the renewal of this permit does not include three asphalt converters (Nos 1, 2 and 4), corresponding afterburners, and Tanks L-82, L-111, L-112, L-121, L-128, L-129, and L-145 included in the former permit. The converters have been shut down, the tanks have been demolished and the deletion was made at the request of the Permittee.

If you have any questions on this, please call Bradford S. Kohlmeyer at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:BSK:mab/510N/sp/69

cc: Region 3

GPN

Illinois Environmental Protection Agency · P. O. Box 19276, Springfield, IL 62794-9276

217/782-2113

OPERATING PERMIT

Rec'd 12/9/91

PERMITTEE

Shell Oil Company
Attn: J.N. Brewster
SA-11A and Route 111
P.O. Box 262
Wood River, IL 62095

Application No.: 72110628
Applicant's Designation: WRR-14
Subject: Lubricants Compounding Facilities
Date Issued: December 4, 1991
Location: SA-11A and Route 111, Roxana

I.D. No.: 119090AAA
Date Received: November 19, 1991
Expiration Date: February 29, 1996

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of storage tanks containing low vapor pressure organic material as described in the above-referenced application. This Permit is subject to standard conditions attached hereto.

It should be noted that this permit has been revised so as to no longer include operation of Tank N-107. In addition, pursuant to 35 Ill. Adm. Code 201.146(n), this permit only covers those tanks listed in the application with a capacity greater than or equal to 5,000 gallons (i.e. 119 bbl).

Donald E. Sutton

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:MED:jmm/sp/863M/30

cc: Region 3

Illinois Environmental Protection Agency · P. O. Box 19276, Springfield, IL 62794-9276

217/782-2113

OPERATING PERMIT - NESHAP SOURCES

Rec'd 11-18-91

PERMITTEE

Shell Oil Company
Attn: J. N. Brewster
Post Office Box 262
Wood River, Illinois 62095

Application No.: 72110630
Applicant's Designation: WRR-16
Operating Permit Expiration Date: December 31, 1994
Subject: Alkylation Plant (WRR-16)
Date Issued: November 13, 1991
Location: SA-11A and Route 111, Roxana

I.D. No.: 119090AAA
Date Received: October 3, 1991

Permit is hereby granted to the above-designated Permittee to operate emission source(s) and/or air pollution control equipment consisting of closed-system process equipment, separator box, two process heaters, four pressurized storage tanks, two tanks for storage of non-volatile materials and flare as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This alkylation plant contain(s) sources in benzene service subject to National Emissions Standards for Hazardous Air Pollutants (NESHAP), 40 CFR 61, Subparts A, J and V. The Illinois EPA (IEPA) is administering these standards in Illinois on behalf of the United States EPA under a delegation agreement.

b. The Permittee shall comply with the applicable design and equipment standards, and marking, inspection, monitoring, tagging, repair and testing requirements in 40 CFR 61.242 or 61.243, and 61.246(b), for the following sources in benzene service, which are not in vacuum service:

i. Pumps (40 CFR 61.242-2)
ii. Compressors (40 CFR 61.242-3)
iii. Pressure relief devices in gas/vapor service (40 CFR 61.242-4)
iv. Sampling connection systems (40 CFR 61.242-5)
v. Open-ended valves or lines (40 CFR 61.242-6)
vi. Valves (40 CFR 61.242-7 or 61.243)
vii. Pressure relief devices in liquid service and flanges and other connectors (40 CFR 61.242-8)
viii. Product accumulator vessels (40 CFR 61.242-9), and
ix. Closed-vent systems and control devices (40 CFR 61.242-11).

c. If the Permittee chooses to comply with the alternative standards for valves in 40 CFR 61.243, the IEPA shall be notified at the address in Condition 5 at least 90 days before implementing such provisions.

d. Delayed repair of leaks is allowed as provided in 40 CFR 61.242-10.

e. At all times the Permittee shall, to the extent practicable, maintain and operate sources in benzene service, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.

2. The Permittee shall follow the procedures specified by 40 CFR 61.245 for inspections and compliance tests.

3a. The permittee shall maintain records as required by 40 CFR 61.246, including:

i. Records on the detection, identity, and repair of all leaks (40 CFR 61.246(c))
ii. Records on the operation of each closed-vent system and control device (40 CFR 61.246(d))
iii. Records identifying all sources subject to 40 CFR 61.242 (40 CFR 61.246(e)), and
iv. Other records as are applicable to the operation of the plant.

b. These records shall be kept at a readily accessible location at the plant, and shall be available for inspection by the Agency.

4. The Permittee shall submit semi-annual reports as required by 40 CFR 61.247(b) including:

i. Monthly data on leaks and repairs,
ii. Dates of process unit shutdowns,
iii. Revisions to the information submitted in previous reports, and
iv. Results of performance testing within the reporting period.

5. Any required reports and notifications concerning operation, testing, or repairs shall be sent to the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234

6a. Emission Limits

The sulfur dioxide emissions from the alkylation plant, benzene extraction unit, and catalytic feed hydrotreating units process heaters or boilers combined shall not exceed 346 lb/hr, on a 3-hour block average basis, pursuant to §214.382(c)(3)(E) and (d).

b. Analysis

i. The flasher pitch burned in these heaters or boilers shall not contain more than 3% sulfur by weight as determined by the appropriate ASTM method. A representative sample shall be taken and analyzed each day.

ii. The refinery fuel gas burned shall not contain more than 39 grains H_2S/100 dscf. A representative sample of the gas shall be taken and analyzed every 8 hours by the Tutweiler procedure, in accordance with Section 214.382(c)(2), if the sulfur content of the gas is not analyzed by a continuous H_2S monitor meeting the requirements of New Source Performance Standards (40 CFR 60.105(a)(4) and the applicable requirements of Performance Specification No. 7 of Appendix B).

c. Recordkeeping

i. The Permittee shall keep records of the amount of pitch and refinery fuel gas burned per hour and lb/hr of sulfur dioxide emitted from each heater and boiler so as to demonstrate compliance with §214.382(c).

ii. The Permittee shall keep detailed records of the analyses performed pursuant to paragraph (b).

iii. The records, as required by c(i-ii), shall be entered in a log or computerized system each day, to address compliance on a 3-hour block average basis.

iv. These records and the log shall be retained for two years from the date of an entry and shall be available for inspection upon request by the Agency.

d. Quarterly Report

Shell shall submit a quarterly report, listing the total sulfur dioxide emissions each month for the entire manufacturing complex, and the highest and second highest daily emission rates, for each month during the quarter.

7a. Operation in excess of applicable sulfur dioxide emission standards is allowed during malfunction and breakdown of the sulfur recovery system provided that:

i. The permittee shall immediately notify the Agency's regional office:

Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234

by phone (618/346-5120) of any malfunction of any component of the permittee's sulfur recovery system which may result in a violation of the sulfur dioxide regulations.

ii. Whenever the Shell sulfur plant has not recovered at least 75% of the total sulfur available from Amoco, Clark, and the permittee, for a four hour period, the permittee shall institute SO_2 emission reduction procedures. The procedures shall reduce uncontrolled SO_2 emission to no more than 16.0 ton/hr. These procedures shall include:

A) All necessary changes in refinery operations, and;

B) Any other reasonable action to reduce emissions.

This condition supersedes standard condition No. 9 and 9.a for malfunction and breakdown of the sulfur recovery system. The permittee shall maintain the records required by standard condition No. 9.b.

Donald E Sutton

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:DGP:rd3450q/11-14

cc: IEPA, FOS Region 3
USEPA

State of Illinois
ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director

2200 Churchill Road, Springfield, IL 62794-9276

OPERATING PERMIT

AUG 25 1993
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PERMITTEE

Shell Oil Company
Attention: J. N. Brewster
SA-11A and Route 111 (P.O. Box 262)
Wood River, Illinois 62095

Application No: 72110614 **I.D. No.:** 119090AAA
Applicants Designation: WRR-17 **Date Received:** August 2, 1993
Date Issued: August 19, 1993 **Expiration Date:** August 19, 1998
Subject: Precursor Unit
Location: SA-11A and Route 111, Roxana

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of closed-vent process equipment, one process heater and storage tanks as described in the above referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1 a. Operation in excess of applicable sulfur dioxide emission standards is allowed during malfunction and breakdown of the sulfur recovery system provided that:

i. The Permittee shall immediately notify the Agency's regional office:

Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234

by phone (618/346-5120) of any malfunction of any component of the Permittee's sulfur recovery system which may result in a violation of the sulfur dioxide regulations.

ii. Whenever the Shell sulfur plant has not recovered at least 75% of the total sulfur available from Amoco, Clark, and the Permittee, for a four hour period, the Permittee shall institute SO_2 emission reduction procedures. The procedures shall reduce uncontrolled SO_2 emissions to no more than 16.0 tons/hr. These procedures shall include:

A) All necessary changes in refinery operations, and;

B) Any other reasonable action to reduce emissions.

b. this condition supersedes standard condition No. 9 and 9.a for malfunction and breakdown of the sulfur recovery system. The Permittee shall maintain the records required by standard condition No. 9.b.

State of Illinois
ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director

2200 Churchill Road, Springfield, IL 62794-9276

If you have any questions concerning this letter, please contact Bradford S. Kohlmeyer at 217/782-2113.

Donald E. Sutton

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:bsk

CC: Region 3

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217/782-2113

OPERATING PERMIT -- NESHAP/NSPS SOURCES

AUG 4 1993
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C. Bach

PERMITTEE

Shell Oil Company
Attention: J.N. Brewster
Post Office Box 262
Wood River, Illinois 62095

Application No.: 72110612
Applicant's Designation: WRR-19
Expiration Date: August 31, 1995
Subject: **Benzene Extraction Unit**
Date Issued: July 28, 1993
Location: SA-11A and Route 111, Roxana

I.D. No.: 119090AAA
Date Received: June 2, 1993

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of closed-vent process equipment, organic material storage tanks with secondary seals, sulfolane bearing water storage tank and two process heaters as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This benzene extraction unit contain(s) sources in benzene service subject to National Emissions Standards for Hazardous Air Pollutants (NESHAP), 40 CFR 61, Subparts A, J and V. The Illinois EPA (IEPA) is administering these standards in Illinois on behalf of the United States EPA under a delegation agreement.

b. The Permittee shall comply with the applicable design and equipment standards, and marking, inspection, monitoring, tagging, repair and testing requirements in 40 CFR 61.242 or 61.243, and 61.246(b), for the following sources in benzene service, which are not in vacuum service:

i. Pumps (40 CFR 61.242-2)
ii. Compressors (40 CFR 61.242-3)
iii. Pressure relief devices in gas/vapor service (40 CFR 61.242-4)
iv. Sampling connection systems (40 CFR 61.242-5)
v. Open-ended valves or lines (40 CFR 61.242-6)
vi. Valves (40 CFR 61.242-7 or 61.243)
vii. Pressure relief devices in liquid service and flanges and other connectors (40 CFR 61.242-8)
viii. Product accumulator vessels (40 CFR 61.242-9), and
ix. Closed-vent systems and control devices (40 CFR 61.242-11).

b. The CH-290 storage tanks shall comply with the equipment standards contained in the NSPS, 40 CFR 60.112b.

c. At all times the Permittee shall, to the extent practicable, maintain and operate these tanks, in a manner consistent with good air pollution control practice for minimizing emissions, pursuant to the New Source Performance Standard.

7a. The Permittee shall fulfill the Testing and Procedures requirements of 60.113b. Notification should be sent to the address in condition 5.

b. The Permittee shall fulfill applicble notification and recordkeeping requirements of the NSPS, 40 CFR 60.7 and 60.115b and the NESHAP, 40 CFR 61.7, 61.356 and 61.257.

c. The Permittee shall notify the Agency of any change in the type of material stored that are different than those identified in the application.

d. The above records shall be retained for two years and shall be available for inspection by the Agency.

8. This permit is issued based on negligible emissions of volatile organic material and benzene from the CH-290 tank. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year. This estimate is based on the tank containing only 200 ppm benzene and two turnovers per year (less than 5,000 barrels per year throughput). Sulfolane is a solid at room temperature.

9a. Emission Limits

The sulfur dioxide emissions from the two (H-1 and H-2) process heaters in the benzene extraction and the process heaters in the alkylation and catalytic feed hydrotreating units combined shall not exceed 346 lb/hr, on a 3-hour block average basis, pursuant to §214.382(c)(3)(E) and (d).

b. Analysis

i. The flasher pitch burned in these heaters or boilers shall not contain more than 3% sulfur by weight as determined by the appropriate ASTM method. A representative sample shall be taken and analyzed each day.

ii. The refinery fuel gas burned shall not contain more than 39 grains H_2S/100 dscf. A representative sample of the gas shall be taken and analyzed every 8 hours by the Tutweiler procedure, if the sulfur content of the gas is not analyzed by a continuous H_2S monitor meeting the requirements of New Source Performance Standards (40 CFR 60.105(a)(4) and the applicable requirements of Performance Specification No. 7 of Appendix B).

c. Recordkeeping

i. The Permittee shall keep records of the amount of pitch and refinery fuel gas burned per hour and lb/hr of sulfur dioxide emitted from each heater and boiler so as to demonstrate compliance with §214.382(c).

ii. The Permittee shall keep detailed records of the analyses performed pursuant to paragraph (b).

iii. The records, as required by c(i-ii), shall be entered in a log or computerized system each day, to address compliance on a 3-hour block average basis.

iv. These records and the log shall be retained for two years from the date of an entry and shall be available for inspection upon request by the Agency.

d. Quarterly Report

Shell shall submit a quarterly report, listing the total sulfur dioxide emissions each month for the entire manufacturing complex, and the highest and second highest daily emission rates, for each month during the quarter.

10. Operation in excess of applicable sulfur dioxide emission standards is allowed during malfunction and breakdown of the sulfur recovery system provided that:

a. The permittee shall imediately notify the Agency's regional office:

Environmental Proyection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234

by phone (618/346-5120) of any malfunction of any component of the permittee's sulfur recovery system which may result in a violation of the sulfur dioxide regulations.

b. Whenever the Shell sulfur plant has not recovered at least 75% of the total sulfur available from Amoco, Clark, and the permittee, for a four hour period, the permittee shall institute SO_2 emission reduction procedures. The procedures shall reduce uncontrolled SO_2 emission to no more than 16.0 ton/hr. These procedures shall include:

i. All necessary changes in refinery operations, and;
ii) Any other reasonable action to reduce emissions.

c. Condition 10 supersedes Standard Condition 9.a.

If you have any questions on this, please call Dan Punzak at 217/782-2113.

Donald E. Sutton

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:DGP:jmm/sp0156K/10-14

cc: IEPA, FOS Region 3
USEPA
J. O'Donnell

217/782-2113

OPERATING PERMIT

PERMITTEE
Shell Oil Company
Attn: J.N. Brewster
P.O. Box 262
Wood River, IL 62095

Application No.: 72110611 I.D. No.: 119090AAA
Applicant's Designation: WRR-20 Date Received: December 27, 1991
Subject: Steam Methane Reformer/Hydrocracker Unit
Date Issued: February 24, 1992 Expiration Date: March 31, 1995

Location: SA-11A and Route 111, Roxana

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of reformer/hydrocracker, separator box, and four process heaters including new low NOX burners on two heaters as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. a. Emission Limits

The sulfur dioxide emissions from the Hydrocracker Unit, Catalytic Reformer No. 1 and saturates gas plant process heaters or boilers combined shall not exceed 1660 lb/hr, on a 3-hour block average basis, pursuant to §214.382(c)(3)((G) and (d).

b. Analysis

i. The flasher pitch burned in these heaters or boilers shall not contain more than 3% sulfur by weight as determined by the appropriate ASTM method. A representative sample shall be taken and analyzed each day.

ii. The refinery fuel gas burned shall not contain more than 39 grains H_2S/100 dscf. A representative sample of the gas shall be taken and analyzed every 8 hours by the Tutweiler procedure, if the sulfur content of the gas is not analyzed by a continuous H_2S monitor meeting the requirements of New Source Performance Standards (40 CFR 60.105(a)(4) and the applicable requirements of Performance Specification No. 7 of Appendix B).

c. Recordkeeping

i. The Permittee shall keep records of the amount of pitch and refinery fuel gas burned per hour and lb/hr of sulfur dioxide emitted from each heater and boiler so as to demonstrate compliance with §214.382(c).

ii. The Permittee shall keep detailed records of the analyses performed pursuant to paragrapn (b).

iii. The records, as required by c(i-ii), shall be entered in a log or computerized system each day, to address compliance on a 3-hour block average basis.

iv. These records and the log shall be retained for two years from the date of an entry and shall be available for inspection upon request by the Agency.

d. Quarterly Report

Shell shall submit a quarterly report, listing the total sulfur dioxide emissions each month for the entire manufacturing complex, and the highest and second highest daily emission rates, for each month during the quarter.

2. Operation in excess of applicable sulfur dioxide emission standards is allowed during malfunction and breakdown of the sulfur recovery system provided that:

a. The permittee shall immediately notify the Agency's regional office:

Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234

by phone (618/346-5120) of any malfunction of any component of the permittee's sulfur recovery system which may result in a violation of the sulfur dioxide regulations.

b. Whenever the Shell sulfur plant has not recovered at least 75% of the total sulfur available from Amoco, Clark, and the permittee, for a four hour period, the permittee shall institute SO_2 emission reduction procedures. The procedures shall reduce uncontrolled SO_2 emission to no more than 16.0 ton/hr. These procedures shall include:

i) All necessary changes in refinery operations, and;

ii) Any other reasonable action to reduce emissions.

c. Condition 2 supersedes standard condition No. 9.a.

Donald E. Sutton

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:DGP:mab/135M/sp/32-33

cc: Region 3

State of Illinois
ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director

2200 Churchill Road, Springfield, IL 62794-9276

217/782-2113

SEP 22 1993
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OPERATING PERMIT - NESHAP SOURCES BENZENE

PERMITTEE

Shell Oil Company
Attn: J.N. Brewster
SA-11A and Route 111 (P.O. Box 262)
Wood River, Illinois 62095

Application No.: 72110610
Applicant's Designation: WRR-21
Expiration Date: September 17, 1996
Subject: **Catalytic Reformer Unit No. 1** (WRR-21)
Date Issued: September 17, 1993
Location: SA-11A and Route 111, Roxana

I.D. No.: 119090AAA
Date Received: September 3, 1993

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of closed-vent process equipment, six process heaters, and one storage tank as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This catalytic reformer unit contain(s) sources in benzene service subject to National Emissions Standards for Hazardous Air Pollutants (NESHAP), 40 CFR 61, Subparts A, J and V. The Illinois EPA (IEPA) is administering these standards in Illinois on behalf of the United States EPA under a delegation agreement.

b. The Permittee shall comply with the applicable design and equipment standards, and marking, inspection, monitoring, tagging, repair and testing requirements in 40 CFR 61.242 or 61.243, and 61.246(b), for the following sources in benzene service, which are not in vacuum service:

i. Pumps (40 CFR 61.242-2)
ii. Compressors (40 CFR 61.242-3)
iii. Pressure relief devices in gas/vapor service (40 CFR 61.242-4)
iv. Sampling connection systems (40 CFR 61.242-5)
v. Open-ended valves or lines (40 CFR 61.242-6)
vi. Valves (40 CFR 61.242-7 or 61.243)
vii. Pressure relief devices in liquid service and flanges and other connectors (40 CFR 61.242-8)
viii. Product accumulator vessels (40 CFR 61.242-9), and
ix. Closed-vent systems and control devices (40 CFR 61.242-11).

c. If the Permittee chooses to comply with the alternative standards for valves in 40 CFR 61.243, the IEPA shall be notified at the address in Condition 5 at least 90 days before implementing such provisions.

d. Delayed repair of leaks is allowed as provided in 40 CFR 61.242-10.

e. At all times the Permittee shall, to the extent practicable, maintain and operate sources in benzene service, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.

2. The Permittee shall follow the procedures specified by 40 CFR 61.245 for inspections and compliance tests.

3a. The permittee shall maintain records as required by 40 CFR 61.246, including:

i. Records on the detection, identity, and repair of all leaks (40 CFR 61.246(c))
ii. Records on the operation of each closed-vent system and control device (40 CFR 61.246(d))
iii. Records identifying all sources subject to 40 CFR 61.242 (40 CFR 61.246(e)), and
iv. Other records as are applicable to the operation of the plant.

b. These records shall be kept at a readily accessible location at the plant, and shall be available for inspection by the Agency.

4. The Permittee shall submit semi-annual reports as required by 40 CFR 61.247(b) including:

i. Monthly data on leaks and repairs,
ii. Dates of process unit shutdowns,
iii. Revisions to the information submitted in previous reports, and
iv. Results of performance testing within the reporting period.

5. Any required reports and notifications concerning operation, testing, or repairs shall be sent to the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234

6. The Permittee shall keep records of periods when the flame on the Aromatics North Unit Flare is extinguished as detected by an IR Camera/Alarm.

7a. Emission Limits from process heaters:

The sulfur dioxide emissions from the Catalytic Reformer No. 1, Hydrocracker Unit and Saturates Gas Plant process heaters combined shall not exceed 1660 lb/hr, on a 3-hour block average basis, pursuant to §214.382(c)(3)(G) and (d).

b. Analysis

i. The flasher pitch burned in these heaters or boilers shall not contain more than 3% sulfur by weight as determined by the appropriate ASTM method. A representative sample shall be taken and analyzed each day.

ii. The refinery fuel gas burned shall not contain more than 39 grains H_2S/100 dscf. A representative sample of the gas shall be taken and analyzed every 8 hours by the Tutweiler procedure.

c. Recordkeeping

i. The Permittee shall keep records of the amount of pitch and refinery fuel gas burned per hour and lb/hr of sulfur dioxide emitted from each heater and boiler so as to demonstrate compliance with §214.382(c).

ii. The Permittee shall keep detailed records of the analyses performed pursuant to paragraph (b).

iii. The records, as required by c(i-ii), shall be entered in a log or computerized system each day, to address compliance on a 3-hour block average basis.

iv. These records and the log shall be retained for two years from the date of an entry and shall be available for inspection upon request by the Agency.

d. Quarterly Report

Shell shall submit a quarterly report, listing the total sulfur dioxide emissions each month for the entire manufacturing complex, and the highest and second highest daily emission rates, for each month during the quarter.

8. Operation in excess of applicable sulfur dioxide emission standards is allowed during malfunction and breakdown of the sulfur recovery system provided that:

a. The permittee shall immediately notify the Agency's regional office:

Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234

by phone (618/346-5120) of any malfunction of any component of the permittee's sulfur recovery system which may result in a violation of the sulfur dioxide regulations.

b. Whenever the Shell sulfur plant has not recovered at least 75% of the total sulfur available from Amoco, Clark, and the permittee, for a four hour period, the permittee shall institute SO_2 emission reduction procedures. The procedures shall reduce uncontrolled SO_2 emission to no more than 16.0 ton/hr. These procedures shall include:

i. All necessary changes in refinery operations, and;

ii. Any other reasonable action to reduce emissions.

9. The Permittee shall notify the Agency's regional office by telephone as soon as possible during normal working hours upon the occurrence of excess emissions due to malfunctions, or breakdowns. The Permittee shall comply with all reasonable and safe directives of the regional office regarding such malfunctions and breakdowns. Within five (5) working days of such occurrence the Permittee shall give a written follow-up notice to the Agency's regional office providing an explanation of the occurrence, the length of time during which operation continued under such conditions, measures taken by the Permittee to minimize excess emissions and correct deficiencies, and when normal operation resumed.

If you have any questions on this, please call Bradford S. Kohlmeyer at 217/782-2113.

Donald E. Sutton/ME

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:BSK:jab/550M/51-54

cc: IEPA, FOS Region 3
USEPA

Illinois Environmental Protection Agency · P. O. Box 19276, Springfield, IL 62794-9276

217/782-2113

Rec'd 2/25/92

OPERATING PERMIT

PERMITTEE

Shell Oil Company
Attn: J.N. Brewster
P.O. Box 262
Wood River, IL 62095

Application No.: 72110609
Applicant's Designation: WRR-22
Subject: Saturates Gas Plant
Date Issued: February 21, 1992
Location: SA-11A and Route 111, Roxana

I.D. No.: 119090AAA
Date Received: February 3, 1992
Expiration Date: April 30, 1995

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of closed-vent process equipment and one process heater as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. Emission Limits

The sulfur dioxide emissions from the hydrocracker unit, catalytic reformer No. 1, and the saturates gas plant process heaters or boilers combined shall not exceed 1,660 lb/hr, on a 3-hour block average basis, pursuant to §214.382(c)(3)(G) and (d).

b. Analysis

i. The flasher pitch burned in these heaters or boilers shall not contain more than 3% sulfur by weight as determined by the appropriate ASTM method. A representative sample shall be taken and analyzed each day.

ii. The refinery fuel gas burned shall not contain more than 39 grains H_2S/100 dscf. A representative sample of the gas shall be taken and analyzed every 8 hours by the Tutweiler procedure, if the sulfur content of the gas is not analyzed by a continuous H_2S monitor meeting the requirements of New Source Performance Standards (40 CFR 60.105(a)(4) and the applicable requirements of Performance Specification No. 7 of Appendix B).

c. Recordkeeping

i. The Permittee shall keep records of the amount of pitch and refinery fuel gas burned per hour and lb/hr of sulfur dioxide emitted from each heater and boiler so as to demonstrate compliance with §214.382(c).

ii. The Permittee shall keep detailed records of the analyses performed pursuant to paragraph (b).

iii. The records, as required by c(i-ii), shall be entered in a log or computerized system each day, to address compliance on a 3-hour block average basis.

iv. These records and the log shall be retained for two years from the date of an entry and shall be available for inspection upon request by the Agency.

d. Quarterly Report

Shell shall submit a quarterly report, listing the total sulfur dioxide emissions each month for the entire manufacturing complex, and the highest and second highest daily emission rates, for each month during the quarter.

2. Operation in excess of applicable sulfur dioxide emission standards is allowed during malfunction and breakdown of the sulfur recovery system provided that:

a. The permittee shall immediately notify the Agency's regional office:

Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234

by phone (618/346-5120) of any malfunction of any component of the permittee's sulfur recovery system which may result in a violation of the sulfur dioxide regulations.

b. Whenever the Shell sulfur plant has not recovered at least 75% of the total sulfur available from Amoco, Clark, and the permittee, for a four hour period, the permittee shall institute SO_2 emission reduction procedures. The procedures shall reduce uncontrolled SO_2 emission to no more than 16.0 ton/hr. These procedures shall include:

i. All necessary changes in refinery operations, and;
ii. Any other reasonable action to reduce emissions.

Donald E. Sutton

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:DGP:jmm/sp/1027M/83-84

cc: Region 3

217/782-2113

OPERATING PERMIT-REVISED

FEB 19 1993
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C. Beck

PERMITTEE

Shell Oil Company
Attn: J.N. Brewster
P.O. Box 262
Wood River, Illinois 62095

Application No.: 72110637
Applicant's Designation: WRR-23
Subject: Distillate Hydrotreater
Date Issued: February 11, 1993
Location: SA-11A and Route 111, Roxana

I.D. No.: 119090AAA
Date Received: February 1, 1993
Expiration Date: October 31, 1995

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of closed-vent process equipment and one process heater with low NO_x burner as described in the above-referenced application. This Permit is subject to standard conditions attached hereto.

1a. Emission Limits

The sulfur dioxide emissions from the aromatics east process heaters combined, which includes the process heater in this appliction, shall not exceed 768 lb/hr, on a 3-hour block average basis, pursuant to §214.382(c)(3)(H) and (d).

b. Analysis

i. The flasher pitch burned in these heaters or boilers shall not contain more than 3% sulfur by weight as determined by the appropriate ASTM method. A representative sample shall be taken and analyzed each day.

ii. The refinery fuel gas burned shall not contain more than 39 grains H_2S/100 dscf. A representative sample of the gas shall be taken and analyzed every 8 hours by the Tutweiler procedure, if the sulfur content of the gas is not analyzed by a continuous H_2S monitor meeting the requirements of New Source Performance Standards (40 CFR 60.105(a)(4) and the applicable requirements of Performance Specification No. 7 of Appendix B).

c. Recordkeeping

i. The Permittee shall keep records of the amount of pitch and refinery fuel gas burned per hour and lb/hr of sulfur dioxide emitted from each heater and boiler so as to demonstrate compliance with §214.382(c).

ii. The Permittee shall keep detailed records of the analyses performed prusuant to paragraph (b).

iii. The records, as required by c(i-ii), shall be entered in a log or computerized system each day, to address compliance on a 3-hour block average basis.

iv. These records and the log shall be retained for two years from the date of an entry and shall be available for inspection upon request by the Agency.

d. Quarterly Report

Shell shall submit a quarterly report, listing the total sulfur dioxide emissions each month for the entire manufacturing complex, and the highest and second highest daily emission rates, for each month during the quarter.

2. Operation in excess of applicable sulfur dioxide emission standards is allowed during malfunction and breakdown of the sulfur recovery system provided that:

a. The permittee shall immediately notify the Agency's regional office:

Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234

by phone (618/346-5120) of any malfunction of any component of the permittee's sulfur recovery system which may result in a violation of the sulfur dioxide regulations.

b. Whenever the Shell sulfur plant has not recovered at least 75% of the total sulfur available from Amoco, Clark, and the permittee, for a four hour period, the permittee shall institute SO_2 emission reduction procedures. The procedures shall reduce uncontrolled SO_2 emission to no more than 16.0 ton/hr. These procedures shall include:

i) All necessary changes in refinery operations, and;

ii) Any other reasonable action to reduce emissions.

This condition supersedes standard condition No. 9 and 9.a for malfunction and breakdown of the sulfur recovery system. The permittee shall maintain the records required by standard condition No. 9.b.

It should be noted that this Permit has been revised to include operation of the equipment described in construction permit 93020001.

If you have questions on this, please call Bradford S. Kohlmeyer at 217/782-2113.

Donald E. Sutton/ME

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:BSK:ds:0329M/27-29

cc: Region 3

State of Illinois
ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director

2200 Churchill Road, Springfield, IL 62794-9276

OPERATING PERMIT

AUG 23 1993
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C. Bach

PERMITTEE

Shell Oil Company
Attention: J. N. Brewster
SA-11A and Route 111 (P.O. Box 262)
Wood River, Illinois 62095

Application No: 72110636
Applicants Designation: WRR-24
Date Issued: August 17, 1993
Subject: Kerosene Hydrotreater Nos. 1 and 2
Location: SA-11A and Route 111, Roxana

I.D. No.: 119090AAA
Date Received: August 2, 1993
Expiration Date: August 17, 1998

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of closed-vent process equipment and two process heaters as described in the above referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1 a. Operation in excess of applicable sulfur dioxide emission standards is allowed during malfunction and breakdown of the sulfur recovery system provided that:

i. The Permittee shall immediately notify the Agency's regional office:

Illinois Environmental Protection Agency
Division of Air Pollution Control - Regional Office
2009 Mall Street
Collinsville, Illinois 62234

by phone (618/346-5120) of any malfunction of any component of the Permittee's sulfur recovery system which may result in a violation of the sulfur dioxide regulations.

ii. Whenever the Shell sulfur plant has not recovered at least 75% of the total sulfur available from Amoco, Clark, and the Permittee, for a four hour period, the Permittee shall institute SO_2 emission reduction procedures. The procedures shall reduce uncontrolled SO_2 emissions to no more than 16.0 ton/hr. These procedures shall include:

A) All necessary changes in refinery operations, and;

B) Any other reasonable action to reduce emissions.

b. This condition supersedes standard condition No. 9 and 9.a for malfunction and breakdown of the sulfur recovery system. The permittee shall maintain the records required by standard condition No. 9.b.

State of Illinois
ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director

2200 Churchill Road, Springfield, IL 62794-9276

If you have any questions concerning this letter, please contact Bradford S. Kohlmeyer at 217/782-2113.

Donald E. Sutton/MS

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:bsk

CC: Region 3

GFN

State of Illinois
ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director
217/782-2113

2200 Churchill Road, Springfield, IL 62794-9276

OPERATING PERMIT - NESHAP SOURCES BENZENE

Rec'd 8/27/93

PERMITTEE

Shell Oil Company
Attn: J.N. Breuster
P.O. Box 262
Wood River, IL 62095

Application No.: 72110635 I.D. No.: 119090AAA
Applicant's Designation: WRR-25 Date Received: August 3, 1993
Operating Permit Expiration Date: August 31, 1997
Subject: **Hydrodesulfurization Unit No. 2/Catalytic Reformer No. 3**
Date Issued: August 23, 1993
Location: SA-11A and Route 111, Roxana

Permit is hereby granted to the above-designated Permittee to Operate emission source(s) and/or air pollution control equipment consisting of four storage tanks, closed-vent process equipment and six process heaters as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This equipment contain(s) sources in benzene service subject to National Emissions Standards for Hazardous Air Pollutants (NESHAP), 40 CFR 61, Subparts A, J and V. The Illinois EPA (IEPA) is administering these standards in Illinois on behalf of the United States EPA under a delegation agreement.

b. The Permittee shall comply with the applicable design and equipment standards, and marking, inspection, monitoring, tagging, repair and testing requirements in 40 CFR 61.242 or 61.243, and 61.246(b), for the following sources in benzene service, which are not in vacuum service:

i. Pumps (40 CFR 61.242-2)
ii. Compressors (40 CFR 61.242-3)
iii. Pressure relief devices in gas/vapor service (40 CFR 61.242-4)
iv. Sampling connection systems (40 CFR 61.242-5)
v. Open-ended valves or lines (40 CFR 61.242-6)
vi. Valves (40 CFR 61.242-7 or 61.243)
vii. Pressure relief devices in liquid service and flanges and other connectors (40 CFR 61.242-8)
viii. Product accumulator vessels (40 CFR 61.242-9), and
ix. Closed-vent systems and control devices (40 CFR 61.242-11).

c. If the Permittee chooses to comply with the alternative standards for valves in 40 CFR 61.243, the IEPA shall be notified at the address in Condition 5 at least 90 days before implementing such provisions.

d. Delayed repair of leaks is allowed as provided in 40 CFR 61.242-10.

e. At all times the Permittee shall, to the extent practicable, maintain and operate sources in benzene service, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.

2. The Permittee shall follow the procedures specified by 40 CFR 61.245 for inspections and compliance tests.

3a. The permittee shall maintain records as required by 40 CFR 61.246, including:

i. Records on the detection, identity, and repair of all leaks (40 CFR 61.246(c))
ii. Records on the operation of each closed-vent system and control device (40 CFR 61.246(d))
iii. Records identifying all sources subject to 40 CFR 61.242 (40 CFR 61.246(e)), and
iv. Other records as are applicable to the operation of the plant.

b. These records shall be kept at a readily accessible location at the plant, and shall be available for inspection by the Agency.

4. The Permittee shall submit semi-annual reports as required by 40 CFR 61.247(b) including:

i. Monthly data on leaks and repairs,
ii. Dates of process unit shutdowns,
iii. Revisions to the information submitted in previous reports, and
iv. Results of performance testing within the reporting period.

5. Any required reports and notifications concerning operation, testing, or repairs shall be sent to the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234

6a. Emission Limits
The sulfur dioxide emissions from the six process heaters or boilers combined shall not exceed 768 lb/hr, on a 3-hour block average basis, pursuant to §214.382(c)(3)(H) and (d).

b. Analysis

i. The flasher pitch burned in these heaters or boilers shall not contain more than 3% sulfur by weight as determined by the appropriate ASTM method. A representative sample shall be taken and analyzed each day.

ii. The refinery fuel gas burned shall not contain more than 39 grains H_2S/100 dscf. A representative sample of the gas shall be taken and analyzed every 8 hours by the Tutweiler procedure.

c. Recordkeeping

i. The Permittee shall keep records of the amount of pitch and refinery fuel gas burned per hour and lb/hr of sulfur dioxide emitted from each heater and boiler so as to demonstrate compliance with §214.382(c).

ii. The Permittee shall keep detailed records of the analyses performed pursuant to paragraph (b).

iii. The records, as required by c(i-ii), shall be entered in a log or computerized system each day, to address compliance on a 3-hour block average basis.

iv. These records and the log shall be retained for two years from the date of an entry and shall be available for inspection upon request by the Agency.

d. Quarterly Report

Shell shall submit a quarterly report, listing the total sulfur dioxide emissions each month for the entire manufacturing complex, and the highest and second highest daily emission rates, for each month during the quarter.

7. Operation in excess of applicable sulfur dioxide emission standards is allowed during malfunction and breakdown of the sulfur recovery system provided that:

a. The permittee shall immediately notify the Agency's regional office:

Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234

by phone (618/346-5120) of any malfunction of any component of the permittee's sulfur recovery system which may result in a violation of the sulfur dioxide regulations.

b. Whenever the Shell sulfur plant has not recovered at least 75% of the total sulfur available from Amoco, Clark, and the permittee, for a four hour period, the permittee shall institute SO_2 emission reduction procedures. The procedures shall reduce uncontrolled SO_2 emission to no more than 16.0 ton/hr. These procedures shall include:

i. All necessary changes in refinery operations, and;
ii. Any other reasonable action to reduce emissions.

8a. The Permittee shall notify the Agency's regional office by telephone as soon as possible during normal working hours upon the occurrence of excess emissions due to malfunctions, or breakdowns. The Permittee shall comply with all reasonable and safe directives of the regional office regarding such malfunctions and breakdowns.

The Permittee shall maintain records of excess emissions during malfunctions and breakdowns and, within five (5) working days of such an event, shall give a written follow-up report to the Agency's regional office. As a minimum, these records and reports shall include:

i. date and duration of malfunction or breakdown;
ii. a full and detailed explanation of the cause for such emissions;
iii. the contaminants emitted and an estimate of the quantity of emissions;
iv. the measures used to reduced the quantity of emissions and the duration of the occurence; and
v. the steps taken to prevent similar malfunctions or breakdowns or reduce their frequency and severity.

b. These records shall be retained for at least two years following an event, maintained at a readily accessible location at the plant, and be available to representatives of the Agency during normal working and/or operating hours.

If you have any questions on this, please call Bradford S. Kohlmeyer at 217/782-2113.

Donald E. Sutton/mx

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:BSK:mab/543M/sp/22-25

cc: IEPA, FOS Region 3
USEPA

Illinois Environmental Protection Agency · P. O. Box 19276, Springfield, IL 62794-9276

217/782-2113

OPERATING PERMIT

APR 4 1991 RECEIVED C. Bach

PERMITTEE

Shell Oil Company
Attn: J.N. Brewster
P.O. Box 262
Wood River, Illinois 62095

Application No.: 72110634
I.D. No.: 119090AAA
Applicant's Designation: WRR-26
Date Received: January 2, 1991
Subject: Cat Reformer No. 2/Hydrodesulfurizer No. 1
Date Issued: March 25, 1991
Expiration Date: February 29, 1996
Location: SA-11A and Route 111, Roxana

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of refinery process equipment and three gas-fired process heaters as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. The refinery fuel gas burned shall not contain more than 39 grains H_2S/100 dscf. A representative sample of the gas shall be taken and analyzed every 8 hours by the Tutweiler procedure.

b. The Permittee shall keep detailed records of the analyses performed pursuant to paragraph (a).

c. These records and the log shall be retained for two years from the date of an entry and shall be available for inspection upon request by the Agency.

d. Shell shall submit a quarterly report, listing the total sulfur dioxide emissions each month for the entire manufacturing complex, and the highest and second highest daily emission rates, for each month during the quarter.

2. Operation in excess of applicable sulfur dioxide emission standards is allowed during malfunction and breakdown of the sulfur recovery system provided that:

Illinois Environmental Protection Agency · P. O. Box 19276, Springfield, IL 62794-9276

a. The permittee shall immediately notify the Agency's regional office:

Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234

by phone (618/346-5120) of any malfunction of any component of the permittee's sulfur recovery system which may result in a violation of the sulfur dioxide regulations.

b. Whenever the Shell sulfur plant has not recovered at least 75% of the total sulfur available from Amoco, Clark, and the permittee, for a four hour period, the permittee shall institute SO_2 emission reduction procedures. The procedures shall reduce uncontrolled SO_2 emission to no more than 16.0 ton/hr. These procedures shall include:

i) All necessary changes in refinery operations, and;

ii) Any other reasonable action to reduce emissions.

This condition supersedes standard condition No. 9 and 9.a for malfunction and breakdown of the sulfur recovery system. The permittee shall maintain the records required by standard condition No. 9.b.

Bharat Mathur, P.E.
Acting Manager, Permit Section
Division of Air Pollution Control

BM:DGP:ds:0108M/81-82

cc: Region 3

217/782-2113

OPERATING PERMIT - NSPS SOURCES

Rec'd 2/24/92

PERMITTEE

Shell Oil Company
Attn: J.N. Brewster
P.O. Box 262
Wood River, IL 62095

File

Application No.: 72110633
Applicant's Designation: WRR-27
Subject: Utilities Department (WRR-27)
Date Issued: February 13, 1992
Location: SA-11A and Route 111, Roxana

I.D. No.: 119090AAA
Date Received: December 24, 1991
Expiration Date: March 31, 1994

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of 5 boilers as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. Emission Limits

The sulfur dioxide emissions from the five utilities department boilers (Nos. 13, 15-18) combined shall not exceed 2400 lb/hr, on a 3-hour block average basis, pursuant to §214.382(c)(3)(F) and (d). In addition, the sulfur dioxide emissions from the utilities department, asphalt converters, distilling unit No. 1 and aromatics east process shall not exceed 2710 lbs/hr pursuant to §214.302(c)(3)(J).

b. Analysis

i. The flasher pitch burned in these heaters or boilers shall not contain more than 3% sulfur by weight as determined by the appropriate ASTM method. A representative sample shall be taken and analyzed each day.

ii. The refinery fuel gas burned shall not contain more than 39 grains H_2S/100 dscf. A representative sample of the gas shall be taken and analyzed every 8 hours by the Tutweiler procedure, in accordance with Section 214.382(c)(2), if the sulfur content of the gas is not analyzed by a continuous H_2S monitor meeting the requirements of New Source Performance Standards (40 CFR 60.105(a)(4) and the applicable requirements of Performance Specification No. 7 of Appendix B).

c. Recordkeeping

i. The Permittee shall keep records of the amount of pitch and refinery fuel gas burned per hour and lb/hr of sulfur dioxide emitted from each heater and boiler so as to demonstrate compliance with §214.382(c).

ii. The Permittee shall keep detailed records of the analyses performed pursuant to paragraph (b).

iii. The records, as required by c(i-ii), shall be entered in a log or computerized system each day, to address compliance on a 3-hour block average basis.

iv. These records and the log shall be retained for two years from the date of an entry and shall be available for inspection upon request by the Agency.

d. Quarterly Report

The Permittee shall submit a quarterly report, listing the total sulfur dioxide emissions each month for the entire manufacturing complex, and the highest and second highest daily emission rates, for each month during the quarter.

2a. In addition to Section 214.332 Boilers 17 and 18 are subject to federal New Source Performance Standards (NSPS) as follows:

Boiler No.	40 CFR 60 Subparts
17	A and D
18	A and J

bi. The applicable limits of the NSPS shall not be exceeded:

Boiler No.	Standards
17	PM: 60.42, SO_2: 60.43, NOX: 60.44
18	SO_2: 60.104

ii. At all times, the Permittee shall also, to the extent practicable, maintain and operate the boilers, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.

c. The hydrogen sulfide concentration in the fuel gas to the Boiler 18 shall not exceed 0.10 grains per dry standard cubic foot, pursuant to the New Source Performance Standard, 40 CFR 60, Subpart J.

d. The Permittee shall operate a continuous emission monitor (CEM) for hydrogen sulfide concentration in the fuel gas to the Boiler 18. The CEM shall meet the requirements of 40 CFR 60.105(a)(3) or (a)(4) and the applicable requirements of Performance Specification No. 7 of Appendix B.

e. The Permittee shall fulfill applicable notification, recordkeeping, and reporting requirements of the NSPS, 40 CFR 60.7.

3a. The permittee shall properly maintain calibrate and operate a continuous opacity monitoring system on Boiler No. 17.

b. Opacity monitors on boilers other than No. 17, shall be properly maintained, calibrated and operated until such time as the Permittee notifies the Agency that monitor has been taken out of service.

c. On or before the 30th day of each calendar quarter, the permittee shall submit to the Agency a report for the last preceding calendar quarter of any and all opacity measurements, including those from monitors installed on Boilers other than No. 17, e.g. Boiler Nos. 15, 16 and 18, which exceed 30 percent, averaged over a six minute period. These "excess opacity" reports shall provide, for each such incident, the percent opacity measured as well as the date and span of such incident. These reports shall also specify for each incident whether it occurred during startup, shut-down, or malfunction. If a malfunction is indicated in the report, all corrective actions taken, if any, shall be reported. The reports shall also specify, for each calendar quarter, the date of those periods during which the continuous monitoring system was not in operation.

4a. Operation in excess of applicable sulfur dioxide emission standards of 35 Ill. Adm. Code Part 214 is allowed during malfunction and breakdown of the sulfur recovery system, pursuant to Part 201, Subpart I. This condition supersedes standard condition 9.

b. The permittee shall immediately notify the Agency's regional office:

Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234

by phone (618/346-5120) of any malfunction of any component of the permittee's sulfur recovery system which may result in a violation of the sulfur dioxide regulations.

c. Whenever the Shell sulfur plant has not recovered at least 75% of the total sulfur available from Amoco, Clark, and the permittee, for a four hour period, the permittee shall institute SO_2 emission reduction procedures. The procedures shall reduce uncontrolled SO_2 emission to no more than 16.0 ton/hr. These procedures shall include:

i) All necessary changes in refinery operations, and;

ii) Any other reasonable action to reduce emissions.

d. The Permittee shall maintain the records required by standard condition 9.b.

5a. For equipment subject to NSPS:

i. The permittee shall immediately notify the Agency's regional office by phone of any malfunction or breakdown, or other occurrence with respect to its sulfur recovery system that results in any violation of the SO_2 emission standards.

ii. The Permittee shall notify the Agency's regional office by telephone as soon as possible during normal working hours upon the release of excess emissions due to malfunctions or breakdowns, or other occurrences.

b. For such equipment the Permittee shall comply with all reasonable and safe directives of the regional office upon malfunctions or breakdowns or other occurrences.

c. For such equipment the permittee shall maintain records of malfunctions and breakdowns and other occurrences resulting in excess emissions. As a minimum, these records shall include the information identified in Condition 5.

6. Within five (5) working days of a malfunction or breakdown or other occurrences resulting in excess emissions the Permittee shall give a written follow-up notice to the Agency's regional office providing

i. an explanation of the occurrence

ii. the length of time during which operation continued under such conditions and an estimate of the quantity of emissions

iii. the measures used to reduce the quantity of emission and length of time during which such operations occured

iv. the steps to be taken to prevent similar malfunctions or breakdowns, or occurrences, and

v. when normal operation resumed.

7. Any required reports and notifications concerning equipment operation, performance testing or a continuous monitoring system shall be sent to the Agency's regional office at the following address unless otherwise indicated:

   Illinois Environmental Protection Agency
   Division of Air Pollution Control - Regional Office
   2009 Mall Street
   Collinsville, Illinois 62234

This permit has been revised to delete operation of the master separator box, separator box 6, and slop oil tanks B-29 and B-30 in accordance with the Permittee's request.

Donald E. Sutton

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:DGP:mab/795L/sp/6-10

cc:IEPA-FOS, Region 3
   USEPA

217/782-2113

OPERATING PERMIT - NESHAP SOURCES BENZENE
NSPS SOURCE - STORAGE TANKS

JAN 18 1993
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C. Bach

PERMITTEE

Shell Oil Company
Attn: J.N. Brewster
P.O. Box 262
Wood River, IL 62095

Application No.: 73010832
I.D. No.: 119090AAA
Applicant's Designation: WRR-28
Date Received: January 4, 1993
Operating Permit Expiration Date: January 31, 1994
Subject: Dispatching Department (WRR-28)
Date Issued: January 13, 1993
Location: SA Route 11A and 111, Roxana

Permit is hereby granted to the above-designated Permittee to Operate emission source(s) and/or air pollution control equipment consisting of light oil loading rack with vapor recovery system, gasoline dispensing facilities and storage tanks as follows: three benzene tanks, two new MBTE tanks with floating roofs and secondary seals, 16 gasoline tanks w/floating roofs and secondary seals, 22 other storage tanks w/floating roofs and secondary seals, 40 heavy oil storage tanks w/floating roofs and 126 miscellaneous fixed roof tanks as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This Dispatching Department contain(s) sources in benzene service subject to National Emissions Standards for Hazardous Air Pollutants (NESHAP), 40 CFR 61, Subparts A, J and V, which are adopted as 35 Ill. Adm. Code 231. The Illinois EPA (IEPA) is administering these standards in Illinois on behalf of the United States EPA under a delegation agreement.

b. The Permittee shall comply with the applicable design and equipment standards, and marking, inspection, monitoring, tagging, repair and testing requirements in 40 CFR 61.242 or 61.243, and 61.246(b), for the following sources in benzene service, which are not in vacuum service:

   i. Pumps (40 CFR 61.242-2)
   ii. Compressors (40 CFR 61.242-3)
   iii. Pressure relief devices in gas/vapor service (40 CFR 61.242-4)
   iv. Sampling connection systems (40 CFR 61.242-5)
   v. Open-ended valves or lines (40 CFR 61.242-6)
   vi. Valves (40 CFR 61.242-7 or 61.243)
   vii. Pressure relief devices in liquid service and flanges and other connectors (40 CFR 61.242-8)
   viii. Product accumulator vessels (40 CFR 61.242-9), and
   ix. Closed-vent systems and control devices (40 CFR 61.242-11).

c. If the Permittee chooses to comply with the alternative standards for valves in 40 CFR 61.243, the IEPA shall be notified at the address in Condition 5 at least 90 days before implementing such provisions.

d. Delayed repair of leaks is allowed as provided in 40 CFR 61.242-10.

e. At all times the Permittee shall, to the extent practicable, maintain and operate sources in benzene service, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.

2. The Permittee shall follow the procedures specified by 40 CFR 61.245 for inspections and compliance tests.

3a. The permittee shall maintain records as required by 40 CFR 61.246, including:

i. Records on the detection, identity, and repair of all leaks (40 CFR 61.246(c))
ii. Records on the operation of each closed-vent system and control device (40 CFR 61.246(d))
iii. Records identifying all sources subject to 40 CFR 61.242 (40 CFR 61.246(e)), and
iv. Other records as are applicable to the operation of the plant.

b. These records shall be kept at a readily accessible location at the plant, and shall be available for inspection by the Agency.

4. The Permittee shall submit semi-annual reports as required by 40 CFR 61.247(b) including:

i. Monthly data on leaks and repairs,
ii. Dates of process unit shutdowns,
iii. Revisions to the information submitted in previous reports, and
iv. Results of performance testing within the reporting period.

5. Benzene shall not be transferred through the loading rack covered by the Permit.

6. The three benzene storage tanks (A-62, A-63 and A-64) are subject to 40 CFR 61 Subpart Y. The storage tanks must be equipped with internal floating roofs and seals as described in §61.271. Tank F-60 shall remain idle until the Agency is informed of any new service.

7. Any required reports and notifications concerning operation, testing, or repairs shall be sent to the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234

8a. The MBTE storage tank(s) Nos. A-150 and A-151 are subject to New Source Performance Standards (NSPS), 40 CFR 60 Subparts A and Kb adopted at 35 Ill. Adm. Code 230.110 and 230.212. The Illinois EPA is administering these standards in Illinois on behalf of the United States EPA under a delegation agreement.

b. The A-150 and A-151 storage tanks shall comply with the equipment standards contained in the NSPS, 40 CFR 60.112b.

c. At all times the Permittee shall, to the extent practicable, maintain and operate these tanks, in a manner consistent with good air pollution control practice for minimizing emissions, pursuant to the New Source Performance Standard.

9a. The Permittee shall fulfill the Testing and Procedures requirements of 60.113b. Notification should be sent to the address in Condition 7.

b. The Permittee shall fulfill applicable notification and recordkeeping requirements of the NSPS, 40 CFR 60.7 and 60.115b.

c. The Permittee shall maintain records of the throughputs and materials stored to allow the Agency to review compliance with the limits in Condition Nos. 15 and 16. Compliance with annual limits shall be determined from a running total of 12 months of data.

d. The Permittee shall notify the Agency of any change in the type of material stored that are different than those identified in the application.

e. The above records shall be retained for two years and shall be available for inspection by the Agency.

10. If a malfunction or breakdown of the packed column vapor recovery system occurs Shell Oil will notify the IEPA Regional Office in Collinsville at 618/346-5120 on the same or next working day. The time of occurrence and type of malfunction and breakdown shall be given.

11. Shell Oil shall submit a quarterly report summarizing the quantity of emissions, the type and the duration of each malfunction, and the steps taken to reduce the occurrence of each malfunction or breakdown.

12. Operation during malfunction and breakdown is allowed for a period of 72 hours for loading products other than benzene. Loading of benzene shall immediately cease upon malfunction or breakdown of the control equipment.

13. If the malfunction and breakdown cannot be corrected within 72 hours Shell Oil shall notify the Regional Office. The Regional Office may allow operation during malfunction and breakdown for a longer period of time on a case-by-case basis.

14. The Shell Oil shall inspect for leakage all of the components of the vapor control system which carry volatile organic material vapors according to the following intervals:

    i. Pump seals shall be inspected visually every week.

    ii. All valves and the coupler that connects to the delivery vessel shall be inspected by a portable detection unit between March 1 and April 30 of each year. All leaks shall be promptly repaired and a reinspection made within 3 months on those valves which were leaking.

15. Emissions of volatile organic material (VOM) vapor pressure of the material stored, and throughput from tanks F-57 and F-59 (combined) shall not exceed the following:

Vapor Pressure (psia)	Throughput (gal/yr)	VOM Emissions (ton/yr)
4.0	22,000,000	1.8

16. Vapor pressure of the material stored, throughput and volatile organic material (VOM) emissions from the two MBTE tanks (A-150 and A-151) shall not exceed the following:

Vapor Pressure (psia at 70°F)	Throughput (bbl/yr, each)	VOM Emissions (ton/yr, each)
4.0	1,575,000	3.2

17. Within 120 days of the receipt of this operating permit, the organic material concentrations in the effluent stream of the light-oil loading racks vapor recovery system shall be measured by an approved testing service. These tests shall be conducted in accordance with 35 Ill. Adm. Code 215.102.

18. At least 30 days prior to the actual date of testing a written test plan shall be submitted to the Agency for review and approval. This plan shall describe the specific procedures for testing, including as a minimum:

    i. The person(s) who will be performing sampling and analysis and their experience with similar tests.

    ii. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the source and any control equipment will be determined.

    iii. The specific determinations of emissions and operation which are intended to be made, including sampling and monitoring locations.

    iv. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods.

    v. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification.

    vi. Any proposed use of an alternative test method, with detailed justification.

    vii. The format and content of the Source Test Report.

19a. Prior to carrying out these tests, the Agency's regional office and the Agency's Source Emission Test Specialist shall be notified a minimum of thirty (30) days prior to the expected date of these tests and further notified a minimum of five (5) working days prior to the test of the exact date, time and place of these tests, to enable the Agency to witness these tests.

Illinois Environmental Protection Agency
Division of Air Pollution Control - Regional Office
2009 Mall Street
Collinsville, Illinois 62234

Illinois Environmental Protection Agency
Attn: Source Emission Test Specialist
Division of Air Pollution Control
Intercontinental Center
1701 First Avenue
Maywood, Illinois 60153

b. Three (3) copies of the Final Report(s) for these tests shall be submitted to the Agency within 14 days after the test results are compiled and finalized.

c. A copy of the Summary of Results, General Information, and Conclusions, as contained in the Final Report, shall also be submitted to the Source Emission Test Specialist.

20. Thirty (30) days after completion of sampling, the Final Report shall include as a minimum:

    i. A summary of results
    ii. General information
    iii. Description of test method(s), including description of sampling points, sampling train, analysis equipment, and test schedule
    iv. Detailed description of test conditions, including

a. Process information, i.e., mode(s) of operation, process rate, e.g. fuel or raw material consumption

b. Control equipment information, i.e., equipment condition and operating parameters during testing, and

c. A discussion of any preparatory actions taken, i.e., inspections, maintenance and repair

v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration

vi. An explanation of any discrepancies among individual tests or anomalous data

21a. Copies of the Final Report(s) for these tests shall be submitted to the Agency within 14 days after the test results are compiled and finalized.

b. Submittals of information shall be made as follows:

i. Submittal of Test Plan - one copy to Source Emission Test Specialist and one copy to Permit Section.

ii. Notices of Test - one copy to Source Emission Test Specialist, one copy to the Regional Office, and one copy to Permit Section.

iii. Final Report - one copy to Source Emission Test Specialist, one copy to the Regional Office, and one copy to Permit Section.

If you have any questions on this permit, please contact Bradford S. Kohlmeyer at 217/782-2113.

Donald E. Sutton/MS

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:BSK:mab/221L/sp/100-105

cc: IEPA, FOS Region 3
USEPA

State of Illinois
ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director

2200 Churchill Road, Springfield, IL 62794-9276

OPERATING PERMIT

OCT 27 1993
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PERMITTEE

Shell Oil Company
Attention: J. N. Brewster
SA-11A and Route 111 (P.O. Box 262)
Wood River, Illinois 62095

Application No: 72110631
Applicants Designation: WRR-29
Date Issued: October 21, 1993
Subject: Cooling Water Towers
Location: SA-11A and Route 111, Roxana

I.D. No.: 119090AAA
Date Received: July 9, 1992
Expiration Date: March 15, 1995

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of seventeen cooling water towers as described in the above referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. The Permittee shall implement the program described in the application to prevent and correct VOM leaks into cooling water towers, including:

   a. The Permittee shall utilize combustible analyzers to continuously monitor for the presence of hydrocarbons in the water of the cooling water towers.

   b. The Permittee shall perform daily surveillance of each tower to visually check for hydrocarbon leaks.

2. Appropriate records of monitoring activity, inspections, and repair activity shall be maintained to allow the Agency to review implementation of the program in Condition No. 1.

3. Pursuant to 35 Ill. Adm. Code 219.986(d), the Permittee shall obtain a federally enforceable operating permit prior to March 15, 1995. The application for the federally enforceable operating permit shall be submitted prior to September 15, 1994, so as to allow sufficient time for processing the application.

4. This permit shall become effective upon the withdrawal of Permit Appeal PCB 92-101.

If you have any questions concerning this letter, please contact Bradford S. Kohlmeyer at 217/782-2113.

Donald E. Sutton/MS

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:bsk
CC: Region 3

Illinois Environmental Protection Agency · P. O. Box 19276, Springfield, IL 62794-9276

217/782-2113

OPERATING PERMIT

JUL 6 1993
RECEIVED
C Bach

PERMITTEE

Shell Oil Company
Attn: J. N. Brewster
P.O. Box 262
Wood River, IL 62095

Application No.: 78040017
Applicant's Designation: WRR-31
Subject: Acetone Unit (WRR-31)
Date Issued: June 30, 1993
Location: SA-11A and Route 111, Roxana

I.D. No.: 119090AAA
Date Received: June 18, 1993

Expiration Date: June 30, 1998

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of acetone plant including two gas-fired process heaters and nine organic material storage tanks as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. Operation in excess of applicable sulfur dioxide emission standards is allowed during malfunction and breakdown of the sulfur recovery system provided that:

   a. The Permittee shall immediately notify the Agency's regional office:

      Environmental Protection Agency
      Division of Air Pollution Control
      2009 Mall Street
      Collinsville, Illinois 62234

      by phone (618/345-0700), of any malfunction of any component of the Permittee's sulfur recovery system which may result in a violation of the sulfur dioxide regulations.

   b. Whenever the Shell sulfur plant has not recovered at leat 75% of the total sulfur available from Amoco, Clark, and the Permittee, for a four hour period, the Permittee shall institute SO_2 emission reduction procedure. The procedures shall reduce uncontrolled SO_2 emission to no more than 16.0 ton/hr. These procedures shall include:

      i. All necessary changes in refinery operation; and,
      ii. Any other reasonable action to reduce emissions.

If you have any questions on this, please call Bradford S. Kohlmeyer at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:BSK:imm/288P/16-17

cc: Region 3

Illinois Environmental Protection Agency · P. O. Box 19276, Springfield, IL 62794-9276

217/782-2113

OPEN BURNING PERMIT

JAN 29 1993 RECEIVED C. Bach

PERMITTEE

Shell Oil Company
Attn: J.N. Brewster
P.O. Box 262
Wood River, IL 62095

Application No.: B9301036 I.D. No.: 119090 Date Issued: January 26, 1993
Date Burning May Begin: April 17, 1993
Date Burning Must Cease: April 16, 1994
Open Burning of: 25 bbl of gasoline per session and 50 bbl of propane per year for firefighter training
Location: SA-11A and Route 111, Madison Co., Wood River Twp.

Permit is hereby granted to open burn the above-referenced material, subject to the standard conditions attached hereto and the following special conditions:

1. Issuance of this permit shall not exempt this open burning from applicable local restrictions.

2. Section 9(a) of the Environmental Protection Act is applicable to open burning, i.e., persons affected by such open burning may lodge complaints with the Environmental Protection Agency if the burning is injurious to human, plant, or animal life, to health, or to property, or unreasonably interferes with the enjoyment of life or property.

3. Burning shall take place only when the wind is blowing away from roadways, residences and populated areas.

4. Prior to each scheduled burn the permittee shall notify residents and businesses that may be affected, of the intended open burning activity.

5. Open burning may occur until 8 pm.

Donald E. Sutton/mr

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:BP:mab/17P/sp/77

cc: Region 3

Illinois Environmental Protection Agency · P. O. Box 19276, Springfield, IL 62794-9276

217/782-2113

OPERATING PERMIT

JUN 26 1992 RECEIVED C. Bach

PERMITTEE

Shell Oil Company
Attn: J.N. Brewster
P.O. Box 262
Wood River, IL 62095

Application No.: 79090040 I.D. No.: 119090AAA
Applicant's Designation: WRR-38 Date Received: April 1, 1992
Subject: SRU-1/SRU-2/SCOT
Date Issued: June 23, 1992 Expiration Date: June 30, 1994
Location: SA-11A and Route 111, Roxana

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of three sulfur recovery units, one SCOT unit and associated equipment as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. Operation in excess of the applicable sulfur dioxide emission standards in 35 Ill. Adm. Code 214 is allowed during malfunction and breakdown of the sulfur recovery system provided that:

   a. The permittee shall immediately notify the Agency's regional office:

      Environmental Protection Agency
      Division of Air Pollution Control
      2009 Mall Street
      Collinsville, Illinois 62234

      by phone (618/346-5120) of any malfunction of any component of the permittee's sulfur recovery system which may result in a violation of the sulfur dioxide regulations.

   b. Whenever the Shell sulfur plant has not recovered at least 75% of the total sulfur available from Amoco, Clark, and the permittee, for a four hour period, the permittee shall institute SO_2 emission reduction procedures. The procedures shall reduce uncontrolled SO_2 emission to no more than 16.0 ton/hr. These procedures shall include:

      i) All necessary changes in refinery operations, and;

      ii) Any other reasonable action to reduce emissions.

      This condition supersedes standard condition No. 9 and 9.a for malfunction and breakdown of the sulfur recovery system. The permittee shall maintain the records required by standard condition No. 9.b.

2. Operation in excess of the applicable emission standards during startup is allowed. This condition supersedes standard condition No. 9.a as it applies to startup. The permittee shall maintain the records required by standard condition No. 9.b.

3. During catalyst changeout and other extended maintenance activities on the SCOT unit, which is normally performed every three years, emissions of SO_2 in excess of the 1000 ppm standard of §214.382(b) is allowed provided the following actions are taken.

   a. The Agency's Regional office is notified in writing 10 days prior to the expected dates of the shutdown.

   b. A critical path analysis is made to minimize the length of the shutdown.

   c. Preparation and maintenance work is done on a two or three shift basis, except for activities than can only be done safely during daylight hours.

   d. Firing of pitch is kept to a minimum.

   e. If emissions of SO_2 exceed 10,382 pounds in any day during the shutdown, the Agency shall be notified within 72 hours.

   f. A final report shall be submitted of daily and total SO_2 emissions from the refinery during the shutdown. The report shall be submitted within 15 days of restarting the scot unit.

4a. Sulfur dioxide emissions from the equipment in this permit shall not exceed 1000 ppm on a 3-hour block average basis pursuant to §214.382(b) and (d), except as addressed by Conditions 1, 2 and 3.

b. SO_2 concentration shall be recorded in a log or computerized system each day, to address compliance on a 3-hour block average basis.

c. These records shall be retained for two years from the date of an entry and shall be available for inspection and copying upon request by the Agency.

d. The quarterly report shall include a listing of all violations of the 1000 ppm standard if it has not been previously reported as a malfunction.

If you have any questions on this, please call Dan Punzak at 217/782-2113.

Donald E. Sutton, mez

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:DGP:mab/127N/sp/50-51

cc: Region 3
B. Moore

Illinois Environmental Protection Agency · P. O. Box 19276, Springfield, IL 62794-9276

217/782-2113

OPERATING PERMIT -- NESHAP CONTROL SYSTEM

Rec'd 8/21/92

PERMITTEE

Shell Oil Company
Attn: J.N. Brewster
P.O. Box 262
Wood River, IL 62095

Application No.: 87120058 I.D. No.: 119090AAA
Applicant's Designation: WRR-41 Date Received: August 11, 1992
Operating Permit Expiration Date: August 4, 1997
Subject: Shell Hartford Dock Including Benzene Barge Loading
Date Issued: August 19, 1992
Location: SA-11A & Route 111, Roxana

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of barge dock for sulfonic acid and caustic barge loading, and petroleum products barge loading controlled by a vapor collection system that is vented to a flare as described in the above referenced application. This Permit is subject to standard conditions attached hereto and the following special conditions:

1a. This barge dock, vapor collection system, and flare contain sources subject to a National Emission Standard for Hazardous Air Pollutants (NESHAP) for benzene transfer operations, 40 CFR 61, Subparts A and BB. The Illinois EPA is administering NESHAP in Illinois on behalf of the United States EPA under a delegation agreement.

b. The vapor collection system shall be operated and maintained to comply with applicable requirements of the NESHAP, 40 CFR 61.302(a), (e), (f), (g), (j), (k) and (l).

c. The benzene vapors generated in loading the barges shall be collected and ducted to a flare that is operated in accordance with §60.18(b) through (f) pursuant to the NESHAP, 40 CFR 61.302(c).

d. Any marine vessel that is loaded with benzene at this facility shall be demonstrated to be vapor tight in accordance with §61.302(e).

e. At all times, the permittee shall also, to the extent practicable, maintain and operate the barge loading facility, vapor collection system and flare, in a manner consistent with good air pollution control practice for minimizing emissions.

2. The permittee shall furnish the Agency written notification as follows, pursuant to 40 CFR 61.09:

   a. A notification of anticipated start-up of the vapor control system not more than 60 but not less than 30 days prior to such date.

   b. A notification of actual start-up within 15 days after such date.

3. The permittee shall operate a continuous monitoring system (heat sensing device) to confirm the presence a flame on the flare. The heat sensing device shall be installed in accordance with the provisions of 40 CFR 61.303(b) and the applicable procedures of Appendix B and C.

4. The permittee shall fulfill applicable record keeping and reporting requirements of the NESHAP, 40 CFR 61.07 and 61.305.

5. Any required reports and notifications concerning equipment operation, performance testing or a continuous monitoring system shall be sent to the Agency's regional office at the following address unless otherwise indicated:

   Illinois Environmental Protection Agency
   Division of Air Pollution Control
   2009 Mall Street
   Collinsville, Illinois 62234

6. This permit is issued based upon addition of a vapor control system to an existing barge loading facility without any increase in emissions of volatile organic material and benzene to the atmosphere.

It should be noted that this permit has been revised to include operation of the equipment described in construction permit 91020012.

If you have any questions on this, please call Brad Kohlmeyer at 217/782-2113.

Donald E. Sutton

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:BSK:jmm/sp/415N/34-35

cc: Region 3
USEPA

State of Illinois
ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director
217/782-2113

2200 Churchill Road, Springfield, IL 62794-9276

OPERATING PERMIT - REVISED

OCT 27 1993
RECEIVED
CB

PERMITTEE

Shell Oil Company
Attn: J.N. Brewster
P.O. Box 262
Wood River, IL 62095

Application No.: 88080051
Applicant's Designation: WRR-51
I.D. No.: 119090AAA
Subject: WWTP Sludge Dewatering Facility
Date Received: October 1, 1993
Date Issued: October 20, 1993
Expiration Date: August 31, 1994
Location: Route 111 and Rand Avenue, Hartford

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of 3 holding tanks, 1 mixing tank, 2 recovered oil tanks, 1 oil water separator, 1 filter press, 1 lime silo with dust collector and associated equipment and a fuels blending addition including a cone bottom blend tank, two 3,000 gallon (tanks T-6 & T-7) CCU oil storage tanks, a 2,000 gallon (T-4) recovered oil storage tank and a 5,700 gallon blend storage tank as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. Hourly and annual emissions of volatile organic material (VOM) shall not exceed the amounts specified in the Table below:

Source	Emissions, Each (Total) lb/hr	ton/yr
T-1, 2, 3 Holding Tanks (3)	0.4 (1.18)	1.73 (5.17)
T-8 Surge Tank	1.95	8.6
T-9, 10 Recovered Oil Tanks (2)	.025 (0.05)	0.11 (0.21)
Oil Water Separator	3.0	13.14
Fugitive-Pump Seals and Valves	0.98	4.3
Filter Presses	Negligible	

These hourly emissions limits are based on AP-42 emission factors. The annual limits are the product of the hourly emission limits and the maximum hours of operation (8760 hr/yr) stated in the permit application.

2. Emissions of particulate matter and operation of the lime silo and its dust collector shall not exceed the following:

Operation (loading) hr/day	hr/yr	PM Emissions lb/hr	ton/yr
4	832	0.9	0.4

3. This permit is issued based on negligible emissions of volatile organic material from the fuels Blending Addition. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hr and 0.44 ton/year.

It should be noted that this permit has been revised to include operation of the equipment described in construction permit 93060117.

It should be noted that Section 2(f) of the Illinois Environmental Protection Act prohibits you from conducting hazardous waste management activities without a RCRA permit issued in accordance with 39(d) of the Act. However, the RCRA regulations do allow a generator to conduct treatment in accumulation tanks or containers without a permit provided that the tanks or containers are emptied every ninety days.

If you have any questions on this, please call Bradford S. Kohlmeyer at 217/782-2113.

Donald E. Sutton/MS

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:BSK:jmm/sp/365P/5-6

cc: Region 3

Illinois Environmental Protection Agency · P. O. Box 19276, Springfield, IL 62794-9276

217/782-2113

Rec'd 3/9/92

OPERATING PERMIT -- NESHAP/NSPS SOURCE

PERMITTEE

Shell Oil Co.
Attn: J.N. Brewster
P.O. Box 262
Wood River, IL 62095

Application No.: 89020016 I.D. No.: 119090AAA
Applicant's Designation: WRR-52 Date Received: December 9, 1991
Subject: Major Effluent Treatment Project
Date Issued: March 6, 1992 Expiration Date: March 31, 1994
Location: Route 111 and Rand Avenue, Roxana

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of oil-water separator, tanks for various purposes, sludge thickener and other equipment for water treatment, and two flares as described in the above referenced application. This Permit is subject to standard conditions attached hereto and the following special conditions:

1a. This effluent treatment project is subject to a New Source Performance Standard (NSPS) for , 40 CFR 60, Subparts A, Kb and QQQ and a National Emission Standard for Hazardous Air Pollutants (NESHAP) for benzene waste operations, 40 CFR 61, Subparts A and FF. The Illinois EPA is administering NSPS and NESHAP in Illinois on behalf of the United States EPA under a delegation agreement.

b. Pursuant to the New Source Performance Standard (NSPS), the following requirements shall be met.

i. The slop oil storage tanks, D-52, D-53, and D-54 shall comply with the requirements contained in the NSPS for Volatile Organic liquid storage vessels, 40 CFR 60 Subpart Kb. Compliance with this standard meets the alternative NESHAP standard for tanks, 40 CFR 61.351.

ii. The oily wastewater sewer drains, the oil-water separator and tank B-121 shall comply with requirements contained in the NSPS for VOC Emissions from Petroleum Refinery Wastewater Systems 40 CFR 60 Subpart QQQ, and in the benzene waste operations NESHAP, 40 CFR 61 Subpart FF.

iii. The flares shall meet the General Control Device Requirements of the NSPS, 40 CFR 60.18(b) through (f).

c. At all times, the permittee shall also, to the extent practicable, maintain and operate the wastewater treatment project, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.

2a. Components in the effluent treatment project shall be subject to the Leak Monitoring Program pursuant to 35 Ill. Adm. Code 215.445 through 215.449, unless subject to specific leak detection requirements pursuant to the NSPS.

b. The permittee shall test the closed-vent system for leaks on an annual basis in accordance with 40 CFR 61.355(h).

3. The permittee shall maintain and operate a thermocouple or other equivalent monitoring system for confirming the presence of pilot flames in the flare in accordance with the provisions of 40 CFR 60.18(f)(2).

4a. The permittee shall fulfill applicable notification, record keeping, reporting/certification requirements of the NSPS, 40 CFR 60.7, 60.115b, 60.697, and 60.698, including

i. Reports for storage vessels of noncompliance (40 CFR 60.115(b))
ii. Reports for the drain systems, oil water separator and miscellaneous tanks, of any noncompliance (40 CFR 60.698)

b. The permittee shall fulfill applicable notification, recordkeeping and reporting requirements of the NESHAP, 40 CFR 61.07 and 61.356.

5. Any required reports and notifications concerning equipment operation, performance testing or a continuous monitoring system shall be sent to the Agency's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
2009 Mall St.
Collinsville, Illinois 62234

6a. Emissions of volatile organic material (VOM) shall not exceed the following:

	lb/hr	ton/yr[c]
Flare [a]	8.5	37.2
Fugitive [b]	1.9	8.3
Total	10.4	45.5

a The following equipment is vented to the flare: slop oil tanks (D-52, 53, 54 and B-121), lift station, bar screen, neutralizers and CPI oil-water separators. The flare efficiency, based on meeting NSPS design and operating criteria, is 98%. There is an installed spare flare.

b Leaks from pumps and valves. Assumes 90% control as a result of leak testing program required by 35 Ill. Adm. Code Part 215 Subpart R.

c Annual emissions are based on continuous operations, 8760 hours/year.

b. This permit is issued based on negligible emissions of VOM from equipment in this project not ducted to the flare such as the sludge thickener, TDC waste water tanks, and diversion tanks. For this purpose emissions from each emission source, shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/yr.

c. This permit is issued based on negligible emissions of sulfur dioxide and hydrogen sulfide from the following elements of the effluent treatment system: lift station, barscreen, neutralization basins, oil/water separator, sludge thickener, oil recovery tankage, diversional equalization tank, and ancilliary facilities. For this purpose emissions from each element shall not exceed the nominal emission rates of 1.0 lb/hr and 4.4 ton/yr for sulfur dioxide and of 0.1 lb/hr and 0.44 ton/yr for hydrogen sulfide.

The emission sources covered by this permit may be subject to revised regulations promulgated by the Illinois Pollution Control Board for emission sources emitting volatile organic material. It will be necessary to comply with their requirements by May 15, 1992.

Donald E. Sutton

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:DGP:mab/227K/1-3/sp

cc: IEPA, FOS, Region 3
USEPA

Illinois Environmental Protection Agency · P. O. Box 19276, Springfield, IL 62794-9276

217/782-2113

JOINT CONSTRUCTION AND OPERATING PERMIT

RECEIVED MAY 4 1989

PERMITTEE

Shell Oil Co.
Attn: W.E. Carr
P.O. Box 262
Wood River, IL 62095

Application No.: 89030071
Applicant's Designation: WRR-53
Subject: Caustic Vent Scrubber
Date Issued: April 27, 1989

I.D. No.: 119090AAA
Date Received: March 21, 1989

Operating Permit Expiration Date: March 31, 1994

Location: SA-11A and Route 111, Roxana

Permit is hereby granted to the above-designated Permittee to CONSTRUCT and OPERATE emission source(s) and/or air pollution control equipment consisting of sulfuric acid loading/unloading rack vented to caustic scrubber, sulfuric acid tank, caustic tank and associated equipment as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. Operation of the emission source(s) included in this permit shall not begin until all associated air pollution control equipment has been constructed and is operational.

2. This permit is issued based on negligible emissions of sulfur dioxide and particulate matter from the loading rack and associated scrubber. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.

Terry A. Sweitzer, P.E.
Manager, Permit Section
Division of Air Pollution Control

TAS:DGP:mab/212K/37

cc: Region 3

State of Illinois
ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director

2200 Churchill Road, Springfield, IL 62794-9276

217/782-7326

November 3, 1993

RE: Submittal of Federally Enforceable State Operating Permit for Shell Oil Company, Wood River, Illinois

David Kee, Director
Air Management Division
USEPA - Region V
77 West Jackson Blvd.
Chicago, Illinois 60604

RECEIVED NOV 08 1993 AIR AND RADIATION DIVISION U.S. EPA, REGION V

Attn: Jay Bortzer

Dear Mr. Kee:

Pursuant to a March 24, 1993, *Federal Register* (58 FR 15824) proposed rulemaking, the Illinois Environmental Protection Agency (IEPA) submits a Federally Enforceable State Operating Permit (FESOP) for Shell Oil Company, thereby satisfying USEPA's September 28, 1984, State Implementation Plan (SIP) inadequacy. This permit addresses recordkeeping and reporting systems related to sulfur dioxide emissions from fuel combustion equipment and the sulfur recovery system.

As part of the requirements for federally enforceable permits, a public hearing was held on September 1, 1993, in Wood River, Illinois. Also attached is the IEPA's Responsiveness Summary that addresses the questions raised during the hearing and written comments received from the public during the comment period.

This FESOP submittal completes the requirements needed for final approval of the SIP revision for Shell Oil Company.

If further information is required, please contact Lynda Bennett of my staff.

Cordially,

Bharat Mathur, Chief
Bureau of Air

Attachments

State of Illinois
ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director
217/782-2113

2200 Churchill Road, Springfield, IL 62794-9276

FEDERALLY ENFORCEABLE OPERATING PERMIT

PERMITTEE

Shell Oil Company
Attn: J.N. Brewster
P.O. Box 262
Wood River, IL 62095

Application No.: 92110025
Applicant's Designation: WRR-56
Subject: Fuel Combustion Equipment
Date Issued: November 2, 1993
Location: SA-11A and Route 111, Roxana

I.D. No.: 119090AAA
Date Received: November 10, 1992

Expiration Date: October 31, 1998

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of recordkeeping and reporting systems for fuel combustion equipment in fifteen previously granted applications listed in Table 1 as described in the above-referenced application. This Permit is subject to the following special condition(s). This permit, including these conditions, is enforceable under State law pursuant to the Environmental Protection Act and under federal law pursuant to the Clean Air Act.

1. Emission Limits

   a. The sulfur dioxide emissions from the process heaters or boilers combined shall not exceed the limits set by 35 Ill. Adm. Code 214.382(c)(3), as stated in each of the 15 applications listed in Table 1 on a 3-hour block average basis, in accordance with 35 Ill. Adm. Code 214.382(d).

   b. The refinery fuel gas burned shall not contain more than 39 grains H_2S/100 dscf.

2. Fuel Analysis

   a. The flasher pitch burned in these heaters or boilers shall not contain more than 3% sulfur by weight as determined by the appropriate ASTM method. A representative sample shall be taken and analyzed each day.

   b. A representative sample of refinery fuel gas shall be taken and analyzed every 8 hours by the Tutweiler procedure, if the sulfur content of the gas is not analyzed by a continuous H_2S monitor meeting the requirements of New Source Performance Standards (40 CFR 60.105(a)(4) and the applicable requirements of Performance Specification No. 7 of Appendix B).

3. Recordkeeping

   a. The Permittee shall keep records of the amount of pitch and refinery fuel gas burned per hour and lb/hr of sulfur dioxide emitted from each source grouping so as to demonstrate compliance with 35 Ill. Adm. Code 214.382(c).

   b. The Permittee shall keep detailed records of the analyses performed pursuant to Condition 2.

   c. The records, as required by Condition 3, shall be entered in a log or computerized system each day, to address compliance on a 3-hour block average basis.

   d. These records and the log shall be retained for three years from the date of an entry and shall be available for inspection upon request by the Agency.

4. Quarterly Report

   The Permittee shall submit a quarterly report, listing the following:

   a. The total sulfur dioxide emissions each month for the entire manufacturing complex, and the highest and second highest daily emission rates for each month during the quarter.

   b. Any date the measured flasher pitch sulfur content exceeded 3%.

   c. All times the continuous H_2S monitor indicated the H_2S content of the fuel gas exceeded 39 grains H_2S/100 dscf for a 3-hour averaging period.

   d. A summary of any exceedance of the SO_2 limit for any source operations group.

   e. The hours during which any fuel other than natural gas is burned in boilers subject to the New Source Performance Standard (NSPS), 40 CFR Part 60, Subpart J.

5. Conditions 1 through 4 of this permit supplement the conditions of the existing permits listed in Table 1. These conditions are necessary to assure that the fuel combustion equipment, either alone or in conjunction with other equipment operated by the Permittee, does not cause or contribute to a violation of the SO_2 air qualty standard. To the extent that the above conditions are inconsistent with conditions of the existing permits, the conditions of existing permits are superseded.

It should be noted that as the permits listed in Table 1 are renewed, the reissued permits will be amended to include the above requirements.

If you have any questions on this permit, please call Dan Punzak at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:DGP:mab/607N/sp/82-84

cc: Region 3

APPENDIX B

PHOTOGRAPH LOGS AND SELECTED PHOTOGRAPHS

PHOTOGRAPH LOG

SHELL OIL COMPANY

Roxana, Illinois
Project No. M73-05

Roll 1

1. CPI Separators
2. DAF-1
3. Pond 2 Aeration Basin
4. Pond 1 EQ Basin
5. Dewatering Surge Tanks (T1, T2, and T3)
6. Polishing Lagoons
7. Flow Meter/Weir Location
8. Smith Lake
9. Box 6
10. Box 6
11. Outfall 003 Discharge Pipe
12. Outfall 003 Sampling Location/Grassy Lake
13. Stormwater Detention Pond
14. Stormwater Detention Pond
15. Detention Pond Outlet
16. Pond Outlet to Drainage Ditch
17. Product Tanks
18. Stormwater Valves at Product Tanks
19. Scully Overfill Protection System
20. Tank Truck Loading Area
21. Oil Residue Near Bottom of Tank A95
22. Sampling Location of Wastewater Influent at Master Box
23. Secondary Thickener Sampling Point
24. Clarifier (002) Sampling Point
25. Bar Screen Bins
26. Bar Screen Bins

Roll 2

1. Substation No. 13
2. Substation Alky Sub West
3. Benzene Monitoring at Recovery Well (R-81)
4. Shell Technician Checking Benzene Leak Off Flanges
5. Close up of Monitoring

Product Storage Tanks and Dike
A-40 and A-53 Tanks and Dikes
Pole Mounted Transformer (T-784, T-785, and T-786)
Lube Loading Rack #1 and #2
A-95 Dike Area (Crude Tank Farm) Southwest
Environmental Emergency Unit Trailer (Located inside main plant)

ll 3

Lead Contaminated Material Drum
Sulfolane Filters Drum
Sulfolane Filters Drum
Sulfolane Filters Drum
Sulfolane Filters Drum
Sulfolane Filters Drum
Sulfolane Filters Drum
Sulfolane Filters Drum
Sulfolane Filters Drum
. Filter Cloth Contaminated with F037 and F038 Drum
. PPE Contaminated with F037 and F038 Drum
. Filter Cloths Drum
. Used PPE Drum
. Used PPE Drum
. Used PPE Drum
. Used PPE Drum
). Filter Cloths Contaminated with F037 and F038 Drum

oll 4

Filter Cloths Contaminated with F037 and F038 Drum
Filter Cloths Contaminated with F037 and F038 Drum
PPE Contaminated with F037 and F038 Drum
Digestion Solution Drum
Mercury and Mercury Contaminated Debris
Flow Bin of Waste Pyrophoric Solids
Flow Bin of Waste Pyrophoric Solids
Flow Bin of Waste Pyrophoric Solids
Flow Bin of Waste Pyrophoric Solids
0. Flow Bin of Waste Pyrophoric Solids
1. Flow Bin of Waste Pyrophoric Solids
2. Site 13 - Solids Disposal Site
3. Site 13 - Solids Disposal Site

14. Site 13 - Solids Disposal Site
15. Site 13 - Solids Disposal Site

Roll 5

1. Monitoring at Production Well 18
2. Monitoring at Production Well 18
3. Example of a sample tag for VOC monitoring
4. Asbestos Removal Area CC #1
5. Asbestos Removal Area CC#1
6. Asbestos Dumpsters
7. Valve 000256 Open end BEU
8. Valve 000258 Open End BEU
9. Refinery View Near BEU
10. Refinery View near BEU

Roll 6

1. East DEA stripper
2. Thermal reactor A train
3. Waste heat boiler A train
4. Converter 2nd stage A train
5. Waste Sulfur
6. Condenser sulfur A train
7. SCOT reactor
8. Oxidizer
9. Stacks from Oxidizer
10. Pumps at WWTP
11. Overview of WWTP pumps/bar screens
12. Vent flare WWTP
13. Lube desalter stage 1 and mixed desalter
14. Sampler drain for desalter
15. Desalter drain for lube
16. Pitch sampling point
17. Pitch sampling point

6. Product Storage Tanks and Dike
7. A-40 and A-53 Tanks and Dikes
8. Pole Mounted Transformer (T-784, T-785, and T-786)
9. Lube Loading Rack #1 and #2
10. A-95 Dike Area (Crude Tank Farm) Southwest
11. Environmental Emergency Unit Trailer (Located inside main plant)

Roll 3

1. Lead Contaminated Material Drum
2. Sulfolane Filters Drum
3. Sulfolane Filters Drum
4. Sulfolane Filters Drum
5. Sulfolane Filters Drum
6. Sulfolane Filters Drum
7. Sulfolane Filters Drum
8. Sulfolane Filters Drum
9. Sulfolane Filters Drum
10. Filter Cloth Contaminated with F037 and F038 Drum
11. PPE Contaminated with F037 and F038 Drum
12. Filter Cloths Drum
13. Used PPE Drum
14. Used PPE Drum
15. Used PPE Drum
16. Used PPE Drum
17. Used PPE Drum
18. Used PPE Drum
19. Filter Cloths Contaminated with F037 and F038 Drum

Roll 4

1. Filter Cloths Contaminated with F037 and F038 Drum
2. Filter Cloths Contaminated with F037 and F038 Drum
3. PPE Contaminated with F037 and F038 Drum
4. Digestion Solution Drum
5. Mercury and Mercury Contaminated Debris
6. Flow Bin of Waste Pyrophoric Solids
7. Flow Bin of Waste Pyrophoric Solids
8. Flow Bin of Waste Pyrophoric Solids
9. Flow Bin of Waste Pyrophoric Solids
10. Flow Bin of Waste Pyrophoric Solids
11. Flow Bin of Waste Pyrophoric Solids
12. Site 13 - Solids Disposal Site
13. Site 13 - Solids Disposal Site

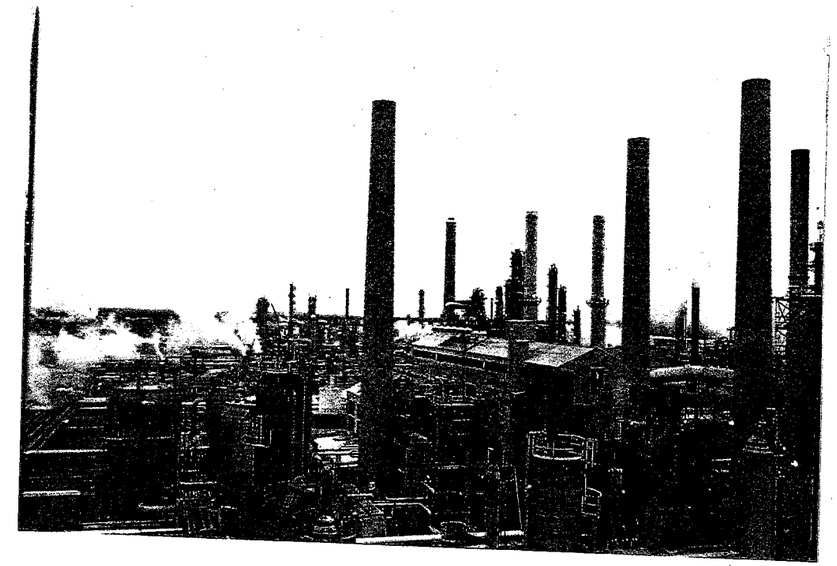
14. Site 13 - Solids Disposal Site
15. Site 13 - Solids Disposal Site

Roll 5

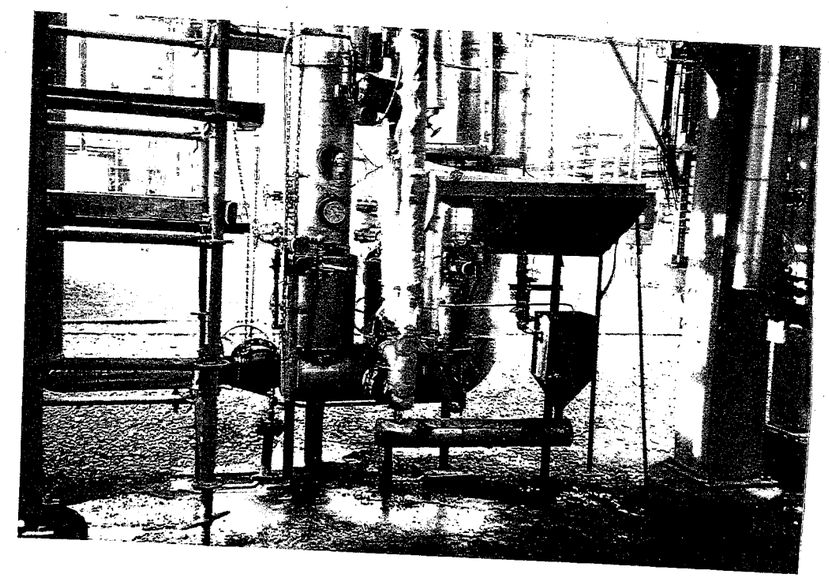
1. Monitoring at Production Well 18
2. Monitoring at Production Well 18
3. Example of a sample tag for VOC monitoring
4. Asbestos Removal Area CC #1
5. Asbestos Removal Area CC#1
6. Asbestos Dumpsters
7. Valve 000256 Open end BEU
8. Valve 000258 Open End BEU
9. Refinery View Near BEU
10. Refinery View near BEU

Roll 6

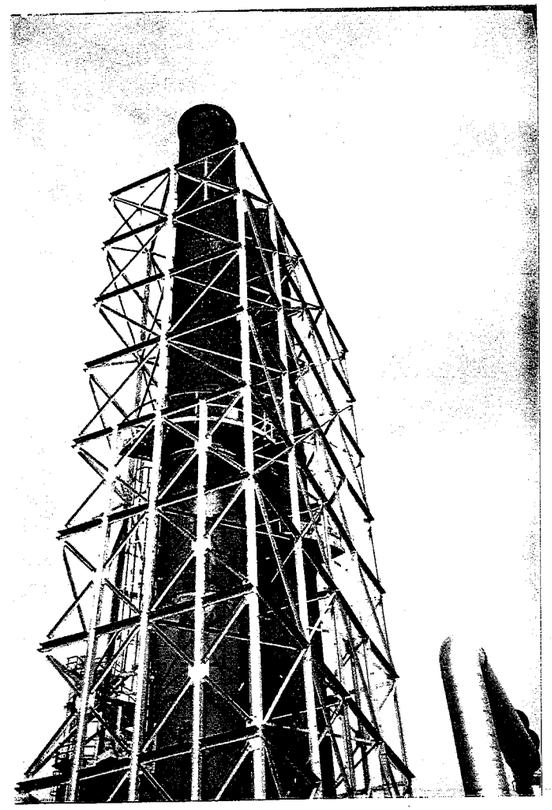
1. East DEA stripper
2. Thermal reactor A train
3. Waste heat boiler A train
4. Converter 2nd stage A train
5. Waste Sulfur
6. Condenser sulfur A train
7. SCOT reactor
8. Oxidizer
9. Stacks from Oxidizer
10. Pumps at WWTP
11. Overview of WWTP pumps/bar screens
12. Vent flare WWTP
13. Lube desalter stage 1 and mixed desalter
14. Sampler drain for desalter
15. Desalter drain for lube
16. Pitch sampling point
17. Pitch sampling point



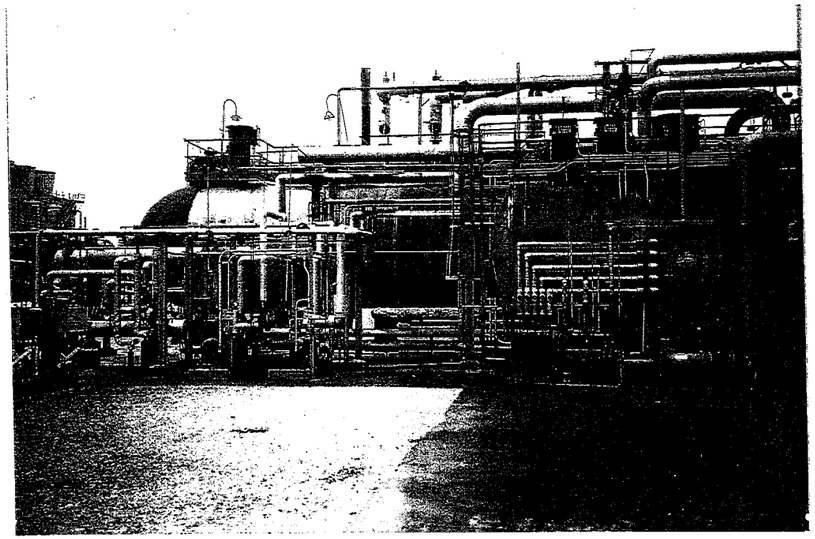
PHOTOGRAPH 1: REFINERY EMISSION SOURCES



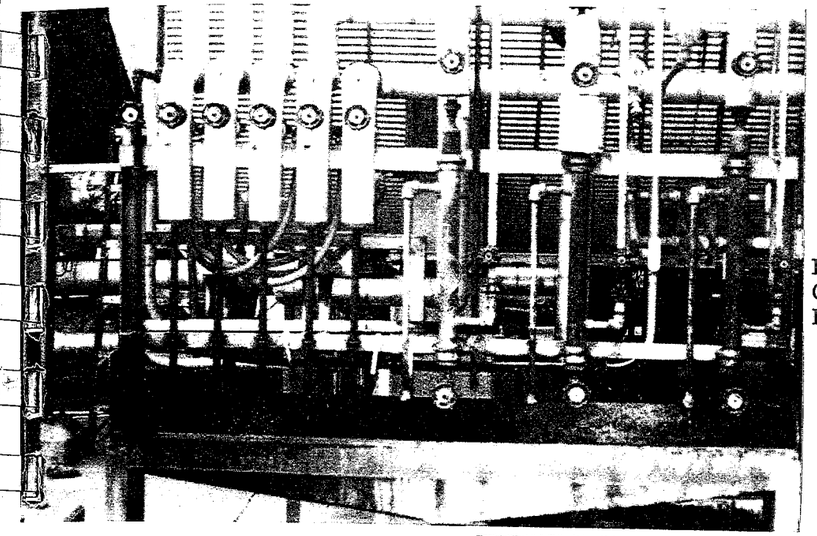
PHOTOGRAPH 2: RFP SAMPLE LOCATION



PHOTOGRAPH 3: SRU/SCOT EMISSION STACKS



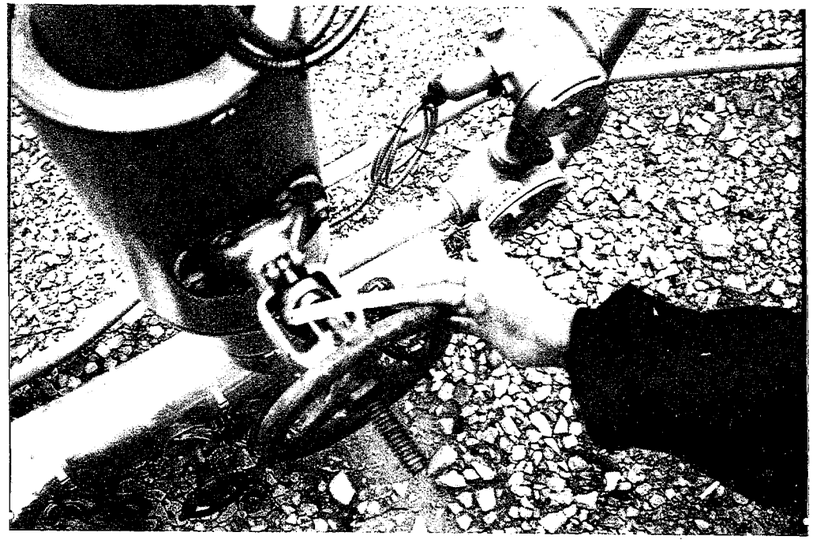
PHOTOGRAPH 4: BENZENE SAMPLE LOCATION AT DESALTER



PHOTOGRAPH 5:
CLOSE-UP OF BENZENE SAMPLE
LOCATION AT DESALTER

PHOTOGRAPH 6:
BENZENE SAMPLE LOCATION
AT WWTP INFLUENT

PHOTOGRAPH 7:
ASBESTOS ENCLOSURE



PHOTOGRAPH 8: SHELL VALVE TAGGING SYSTEM

PHOTOGRAPH 9: MONITORING WITH TLV

APPENDIX C

EXIT CONFERENCES ATTENDEES

Closing Conference - 11-5-93

NAME	COMPANY	Number
KEN GARING	EPA-NEIC	(303) 236-5124
Daren Vanderberghe	EPA-NEIC	(303) 236-5124
Clyde Wiseman	Shell	(618) 255-3375
Linda Tekrony	EPA-NEIC	(303) 236-5124
Anne Billington	EPA-NEIC	(303) 236-5124
Gary Spears	Shell	618-255-3375
Joe Brewster	Shell	618-255-2478
LARRY HEUCATTER	SHELL	618-255-2448
Jeff Weerhaber	Shell	255-2369
Chris Cahnovsky	IEPA	346-5120
JOHN Justice	IEPA	618/346-5120
Jay Ranteen	Shell	618-255-2737
Colleen Hutchings	Shell	618-255-2265
ERIC PETERSEN	Shell	618-255-3190
Randy Zerkel	Shell	618-255-2734
ROBERT MILLER	SHELL	(618) 255-2405
KENT PECCOLA	Shell	(618) 255-2758
Robert Gillette	Shell	(618) 255-2755
Gina Nicholson	Shell	618-255-2512
Jeff Benkenck	State of Ill EPA	618-346-5120
SERGIO SIAO	EPA-NEIC	(303) 236-5124
E Gayle Johnson	Shell	(618) 255 2201

Close out LDAR Evaluation

	Company	Phone
Bevington	EPA/NEIC	(303) 236-5124
Bustamante	EPA/NEIC	(303) 236-5124
Benbenck	State of Ill EPA	618-346-5120
BRISKY	SHELL	618-255-2562
Brewster	Shell Oil	618-255-2478
Nicholson	Shell	618-255-2512
Spencer	Shell	618 255-3549
J. Crainick	Shell	618-255-2694
LaTempt	Shell	618-255-2140
Johnson	Shell	618-255-2201
Jobe	Shell	618-255-2893

APPENDIX D

JANUARY 1993 FCC STACK TEST RESULTS

THE ALMEGA CORPORATION

A DIVISION OF NATIONAL AIR NETWORK, INC.

NO. 1 AND NO. 2 CAT CRACKER
STACK PARTICULATE EMISSION TESTING
JANUARY 12 AND 13, 1993
THE ALMEGA CORPORATION PROJECT I-7205
THE ALMEGA CORPORATION REPORT I-7205-1
SHELL OIL COMPANY CONTRACT #WRB-2235

PREPARED FOR:

Shell Oil Company
P. O. Box 262
Wood River, Illinois 62095

An ENVIRONMENTAL SERVICES OF AMERICA, INC. Company

THE ALMEGA CORPORATION
A DIVISION OF NATIONAL AIR NETWORK, INC.
601 A Country Club Drive
Bensenville, Illinois 60106
Phone: (708) 595-0175
Fax: (708) 595-2103

March 23, 1993

Shell Oil Company
P.O. Box 262
Wood River, Illinois 62095

Attention : Mr. Terry Pomatto

Subject : No. 1 and No. 2 Cat Cracker
Stack Particulate Emission Testing
January 12 and 13, 1993
The Almega Corporation Project I-7205
The Almega Corporation Report I-7205-1
Shell Oil Company Contract #WRB-2235

Gentlemen:

1. INTRODUCTION

1.1 A series of particulate emission tests was conducted on the No. 1 and No. 2 cat cracke precipitator stacks at Shell Oil Company in Wood River, Illinois on January 12 and 13, 1993.

1.2 Emission testing was performed at both stack test platforms located approximately 120 ft. up each of the two identical but separate stacks servicing the number 1 and 2 electrostatic precipitators. The purpose of this test series was to determine the degree of complianc with applicable Illinois EPA emission codes.

1.3 Emission testing was conducted following procedural requirements as detailed in Title 40 Code of Federal Regulations (40: CFR) (Ref. 1).

1.4 Emission testing was conducted by Mark Reichard, Matthew Pavlik and Tom Lundin of The Almega Corporation using an Andersen Samplers USEPA type Method 5 sampling train.

1.5 The cat cracker units were operated normally by Shell personnel.

1.6 This report summarizes the test methods, procedures and findings of this test series. Attached as appendices is a complete documentation of all field test data and supporti calculations.

2. SUMMARY OF TEST METHODS

2.1 Particulate emission testing was conducted on the No. 1 and No. 2 cat cracker precipitator stacks at Shell Oil Company in Wood River, Illinois on January 12 and 13, 1993.

2.2 The selection and location of the sampling points for this stack test followed Method 1 (Ref. 1). Specifically, sampling was conducted for 3 minutes at each of 20 points, 5 points on each of four radii in each of the two identical but separate 124 inch inside diameter stacks exhausting the two electrostatic precipitators.

2.3 The stack gas velocity was determined using an S type pitot tube and followed Method 2 (Ref. 1).

2.4 Stack gas samples were taken following Method 3 (Ref. 1) for determination of CO_2, O_2 and molecular weight.

2.5 The stack gas moisture was determined following Method 4 (Ref. 1).

2.6 Particulate emission sampling was performed following method 5 (Ref. 1).

2.7 The particulate catch included nozzle, probe, prefilter glassware washings and filter particulates as detailed in Method 5.

2.8 A quartz glass-lined stainless steel sampling probe and appropriately sized stainless steel sampling nozzle were used. Prefilter glassware was also made of quartz.

3. SUMMARY OF TEST RESULTS

3.1 The results of this test series are summarized in Tables No. 1 and 2 for the stack particulate tests of the No. 1 and No. 2 cat cracker units on January 12 and 13, 1993, respectively.

3.2 The particulate field test and laboratory analysis data and calculation summaries for No. 1 and No. 2 cat cracker units are included in Appendix A.

3.3 Plant operational data containing the catalyst recirculation rate are included in Appendix B.

3.4 Equipment calibrations are included in Appendix C.

3.5 Table 3 contains the calculated allowable emission rate formula.

4. CONCLUSION

4.1 Particulate emission testing was conducted on the No. 1 and No. 2 cat cracker precipitator stacks at Shell Oil Company in Wood River, Illinois on January 12 and 13, 1993.

4.2 Test methods followed Title 40: CFR (Ref. 1).

4.3 This report summarizes the test methods, procedures and findings of this test series. Attached as appendices is a complete documentation of test methods, procedures and field and laboratory analyses data.

4.4 Findings of this test series show the following particulate concentrations and emission rates:

No. 1 Cat Cracker - January 13, 1993

Test Run	Particulate Concentration grains/dscf	Particulate Emission Rate lbs/hr	Calculated Allowable Emission Rate lbs/hr
1	.0140	14.51	82.29
2	.0147	14.98	82.34
3	.0235	23.92	81.89
Average	.0174	17.80	82.17

No. 2 Cat Cracker - January 12, 1993

Test Run	Particulate Concentration grains/dscf	Particulate Emission Rate lbs/hr	Calculated Allowable Emission Rate lbs/hr
1	.0328	32.83	79.84
2	.0261	25.96	79.57
3	.0753	72.94	78.95
Average	.0447	43.91	79.45

The Almega corporation is pleased to have been of service to Shell Oil Company and looks forward to further opportunities of being of service.

Respectfully submitted,

THE ALMEGA CORPORATION
A Division of National Air Network, Inc.

Mark A. Reichard

Mark A. Reichard
Senior Field Technician

MR/lb
Enclosures

TABLE 1

SUMMARY OF EMISSION TEST DATA

COMPANY: Shell Oil Company, Wood River, Illinois

LOCATION: No. 1 Cat Cracker Precipitator Stack

OPERATORS: M. Reichard, M. Pavlik and T. Lundin

TEST DATE: January 13, 1993

REPETITION#:	1	2	3
TEST TIME:	10:29A-11:41A	12:19P-1:29P	1:58P-3:09P
STACK GAS			
Temperature, average °F	517.8	524.3	525.3
Velocity average fps	53.36	51.93	52.68
Volume flow x 10^6 dscfh	7.256	7.116	7.120
acfm	268,496	261,300	265,074
scfm	120,933	118,600	
118,665			
Orsat, average % CO_2	15.0	15.2	14.9
% O_2	3.3	2.4	3.2
Moisture %	16.7	15.5	16.6
PARTICULATE SAMPLE			
Time, minutes	60	60	60
Volume scf db	47.734	46.194	46.480
Particulates collected, mg			
Filter	23.2	24.3	35.8
Probe Wash	20.1	19.8	35.4
Total	43.3	44.1	70.4
Isokinetic Ratio %	103.64	102.32	
102.85			
PARTICULATE			
Concentration grains/dscf	.0140	.0147	.0235
Emissions lbs/hr	14.51	14.98	23.9
PROCESS OPERATIONS			
Catalyst recirculation rate, tons/minute	23.8	23.9	23.1
Soot blowing	NO	NO	NO
CALCULATED ALLOWABLE			
Emissions lbs/hr	82.29	82.34	81.89

TABLE 2

SUMMARY OF EMISSION TEST DATA

COMPANY: Shell Oil Company, Wood River, Illinois

LOCATION: No. 2 Cat Cracker Precipitator Stack

OPERATORS: M. Reichard, M. Pavlik and T. Lundin

TEST DATE: January 12, 1993

REPETITION#:	1	2	3
TEST TIME:	9:27A-10:40A	11:12A-2:21P	12:49P-2:01P
STACK GAS			
Temperature, average °F	682.2	690.5	683.4
Velocity average fps	60.01	60.68	59.26
Volume flow x 10^6 dscfh	7.0094	6.9537	6.782
acfm	301,957	305,328	298,183
scfm	116,823	115,895	113,034
Orsat, average % CO_2	15.1	15.0	15.[illegible]
% O_2	2.8	3.1	3.[illegible]
Moisture %	15.0	16.0	16.6
PARTICULATE SAMPLE			
Time, minutes	60	60	60
Volume scf db	44.910	45.420	43.935
Particulates collected, mg			
Filter	49.8	45.6	41.
Probe Wash	45.6	31.3	173.
Total	95.4	76.9	214.
Isokinetic Ratio %	101.04	102.97	102.1
PARTICULATE			
Concentration grains/dscf	.0328	.0261	.075
Emissions lbs/hr	32.83	25.96	72.9
PROCESS OPERATIONS			
Catalyst recirculation rate, tons/minute	19.8	19.4	18.
Soot blowing	NO	NO	N
CALCULATED ALLOWABLE			
Emissions lbs/hr	79.84	79.57	78.9

TABLE 3

CALCULATED ALLOWABLE EMISSION RATE

$$E = [55.0\ (P)^{0.11}] - 40$$

where: E = allowable emission rate in pounds per hour

P = catalyst recycle rate, including the amount of fresh catalyst added, in tons per hour

therefore for Run 1, Cat 2:

P = (19.8 tons/min) (60 min/hr)

P = 1188 tons/hr

$E = [55\ (1188_{0.11}] - 40$

E = 79.84 lbs/hr

REFERENCE

1 Title 40: Code of Federal Regulations

APPENDICES

A Field Test, Laboratory Analysis Data and Calculation Summaries for No. 1 and No. 2 Cat Cracker Units

B Operational Data Feed Rates for Cat Crackers No. 1 and No. 2

C Equipment Calibrations and Chain-of-Custody

APPENDIX E

PROCESS HEATERS AND BOILERS

HEATER AND BOILER INFORMATION
Shell Oil Company
Roxana, Illinois

Plant Unit	Refinery Name or Number	Rated Heat Input MM Btu/hr	Type of Fuel	Start-Up Date	Operating Permit	
					Number	Expiration Date
DU-1	Primary Reboil Heater	120.0	Pitch/RFG[1]	Pre-1973	72110615	6/30/97
	Secondary Feed Heater	200.0	Pitch/RFG	Pre-1973		
DU-2	F-200	151.0	Pitch/RFG	Pre-1973	72110616	7/31/96
	F-202	230.0	Pitch/RFG	Pre-1973		
	F-203	230.0	Pitch/RFG	Pre-1973		
	F-204	61.0	Pitch/RFG	Pre-1973		
	F-205	61.0	Pitch/RFG	Pre-1973		
Rectified Absorber Unit	DBT[2] Reboil Furnace	69.0	RFG	Pre-1973	72110618	6/30/97
	Absorber/DET[3]	85.0	Pitch/RFG	Pre-1973		
Alkylation Plant	Alky Recovery Heater H-1	37.5	Fuel Oil	Pre-1973	7211063	12/31/94
	Alky Recovery Heater H-2	110.0	Fuel Oil	Pre-1973		

1 *Refinery Fuel Gas*
2 *Debutanizer*
3 *Deethanizer*

Plant Unit	Refinery Name or Number	Rated Heat Input MM Btu/hr	Type of Fuel	Start-Up Date	Operating Permit	
					Number	Expiration Date
Gas Plant	H-6	62.1	Pitch/RFG	Pre-1973	72110619	6/30/97
Vacuum Flashing Unit	Visbreaker Heater - West	110.0	Pitch/RFG	Pre-1973	72110620	8/31/95
	Visbreaker Heater - East	110.0	Pitch/RFG	Pre-1973		
	Visbreaker Vac Flasher Heater	50.0	Pitch/RFG	Pre-1973		
	North	100.0	Pitch/RFG	May 23, 1986		
	South	100.0	Pitch/RFG	May 23, 1986		
Catalytic Dewaxing Unit/ Lube Oil Deasphalting Unit	Cat Dew Heater	20.5	RFG	March 21, 1988	72110624	4/39/95
	DAO[1] Heater	5.0	RFG	Pre-1973		
	AS[2] Heater	6.0	RFG	Pre-1973		
Lube Fractionation/ Extraction Unit	VF[3] Charge Furnace	89.1	RFG	Pre-1973	72110625	9/25/94
	Raffinate Heater	20.8	RFG	Pre-1973		
	Extract Heater	63.5	RFG	Pre-1973		
Precursor Unit	Furnace*	67.4	Fuel Oil	Pre-1973	72110614	8/19/98
Lube Oil Hydrotreater	Charge Heater	20.8	RFG	Pre-1973	72110627	11/25/95

1 *Vacuum Flasher* * *Unit is Shutdown (Not in Service)*

Plant Unit	Refinery Name or Number	Rated Heat Input MM Btu/hr	Type of Fuel	Start-Up Date	Operating Permit	
					Number	Expiration Date
Benzene Extraction Unit	H-1	110.0	Pitch/RFG	Pre-1973	72110612	8/31/95
	H-2	110.0	Pitch/RFG	Pre-1973		
Steam Methane Reformer/ Hydrocracker Unit	SMR H-1	454.2	Pitch/RFG	Pre-1973	72110611	3/31/95
	Hydrocracker H-1	70.0	Pitch/RFG	Pre-1973		
	Hydrocracker H-2	70.0	Pitch/RFG	Pre-1973		
	Fractionator H-3	235.0	Pitch/RFG	Pre-1973		
Catalytic Reformer Unit No. 1	Cat Reformer 1 Heater H-1	165.0	Pitch/RFG	Pre-1973	72110610	9/17/96
	Cat Reformer 1 Heater H-2	162.0	Pitch/RFG	Pre-1973		
	Cat Reformer 1 Heater H-3	78.0	Pitch/RFG	Pre-1973		
	Cat Reformer 1 Heater H-4	40.0	Pitch/RFG	Pre-1973		
	Cat Reformer 1 Heater H-5	38.0	Pitch/RFG	Pre-1973		
	Cat Reformer 1 Heater H-7	100.0	Pitch/RFG	Pre-1973		

Plant Unit	Refinery Name or Number	Rated Heat Input MM Btu/hr	Type of Fuel	Start-Up Date	Operating Permit	
					Number	Expiration Date
Distillate Hydrotreater	DHT Charge Heater	108.0	Pitch/RFG	Pre-1973	72110637	10/31/95
Kerosene Hydrotreater	No. 1	98.7	RFG	Pre-1973	72110636	8/17/98
	No. 2	98.7	RFG	Pre-1973		
Cat Reformer No. 2/ Hydro-desulfurizer No. 1	Cat Reform No. 2 North	137.5	RFG	Pre-1973	72110634	2/29/96
	Cat Reform No. 2 South	137.5	RFG	Pre-1973		
	HDU No. 1 Charge Heater	67.3	RFG	Pre-1973		
Acetone Unit	DMK[1] Converter Heater H-1*	29.0	RFG	May 19, 1980	78040017	6/30/98
	DMK Converter Heater H-2*	29.0	RFG	May 19, 1980		
Utilities Department	Boiler No. 13*	249.0	Pitch/RFG	Pre-1973	72110633	3/31/96
	Boiler No. 15	249.0	Pitch/RFG	Pre-1973		
	Boiler No. 16	249.0	Pitch/RFG	Pre-1973		
	Boiler No. 17	700.0	Pitch/RFG	Oct. 1974		
	Boiler No. 18	249.0	Pitch/RFG	Dec. 1979		

[1] *Dimethyl Ketone* * *Shutdown (Not in Service)*

Plant Unit	Refinery Name or Number	Rated Heat Input MM Btu/hr	Type of Fuel	Start-Up Date	Operating Permit	
					Number	Expiration Date
Hydrodesulfuri-zation No. 2/ Catalytic Reformer No. 3	HDU-2 Heater	81.0	Pitch/RFG	Pre-11973	72110635	8/31/97
	Cat 3 Reboiler Heater	31.6	Pitch/RFG	Pre-1973		
	Cat 3 Regen Heater	25.4	RFG	Pre-1973		
	Cat 3 Charge Heater	144.7	Pitch/RFG	Pre-1973		
	Cat 3 1st Reheat	141.0	Pitch/RFG	Pre-1973		
	Cat 3 2nd Reheat	74.0	Pitch/RFG	Pre-1973		
Saturate Gas Plant	Sat Gas Plant H-6*	62.1	Pitch/RFG	Pre-1973	72110609	4/30/95
Catalytic Cracking Unit 1	Unit No. 1 CO Boiler	N/A	RFG	Pre-1973	72110621	5/17/98
Catalytic Cracking Unit 2	Unit No. 2 CO Boiler	N/A	RFG	Pre-1973	72110622	5/17/98
Cracked Absorption Unit	Rich Oil Furnace	95.0	Pitch/RFG	Pre-1973	72110619	6/30/97
Refinery Flasher Pitch System	RFP Heater	17.0	RFG	Pre-1973	72110620	8/31/95

* *Shutdown (Not in Service)*

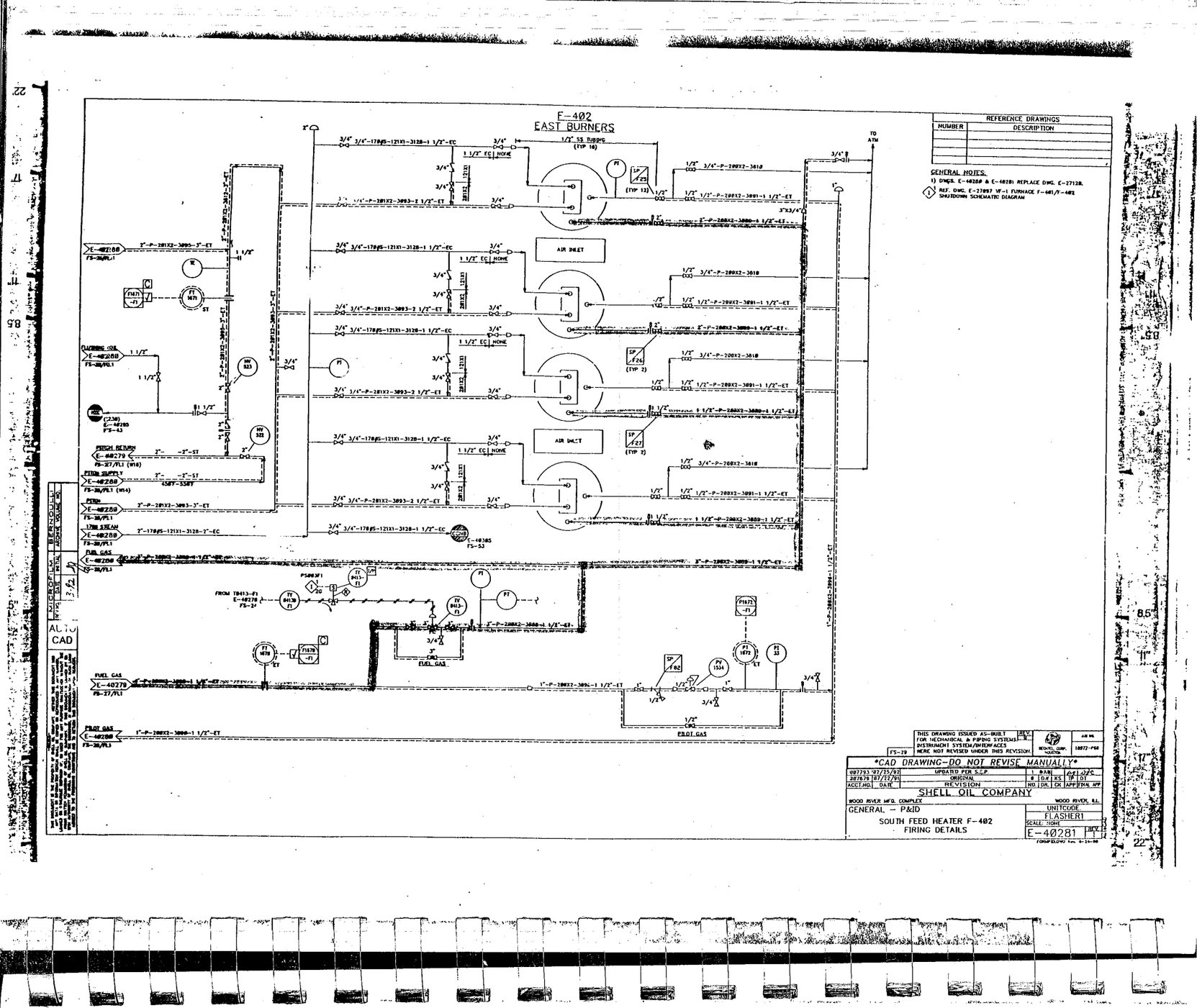
Plant Unit	Refinery Name or Number	Rated Heat Input MM Btu/hr	Type of Fuel	Start-Up Date	Operating Permit	
					Number	Expiration Date
Catalytic Cracking Unit No.1	B-1 Air Heater (startups only)	43.2	RFG	Pre-1973	72110621	5/17/98
Catalytic Cracking Unit No.2	B-1 Air Heater (startups only)	43.2	RFG	Pre-1973	72110622	5/17/98
Catalytic Feed Hydrotreater	Heater	32.0	RFG	Pre-1973		

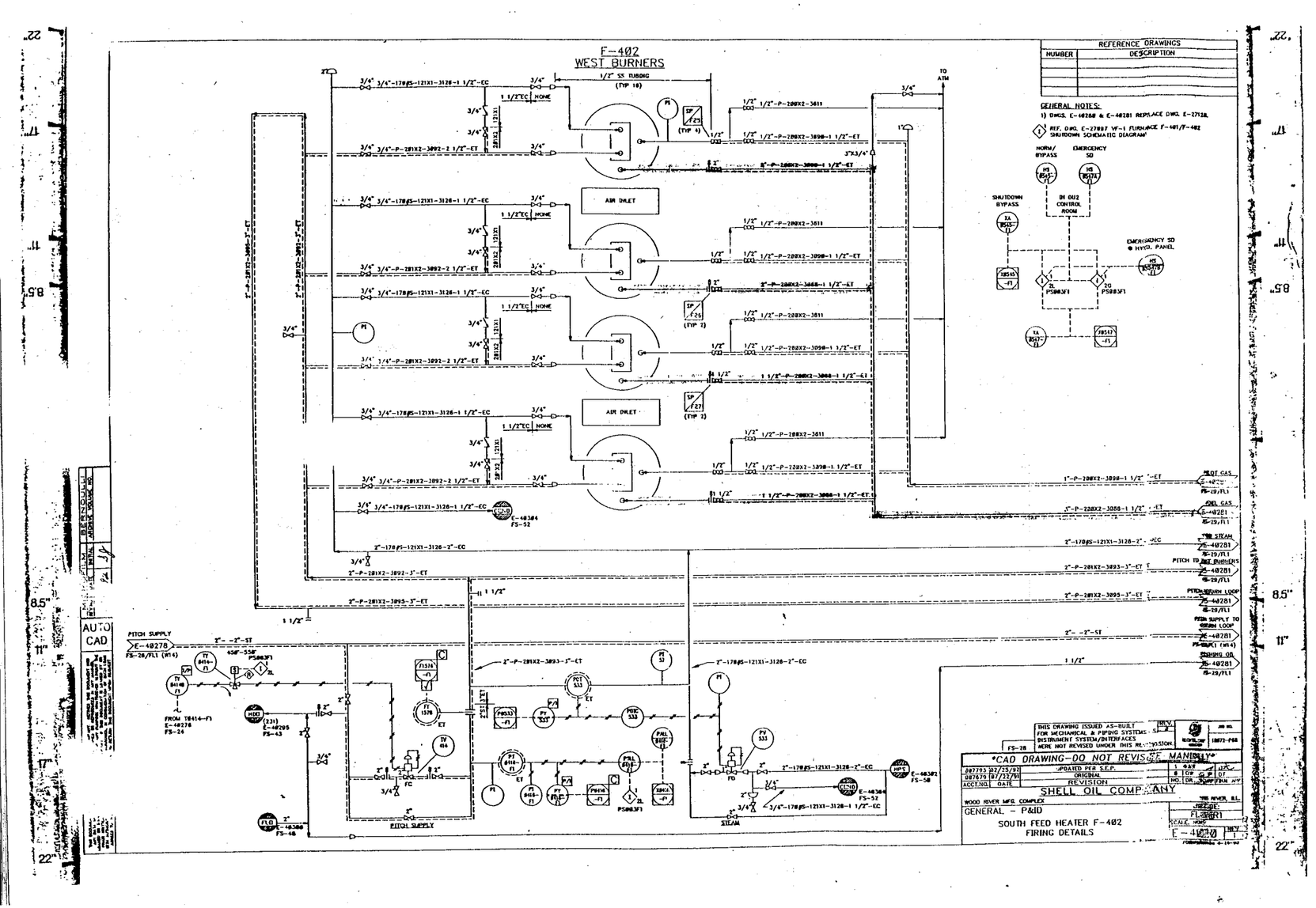
APPENDIX F

PID FOR NSPS UNITS

F-1
CHARGE HEATER
SHELL OIL COMPANY
WOOD RIVER REFINERY
GENERAL - FLOW DIAGRAM FOR
CHARGE HEATER
CDU
LUBE
E-30695-8
REFERENCE DRAWINGS

F-401
WEST BURNERS
F-401
EAST BURNERS
AIR INLET
SHELL OIL COMPANY
NORTH FEED HEATER F-401
FIRING DETAILS
GENERAL - P&ID
WOOD RIVER MFG. COMPLEX
CAD DRAWING-DO NOT REVISE MANUALLY
GENERAL NOTES:
1) DWGS. E-48278 & E-48279 REPLACE DWG. E-27127.
2) REF. DWG. E-27297 (F-1) FURNACE F-401/F-402 SHUTDOWN SCHEMATIC DIAGRAM
REFERENCE DRAWINGS
DESCRIPTION
ISSUED FOR CONSTRUCTION
MICROFILM
BERNOULLI
ARCHIVE VOLUME NO.
AUTO CAD


F-402
EAST BURNERS
REFERENCE DRAWINGS
NUMBER
DESCRIPTION
GENERAL NOTES:
1) DWGS. E-40280 & E-40281 REPLACE DWG. E-27128.
REF. DWG. E-27097 VF-1 FURNACE F-401/F-402 SHUTDOWN SCHEMATIC DIAGRAM
AIR INLET
AIR INLET
PITCH RETURN
PITCH SUPPLY
PITCH
FUEL GAS
PILOT GAS
FUEL GAS
PILOT GAS
TO ATM
THIS DRAWING ISSUED AS-BUILT FOR MECHANICAL & PIPING SYSTEMS INSTRUMENT SYSTEM/INTERFACES WERE NOT REVISED UNDER THIS REVISION.
CAD DRAWING-DO NOT REVISE MANUALLY
UPDATED PER S.E.P.
ORIGINAL
REVISION
SHELL OIL COMPANY
WOOD RIVER MFG. COMPLEX
GENERAL - P&ID
SOUTH FEED HEATER F-402
FIRING DETAILS
UNITCODE
FLASHER1
E-40281
AUTO CAD


F-402
WEST BURNERS
REFERENCE DRAWINGS
NUMBER
DESCRIPTION
GENERAL NOTES:
1) DWGS. E-40280 & E-40281 REPLACE DWG. E-27128.
REF. DWG. E-27097 VF-1 FURNACE F-401/F-402 SHUTDOWN SCHEMATIC DIAGRAM
AIR INLET
AIR INLET
PITCH SUPPLY
PITCH SUPPLY
STEAM
TO ATM
THIS DRAWING ISSUED AS-BUILT FOR MECHANICAL & PIPING SYSTEMS INSTRUMENT SYSTEM/INTERFACES WERE NOT REVISED UNDER THIS REVISION.
CAD DRAWING-DO NOT REVISE MANUALLY
UPDATED PER S.E.P.
ORIGINAL
REVISION
SHELL OIL COMPANY
WOOD RIVER MFG. COMPLEX
GENERAL - P&ID
SOUTH FEED HEATER F-402
FIRING DETAILS
E-40280
AUTO CAD

APPENDIX G

SHELL DESIGNATION OF BOILER NO. 17

PURPOSE

The purpose of this procedure is to outline the fuel requirements for new source heaters and boilers. New source requirements for opacity at Boiler 17 are also covered.

SUMMARY

USEPA regulations limit the H_2S content in the refinery fuel gas to new source heaters and boilers. New source regulations also limit the opacity emissions from Boiler 17. The Environmental Conservation Department must be consulted before any process change or project to construct, rebuild, or modify a heater or boiler to determine if new source requirements would be triggered.

The refinery fuel gas (RFG) supplied to new source heaters and boilers must contain no more than 10 grains H_2S/100 scf in a 3-hour rolling average period. This requirement does not apply to Boiler 17. The Cracked Gas Plant must immediately notify the Environmental Supervisor on Cybertel pager 618-325-4476, whenever the RFG to the new source heaters/boilers exceeds the limit. The Cracked Gas Plant should also notify the new source heater/boiler owners.

In general, the opacity limit for Boiler 17 is 20% in a six-minute block average period. This limit does not apply when burning pitch. Utilities must immediately notify the Environmental Supervisor on Cybertel pager 618-325-4476, whenever the opacity limit is exceeded.

Refer to EC 1.03 for refinery fuel gas requirements for heaters and boilers that are not new sources.

CONTENTS

The remaining sections of this procedure are outlined below:

I. New Source Heaters and Boilers
II. Boiler 17
III. Reporting Requirements
IV. Responsibilities
V. Recordkeeping Requirements

VI. Training
VII. Audits

Attachment 1 - Training Guide
Attachment 2 - Audit Form

I. NEW SOURCE HEATERS/BOILERS

A continuous emission monitor for H_2S is required on refinery fuel gas supplied to new source heaters and boilers. Heaters and boilers are considered "new source" if they are newly constructed, reconstructed, or if modified in such a way that an increase in emissions would result. Reconstruction occurs when the fixed capital cost to rebuild an existing heater or boiler is greater than 50% of the fixed capital cost to build an entirely new one. A modification can be a physical or operational change. The current new source heaters and boiler at WRMC are listed below:

CDU Heater
Boiler 18
VF-1 North Heater
VF-1 South Heater

The refinery fuel gas (RFG) supplied to new source heaters and boilers must not exceed 10 grains H_2S/100 scf. The H_2S content of the RFG to new source heaters and boilers is monitored using the H_2S analyzer at the Cracked Gas Plant. Compliance is basis a three-hour rolling average period. The rolling average must be determined every hour for the previous three hours. The analyzer is programed to automatically calculate the 3-hour rolling averages from the data generated by the analyzer.

If the analyzer fails, the new sources should be switched to natural gas, if feasible. Switchover to natural gas should also be considered whenever the RFG exceeds 10 grains. The Cracked Gas Plant is responsible for implementing corrective actions and for immediately notifying the Environmental Supervisor of any problems. The Cracked Gas Plant should also notify the new source owners of any problems and whenever a switch is made from natural gas to RFG, or vice versa.

Before constructing, rebuilding, modifying, or making a process change to a heater or boiler, the affected Department must notify the Environmental Conservation Department to determine if new source requirements would be triggered.

II. BOILER 17

A continuous emission monitor for opacity is required on emissions to atmosphere from Boiler 17. The opacity limit is 20% in a six-minute

block average period, except for 1 six-minute period per hour of no more than 27% opacity. The opacity is monitored using the opacity monitor at Boiler 17. The Utilities process computer is programed to automatically calculate the 6-minute block averages from the data generated by the opacity monitor. Utilities is responsible for implementing corrective actions and for immediately notifying the Environmental Supervisor of any problems.

Boiler 17 is only subject to the 20% opacity limit when 100% refinery fuel gas is burned. When burning refinery flasher pitch, alone or in combination with refinery fuel gas, Boiler 17 is not subject to the 20% opacity limit. The opacity limit when burning pitch is 30% (see EC 1.08). Furthermore, Boiler 17 is not subject to the 10-grain H_2S fuel gas limit. RFG requirements for Boiler 17 are outlined in EC 1.03.

III. REPORTING REQUIREMENTS

The following incidents must be immediately reported to the Environmental Supervisor on Cybertel pager 618-325-4476 whenever they occur:

1. RFG supply to new source heaters and boilers exceeds 10 grains H_2S/100 scf in a 3-hour rolling average period.
2. Boiler 17 opacity exceeds 20% in a six-minute block average period.

Environmental Supervisors are responsible for reporting incidents to the IEPA Collinsville office by FAX as soon as they occur. However, a FAX is not required for Boiler 17 opacity exceedances which are handled by quarterly reports to the IEPA.

IV. RESPONSIBILITIES

ALL DEPARTMENTS are responsible for:
1) notifying the Environmental Conservation Department of any proposed physical or operational change to an existing heater or boiler, and of any proposed new heater or boiler construction.

The CRACKED GAS PLANT is responsible for:
1) maintaining the H_2S analyzer,
2) immediately reporting to the Environmental Supervisor when the 10-gr H_2S limit of refinery fuel gas is exceeded, and
3) implementing corrective actions to reduce the RFG to no more than the limit (including switching to natural gas, if feasible).

UTILITIES is responsible for:
1) maintaining the boiler opacity monitors,
2) immediately reporting when the opacity limit is exceeded to the Environmental Supervisor, and
3) implementing corrective actions to lower opacity to no more than the limit.

The ENVIRONMENTAL CONSERVATION DEPARTMENT is responsible for:
1) preparing and submitting incidents reports and quarterly reports to the IEPA, including FAX reports made by the Environmental Supervisors, and
2) reviewing proposed changes for applicability of new source requirements.

V. RECORDKEEPING REQUIREMENTS

The following records must be retained for the current year plus an additional two years. This amounts to an approximate 3-year retention period.

1. RFG and pitch consumption rates to each new source heater and boiler.
2. Strip charts from the H_2S analyzer and opacity monitors.
3. Calibration checks and maintenance records on the H_2S analyzer and opacity monitors.
4. Computer reports on 10-gr fuel gas and boiler opacity exceedances.
5. Shift reports containing information on RFG and opacity incidents.

VI. TRAINING

Training on the content of this procedure should be performed to assure the procedure is clearly understood. Training should include a reading of the procedure emphasizing: the purpose of the procedure, environmental limits, reporting responsibilities, and corrective action requirements. A training guide is provided in Attachment 1.

VII. AUDITS

Employees should be audited to assess their knowledge of the requirements in this procedure. Audits can also be useful to determine when re-training is needed. The audit form is provided in Attachment 2.

APPROVAL:	REVIEWER:
SUPERINTENDENT FACILITIES SUPPORT TITLE	MANAGER ENVIRONMENTAL CONSERVATION TITLE
W L Phelps SIGNATURE	J. N. Brunt SIGNATURE
	NUMBER 4 REVISION

APPENDIX H

1975 REGION VI CORRESPONDENCE REGARDING REFINERY FUEL PITCH

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VI
1600 PATTERSON, SUITE 1100
DALLAS, TEXAS 75201

JUN 3 1975

Mr. R. V. Mattern, Superintendent
Environmental Conservation
Shell Chemical Company
P. O. Box 2633
Deer Park, Texas 77536

Dear Mr. Mattern:

This will confirm your telephone conversation on May 2, 1975 with Ms. Letitia Taitte of my office with regard to the question of whether or not "pitch" is a fossil fuel within the meaning of 40 C.F.R. 60.41(b), and will also address the other matters raised in a letter written apparently on your behalf by Mr. David Cavers of Combustion Engineering, Inc. (CEI) to Mr. George Stevens of the Environmental Protection Agency (EPA), Washington, D. C. headquarters, dated March 20, 1975.

As Ms. Taitte indicated to you in the May 2, 1975 telephone call, it has been determined after considerable correspondence and telephone exchanges between Region VI of the EPA, and EPA headquarters and your office, that pitch, of the derivation and composition detailed in your letter of February 11, 1975 to this office, is not a fossil fuel within the meaning of the definition at 40 C.F.R. 60.41(b). However, although a determination has not been specifically requested as to whether or not a steam generator fired simultaneously by both pitch and a fossil fuel (in this case natural gas) is covered by the New Source Performance Standards (NSPS), 40 C.F.R. Part 60, Subpart D, the question necessarily arises since it is clear from your letter of February 11, 1975 that the steam generator is designed to burn natural gas and pitch simultaneously. Our determination of the applicability of the NSPS to F-UT-130 follows.

If the steam generator is so designed that it is capable of being fired by more than 250 million BTU heat input per hour from natural gas, the steam generator is indeed a "fossil-fuel fired steam generator" within the meaning of the definition at 40 C.F.R. 60.41(b). However, as a practical matter, determinations of compliance with applicable New Source Performance Standards are made on the basis of tests performed while the steam generator is fired entirely by fossil fuel. Consequently, steam generator F-UT-130 is required to be tested for compliance with, and to be in compliance with, the New Source Performance Standards for Fossil Fuel Fired Steam Generators, including the particulate opacity standard, only

when it is fired entirely by natural gas, if the natural gas can supply more than 250 million BTU per hour heat input. In view of this, it is not necessary that "waivers" be requested for "pitch firing" of F-UT-130. Steam generator F-UT-130 need not be tested during firing by pitch (whether the pitch is the only fuel or is used in combination with a fossil fuel), and therefore no test methods need be waived.

CEI had also requested on your behalf certain waivers "for natural gas firing." It is our understanding that the steam generator F-UT-130 was tested during 100 percent natural gas firing on March 26, 1975. Since these tests have already been performed, it seems inappropriate to grant waivers before we receive and evaluate the report indicating the methods used and the figures obtained. With regard to this test, we call to your attention that the EPA did not receive the 30 days advance notice of the test date which the owner or operator of the affected facility is required to give, in accordance with 40 C.F.R. 60.8(d). However, in view of the considerable correspondence and telephone communications which have been exchanged among Region VI, CEI and your office on the subject of the testing of this generator, and the delays occasioned by these communications, Region VI will expect to receive and evaluate these tests and the methods employed during them. You will not be penalized for the inadequate advance notice given of this test. However, in the future you are expected to observe the notice requirements of 40 C.F.R. Part 60, Subpart A, and should note that all such required notifications are to be addressed to the Director of the Enforcement Division of the appropriate regional office, in accordance with 40 C.F.R. 60.4.

We have attempted in this letter to address all of the questions raised in the correspondence to date regarding steam generator F-UT-130 at your Shell Chemical Company, Deer Park plant. If you feel that any of the questions remain unanswered, please write to the Enforcement Division at the above address.

Sincerely yours,

O. W. Lively Jr.

for James J. Doyle
Director
Enforcement Division

cc: Mr. Richard Schlacker
Shell Chemical Company
P. O. Box 2633
Deer Park, Texas 77536

Mr. J. D. Cavers
Senior Test Engineer
Combustion Engineering, Inc.
1000 Prospect Hill Road
Windsor, Connecticut 06095

APPENDIX I

PRVS RELIEVING TO ATMOSPHERE

SUMMARY
ATMOSPHERIC RELEIF VALVES
Shell Refinery
Roxana,Illinois

Process Unit	Number of Atmospheric Relief Valves
Distilling No. 1	7
Distilling No. 2	14
Flashers 1 and 3	3
Gas Plant	7
Cracking Reformer No. 1	11
Cracking Reformer No. 3	9
Hydrocracker	4
Benzene Extraction Unit	5
Sats Gas Plant	4
Catalytic Reformer-1	2
Catalytic Reformer-3	3
Distillate Hydrotreater	4
Hydrosulfurization Unit-2	3
Steam Methane Reformer	1
Acid Handling Plant	3
Environmental Operations	9
Lubes	4
Catalytic Dewaxing Unit	18
TOTAL	111

ATMOSPHERIC RELIEF VALVES CAPABLE OF H_2S/MeSH AND PO RELEASES

PRV NUMBER	STREAM NAME	MAXIMUM RELEASE RATE, LB/MIN	(%) PERCENT WEIGHT H_2S	MeSH	C_6H_6	NH_3	Cl_2
	Distilling No. 1						
R-315	Pet 1200	263*	--	--	--	--	--
	Pet 7140	285**	--	--	--	--	--
R-828	Pri Col Overhead	2,526	0.12	0.003	1.21	--	--
R-829	Pri Col Overhead	441	0.12	0.003	1.21	--	--
R-835	Debut Overhead (summer)	3,510	0.11	0.01	0.13	--	--
	Debut Overhead (winter)	3,337	0.12	0.01	--	--	--
R-836	Pri Col Overhead	441	0.12	0.003	1.21	--	--
R-838	Pri Col Overhead	2,526	0.12	0.003	1.21	--	--
R-956	Tretolite Pet 7140	812**	--	--	--	--	--
	Distilling No. 2						
R-1502	Upper Column Overhead	2,458	0.75	0.0019	2.8	--	--
R-1503	Upper Column Overhead	2,458	0.75	0.0019	2.8	--	--
R-1504	Upper Column Overhead	2,458	0.75	0.0019	2.8	--	--
R-1505	Upper Column Overhead	2,458	0.75	0.0019	2.8	--	--
R-1506	Upper Column Overhead	2,458	0.75	0.0019	2.8	--	--
R-1507	Upper Column Overhead	2,458	0.75	0.0019	2.8	--	--
R-1508	Upper Column Overhead	1,594	0.75	0.0019	2.8	--	--
R-1510	Vac Flasher Overhead	746	10.98	--	--	--	--
R-1511	Debut Col Overhead	4,532	0.49	0.0003	--	--	--
R-1514	Deprop Col Overhead	2,865	4.12	0.11	--	--	--
R-1516	Deisohex Col Overhead	1,944	0.033	0.0002	0.5	--	--
R-1553	Deisohex Col Overhead	2,408	0.033	0.0002	0.5	--	--
R-1554	Deisohex Col Overhead	4,505	0.033	0.0002	0.5	--	--
R-5668	Debut Col Overhead	794	0.49	0.0003	--	--	--
	Flashers 1 and 3						
R-2079	Vent Gas	627	7.89	--	1.99	--	--
R-2120	Vent Gas	394	7.89	--	1.99	--	--
R-2135	Vent Gas	254	7.61	--	2.13	--	--
	Gas Plant						
R-4249-1	CAU Prestripper V-973	1,044	10	0.3	--	--	--
R-4303-1	RAU Debutanizer V-3301	4,014	1.34	0.0002	--	--	--
R-4333	RAU Deethanizer V-3300	1,636	8.32	0.23	--	--	--
R-4336	CAU Debut Top MW V-2801	1,315	--	0.001	--	--	--
R-4433	Deisohexanizer V-2800	1,330	--	--	1.08	--	--
R-6081	No.2 Deprop V-946	1,453	3.97	--	--	--	--
R-15060	Deisohexanizer V-2800	1,330	--	--	1.08	--	--

* This stream contains 0.39% xylene.
** This stream contains 0.23% NaOH, 0.13% toluene, and 3.92% xylene.

PRV NUMBER	STREAM NAME	MAXIMUM RELEASE RATE, LB/MIN	(%) PERCENT WEIGHT H_2S	MeSH	C_6H_6	NH_3	Cl_2	C_7H_8
	Cracking No. 1							
R-3268	Frac Tops Vapor	1,867	0.8	--	1.5	--	--	2.8
R-3269	Frac Tops Vapor	1,867	0.8	--	1.5	--	--	2.8
R-3295	Frac Tops Vapor	1,867	0.8	--	1.5	--	--	2.8
R-3305	Frac Tops Vapor	1,150	0.8	--	1.5	--	--	2.8
R-3306	Frac Tops Vapor	1,150	0.8	--	1.5	--	--	2.8
R-3307	Frac Tops Vapor	1,150	0.8	--	1.5	--	--	2.8
R-3308	Frac Tops Vapor	1,150	0.8	--	1.5	--	--	2.8
R-3309	Frac Tops Vapor	1,150	0.8	--	1.5	--	--	2.8
R-3310	Frac Tops Vapor	1,150	0.8	--	1.5	--	--	2.8
R-3634	CCLGO to BOP	36,991*	--	--	--	--	--	--
R-3635	CCLGO to BOP	38,548*	--	--	--	--	--	--
	Cracking No. 2							
R-3495	Frac Tops Vapor	1,625	0.9	--	0.9	--	--	3.3
R-3533	Frac Tops Vapor	1,625	0.9	--	0.9	--	--	3.3
R-3534	Frac Tops Vapor	1,625	0.9	--	0.9	--	--	3.3
R-3605	Frac Tops Vapor	983	0.9	--	0.9	--	--	3.3
R-3606	Frac Tops Vapor	983	0.9	--	0.9	--	--	3.3
R-3607	Frac Tops Vapor	983	0.9	--	0.9	--	--	3.3
R-3608	Frac Tops Vapor	983	0.9	--	0.9	--	--	3.3
R-3609	Frac Tops Vapor	983	0.9	--	0.9	--	--	3.3
R-3610	Frac Tops Vapor	983	0.9	--	0.9	--	--	3.3
	Hydrocracker							
R-6481	Low Press Sep V-4169	2,840	21.2	--	--	--	--	--
R-6483	Main Frac Tops V-4171	5,570	19.9	--	--	--	--	--
R-6494	Low Press Sep V-4169	1,638	21.2	--	--	--	--	--
R-7890	Low Press Sep V-4169	1,040	21.2	--	--	--	--	--
	BEU							
R-5700	Feed Splitter V-2700	1,709	--	--	17	--	--	--
R-5701	Feed Splitter V-2700	1,709	--	--	17	--	--	--
R-5702	Raff Splitter V-2701	1,709	--	--	40	--	--	1.0
R-5703	Raff Splitter V-2701	1,709	--	--	40	--	--	1.0
R-5742	Water Still V-2704							
	(PSC upset)	831	--	--	30	--	--	--
	(SRC upset)	802	--	--	80	--	--	0.1
	Sats Gas Plant							
R-3713	Debut Col V-4257	6,344	0.09	0.1	--	--	--	--
R-3717	Sponge Oil Col V-4254	505	5.1	--	1.7	--	--	--
R-3723	Deprop Col V-4259	2,909	0.0001	--	--	--	--	--
R-3746	Debut Col V-4257	6,344	0.09	0.1	--	--	--	--

* This stream contains 0.71% xylene and is common to both CCU-1 & CCU-2.

PRV NUMBER	STREAM NAME	MAXIMUM RELEASE RATE, LB/MIN	(%) PERCENT WEIGHT H_2S	MeSH	C_6H_6	NH_3	Cl_2
	CR-1						
R-6410-1	C/WW Col V-4118						
	(chloriding)	1,000	--	--	--	--	0.15
	(comb removal)	1,000	--	--	19.3	--	--
R-6442	MSD V-4123						
	(chloriding)	511	--	--	--	--	0.15
	CR-3						
R-6312	Demister V-2497						
	(chloriding)	170	--	--	--	--	0.15
	(HC removal)	170	--	--	19.3	--	--
R-6316	MSD V-2400						
	(chloriding)	170	--	--	--	--	0.15
R-6327	5.6 Be Caustic	260*	--	--	--	--	--
	DHT						
R-6205	Frac Col V-3353	1,939	15.6	--	--	--	--
R-6210	Frac Col V-3353	1,939	15.6	--	--	--	--
R-6230	Frac Col V-3353	1,939	15.6	--	--	--	--
R-9521	Frac Col V-3353	1,939	15.6	--	--	--	--
	HDU-2						
R-6302	Sour Hydrogen V-2402	1,130	0.7	--	--	--	--
R-6304	Sour Hydrogen V-2404	59	0.7	--	--	--	--
R-15177	Strip Vent Gas V-2407	1,072	5.36	--	--	--	--
	SMR						
R-6491	Vent Gas Suct KOP V-4176	5	19.9	--	--	--	--
	Acid Handling Plant						
R-8550	Ammonia Storage V-3596	977	--	--	--	100	--
R-8559	Ammonia Storage V-3596	2,599	--	--	--	100	--
R-8560	Ammonia Storage V-3596	2,747	--	--	--	100	--
	Env Oprns						
R-1683	SWS V-4543	1,560	5.0	--	--	50.0	--
R-7633	DEA Stripper V-4505	62,540	75.0	--	--	--	--
R-7673	DEA Stripper V-4552	85,892	75.0	--	--	--	--
R-7688	DEA Stripper V-4555	85,892	75.0	--	--	--	--
R-7689	DEA Strip Accum V-4556	14,793	85.0	--	--	--	--
R-7691	DEA Strip Accum V-4553	14,793	85.0	--	--	--	--
R-7797	SCOT Ammonia V-4593	7,483	--	--	--	100	--
R-7798	SCOT Ammonia V-4593	7,483	--	--	--	100	--
R-7799	SCOT Ammonia V-4593	2,855	--	--	--	100	--

* This stream contains 3.35% NaOH.

PRV NUMBER	STREAM NAME	MAXIMUM RELEASE RATE, LB/MIN	(%) PERCENT WEIGHT H_2S	MeSH	C_6H_6	NH_3	Cl_2
	Lubes						
R-15150	LHT Recycle Hydrogen	2,233	6.1	--	--	--	--
R-15152	LHT Hydrogen Feed	242	3.0	--	--	--	--
R-15157	LHT Stripper Vent	467	19.9	--	--	--	--
R-15159	LHT Preflash Vent	5,417	11.1	--	--	--	--
	CDU						
R-8864	PSA Feed Hydrogen	184	0.5	--	--	--	--
R-8865	PSA Feed Vent	85	0.3	--	--	--	--
R-8866	PSA Feed Hydrogen	188	0.5	--	--	--	--
R-8867	PSA Feed Hydrogen	1.64	0.5	--	--	--	--
R-8868	PSA Feed Hydrogen	1.64	0.5	--	--	--	--
R-8869	PSA Feed Hydrogen	1.64	0.5	--	--	--	--
R-8870	PSA Feed Hydrogen	1.64	0.5	--	--	--	--
R-8871	PSA Feed Hydrogen	1.64	0.5	--	--	--	--
R-8872	PSA Feed Hydrogen	1.64	0.5	--	--	--	--
R-8873	PSA Feed Hydrogen	1.64	0.5	--	--	--	--
R-8874	PSA Feed Hydrogen	1.64	0.5	--	--	--	--
R-8875	PSA Feed Hydrogen	1.64	0.5	--	--	--	--
R-8876	PSA Feed Hydrogen	1.64	0.5	--	--	--	--
R-8877	PSA Feed Hydrogen	1.64	0.5	--	--	--	--
R-8878	PSA Feed Hydrogen	1.64	0.5	--	--	--	--
R-8879	PSA Vent	1,740	0.3	--	--	--	--
R-8884	PSA Vent C-800	423	0.3	--	--	--	--
R-8885	PSA Vent C-800	489	0.3	--	--	--	--

IMPORTANT:

Steam compositions may change with the variability of crude. For an actual release, the streams should be sampled to determine the exact composition at the time of the release.

APPENDIX J

HYDROCARBON STORAGE TANK DATA

WRMC TANK LIST WITH DIAMETER OR CAPACITY FOR SARA 313

Tank Number	Material ID	Material Name	Diameter or Capacity	Value	Units
TK-A010	TSTREAM 01	AC ASPHALT	TKCAP	88792.86	BBL
TK-A010	TSTREAM 01	AC ASPHALT	TKDIA	115.00	FT
TK-A012	TSTREAM 25	KEROSENE	TKDIA	115	FT
TK-A014	TSTREAM 25	KEROSENE	TKDIA	115	FT
TK-A016	TSTREAM 07	CC CLARIFIED OIL	TKDIA	120	FT
TK-A019	TSTREAM 17	DESULF HVY NAPHTHA	TKDIA	117	FT
TK-A022	TSTREAM 35	NO.6 OIL	TKCAP	80420	BBL
TK-A022	TSTREAM 35	NO.6 OIL	TKDIA	117.00	FT
TK-A023	TSTREAM 04	BENZENE RAFFINATE	TKDIA	117	FT
TK-A024	TSTREAM 09	CC HVY GASOLINE	TKDIA	110	FT
TK-A025	TSTREAM 09	CC HVY GASOLINE	TKDIA	110	FT
TK-A027	TSTREAM 04	BENZENE RAFFINATE	TKDIA	110	FT
TK-A027	TSTREAM 09	CC HVY GASOLINE	TKDIA	110	FT
TK-A027	TSTREAM 19	GASOLINE BASE	TKDIA	110	FT
TK-A028	TSTREAM 20	GASOLINE RU2000	TKDIA	110	FT
TK-A029	TSTREAM 35	NO.6 OIL	TKCAP	80419.64	BBL
TK-A029	TSTREAM 35	NO.6 OIL	TKDIA	117.00	FT
TK-A030	TSTREAM 35	NO.6 OIL	TKCAP	80419.64	BBL
TK-A030	TSTREAM 35	NO.6 OIL	TKDIA	117.00	FT
TK-A031	TSTREAM 21	GASOLINE SR2000	TKDIA	140	FT
TK-A032	TSTREAM 20	GASOLINE RU2000	TKDIA	110	FT
TK-A033	TSTREAM 22	GASOLINE SU2000/SU2000E	TKDIA	120	FT
TK-A034	TSTREAM 21	GASOLINE SR2000	TKDIA	140	FT
TK-A037	TSTREAM 03	AVIATION GASOLINE	TKDIA	120	FT
TK-A037	TSTREAM 09	CC HVY GASOLINE	TKDIA	120	FT
TK-A037	TSTREAM 22	GASOLINE SU2000/SU2000E	TKDIA	120	FT
TK-A039	TSTREAM 01	AC ASPHALT	TKCAP	136321.38	BBL
TK-A039	TSTREAM 01	AC ASPHALT	TKDIA	144.00	FT
TK-A040	TSTREAM 23	HVY REFORMATE	TKDIA	144	FT
TK-A041	TSTREAM 09	CC HVY GASOLINE	TKDIA	144	FT
TK-A041	TSTREAM 09	CC HVY GASOLINE	TKDIA	144	FT
TK-A041	TSTREAM 23	HVY REFORMATE	TKDIA	144	FT
TK-A041	TSTREAM 23	HVY REFORMATE	TKDIA	144	FT
TK-A042	M 15	ROAD OIL FOR TANK A042	TKCAP	136321.38	BBL
TK-A042	M 15	ROAD OIL FOR TANK A042	TKDIA	144.00	FT
TK-A042	TSTREAM 35	NO.6 OIL	TKCAP	136321.38	BBL
TK-A042	TSTREAM 35	NO.6 OIL	TKDIA	144.00	FT
TK-A044	TSTREAM 47	SR XHGO/XXHGO	TKCAP	82582.40	BBL
TK-A044	TSTREAM 47	SR XHGO/XXHGO	TKDIA	120.00	FT
TK-A046	TSTREAM 43	SR HGO	TKCAP	136321.38	BBL
TK-A046	TSTREAM 43	SR HGO	TKDIA	144.00	FT
TK-A047	TSTREAM 01	AC ASPHALT	TKCAP	136321.38	BBL
TK-A047	TSTREAM 01	AC ASPHALT	TKDIA	144.00	FT
TK-A048	TSTREAM 01	AC ASPHALT	TKCAP	136321.38	BBL
TK-A048	TSTREAM 01	AC ASPHALT	TKDIA	144.00	FT
TK-A049	TSTREAM 01	AC ASPHALT	TKCAP	136321.38	BBL
TK-A049	TSTREAM 01	AC ASPHALT	TKDIA	144.00	FT
TK-A050	TSTREAM 47	SR XHGO/XXHGO	TKCAP	52389.47	BBL
TK-A050	TSTREAM 47	SR XHGO/XXHGO	TKDIA	102.00	FT
TK-A052	TSTREAM 23	HVY REFORMATE	TKDIA	120	FT
TK-A053	TSTREAM 23	HVY REFORMATE	TKCAP	0	MGAL
TK-A053	TSTREAM 23	HVY REFORMATE	TKDIA	150	FT

WRMC TANK LIST WITH DIAMETER OR CAPACITY FOR SARA 313

Tank Number	Material ID	Material Name	Diameter or Capacity	Value	Units
TK-A054	TSTREAM 09	CC HVY GASOLINE	TKCAP	0	MGAL
TK-A054	TSTREAM 09	CC HVY GASOLINE	TKDIA	150	FT
TK-A055	TSTREAM 41	SOUR WATER	TKCAP	57345.39	BBL
TK-A055	TSTREAM 41	SOUR WATER	TKDIA	115.00	FT
TK-A056	TSTREAM 18	DIESELINE	TKCAP	57345.39	BBL
TK-A056	TSTREAM 18	DIESELINE	TKDIA	115.00	FT
TK-A057	TSTREAM 22	GASOLINE SU2000/SU2000E	TKDIA	90	FT
TK-A058	TSTREAM 22	GASOLINE SU2000/SU2000E	TKDIA	90	FT
TK-A061	TSTREAM 31	MOTOR ALKYLATE	TKDIA	120	FT
TK-A062	TSTREAM 05	BENZENE	TKCAP	0	MGAL
TK-A062	TSTREAM 05	BENZENE	TKDIA	90	FT
TK-A063	TSTREAM 05	BENZENE	TKCAP	0	MGAL
TK-A063	TSTREAM 05	BENZENE	TKDIA	90	FT
TK-A064	TSTREAM 05	BENZENE	TKCAP	0	MGAL
TK-A064	TSTREAM 05	BENZENE	TKDIA	90	FT
TK-A065	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	TKDIA	110	FT
TK-A066	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	TKDIA	110	FT
TK-A067	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	TKDIA	110	FT
TK-A068	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	TKDIA	140	FT
TK-A069	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	TKDIA	140	FT
TK-A070	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	TKDIA	110	FT
TK-A071	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	TKDIA	110	FT
TK-A072	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	TKDIA	110	FT
TK-A073	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	TKDIA	140	FT
TK-A074	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	TKDIA	140	FT
TK-A075	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	TKDIA	140	FT
TK-A076	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	TKDIA	140	FT
TK-A077	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	TKDIA	140	FT
TK-A078	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	TKDIA	140	FT
TK-A079	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	TKDIA	140	FT
TK-A080	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	TKDIA	140	FT
TK-A081	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	TKDIA	140	FT
TK-A082	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	TKDIA	140	FT
TK-A083	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	TKDIA	140	FT
TK-A084	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	TKDIA	140	FT
TK-A088	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	TKDIA	140	FT
TK-A089	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	TKDIA	140	FT
TK-A090	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	TKDIA	140	FT
TK-A094	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	TKDIA	140	FT
TK-A095	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	TKDIA	140	FT
TK-A096	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	TKDIA	140	FT
TK-A097	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	TKDIA	210	FT
TK-A100	TSTREAM 18	DIESELINE	TKCAP	131594.71	BBL
TK-A100	TSTREAM 18	DIESELINE	TKDIA	140.00	FT
TK-A101	TSTREAM 18	DIESELINE	TKCAP	131594.71	BBL
TK-A101	TSTREAM 18	DIESELINE	TKDIA	140.00	FT
TK-A102	TSTREAM 18	DIESELINE	TKCAP	80568.19	BBL
TK-A102	TSTREAM 18	DIESELINE	TKDIA	120.00	FT
TK-A103	TSTREAM 45	SR LGO	TKCAP	80568.19	BBL
TK-A103	TSTREAM 45	SR LGO	TKDIA	120.00	FT
TK-A104	TSTREAM 18	DIESELINE	TKCAP	80568.19	BBL
TK-A104	TSTREAM 18	DIESELINE	TKDIA	120.00	FT

WRMC TANK LIST WITH DIAMETER OR CAPACITY FOR SARA 313

Tank Number	Material ID	Material Name	Diameter or Capacity	Value	Units
TK-A105	TSTREAM 18	DIESELINE	TKCAP	131594.71	BBL
TK-A105	TSTREAM 18	DIESELINE	TKDIA	140.00	FT
TK-A106	TSTREAM 04	BENZENE RAFFINATE	TKDIA	120	FT
TK-A106	TSTREAM 09	CC HVY GASOLINE	TKDIA	120	FT
TK-A106	TSTREAM 23	HVY REFORMATE	TKDIA	120	FT
TK-A106	TSTREAM 23	HVY REFORMATE	TKDIA	120	FT
TK-A106	TSTREAM 23	HVY REFORMATE	TKDIA	120	FT
TK-A106	TSTREAM 48	TOLUENE CONC.	TKDIA	120	FT
TK-A107	TSTREAM 26	LT REFORMATE	TKDIA	120	FT
TK-A108	TSTREAM 04	BENZENE RAFFINATE	TKDIA	120	FT
TK-A108	TSTREAM 09	CC HVY GASOLINE	TKDIA	120	FT
TK-A108	TSTREAM 23	HVY REFORMATE	TKDIA	120	FT
TK-A108	TSTREAM 23	HVY REFORMATE	TKDIA	120	FT
TK-A108	TSTREAM 23	HVY REFORMATE	TKDIA	120	FT
TK-A109	TSTREAM 23	HVY REFORMATE	TKDIA	120	FT
TK-A109	TSTREAM 26	LT REFORMATE	TKDIA	120	FT
TK-A109	TSTREAM 31	MOTOR ALKYLATE	TKDIA	120	FT
TK-A110	TSTREAM 24	JET A	TKDIA	130	FT
TK-A111	TSTREAM 24	JET A	TKDIA	130	FT
TK-A111	TSTREAM 24	JET A	TKDIA	130	FT
TK-A112	TSTREAM 25	KEROSENE	TKDIA	90	FT
TK-A113	TSTREAM 09	CC HVY GASOLINE	TKDIA	120	FT
TK-A113	TSTREAM 23	HVY REFORMATE	TKDIA	120	FT
TK-A113	TSTREAM 48	TOLUENE CONC.	TKDIA	120	FT
TK-A114	TSTREAM 47	SR XHGO/XXHGO	TKCAP	82582.40	BBL
TK-A114	TSTREAM 47	SR XHGO/XXHGO	TKDIA	120.00	FT
TK-A115	TSTREAM 48	TOLUENE CONC.	TKDIA	120	FT
TK-A116	TSTREAM 02	AVIATION ALKYLATE	TKCAP	0	MGAL
TK-A116	TSTREAM 02	AVIATION ALKYLATE	TKDIA	120	FT
TK-A116	TSTREAM 17	DESULF HVY NAPHTHA	TKCAP	0	MGAL
TK-A116	TSTREAM 17	DESULF HVY NAPHTHA	TKDIA	120	FT
TK-A116	TSTREAM 23	HVY REFORMATE	TKCAP	0	MGAL
TK-A116	TSTREAM 23	HVY REFORMATE	TKDIA	120	FT
TK-A116	TSTREAM 26	LT REFORMATE	TKCAP	0	MGAL
TK-A116	TSTREAM 26	LT REFORMATE	TKDIA	120	FT
TK-A117	TSTREAM 47	SR XHGO/XXHGO	TKCAP	154212.56	BBL
TK-A117	TSTREAM 47	SR XHGO/XXHGO	TKDIA	150.00	FT
TK-A118	TSTREAM 47	SR XHGO/XXHGO	TKCAP	154212.56	BBL
TK-A118	TSTREAM 47	SR XHGO/XXHGO	TKDIA	150.00	FT
TK-A119	TSTREAM 11	CC LT GASOLINE	TKDIA	110	FT
TK-A120	TSTREAM 10	CC LGO	TKDIA	110	FT
TK-A120	TSTREAM 43	SR HGO	TKDIA	110	FT
TK-A120	TSTREAM 47	SR XHGO/XXHGO	TKDIA	110	FT
TK-A121	TSTREAM 48	TOLUENE CONC.	TKDIA	120	FT
TK-A122	TSTREAM 17	DESULF HVY NAPHTHA	TKCAP	0	MGAL
TK-A122	TSTREAM 17	DESULF HVY NAPHTHA	TKDIA	140	FT
TK-A123	TSTREAM 11	CC LT GASOLINE	TKDIA	110	FT
TK-A124	TSTREAM 47	SR XHGO/XXHGO	TKDIA	150	FT
TK-A125	TSTREAM 09	CC HVY GASOLINE	TKDIA	150	FT
TK-A125	TSTREAM 23	HVY REFORMATE	TKDIA	150	FT
TK-A126	TSTREAM 47	SR XHGO/XXHGO	TKDIA	150	FT
TK-A127	TSTREAM 31	MOTOR ALKYLATE	TKDIA	110	FT

WRMC TANK LIST WITH DIAMETER OR CAPACITY FOR SARA 313

Tank Number	Material ID	Material Name	Diameter or Capacity	Value	Units
TK-A128	TSTREAM 24	JET A	TKDIA	120	FT
TK-A129	TSTREAM 23	HVY REFORMATE	TKDIA	150	FT
TK-A130	TSTREAM 25	KEROSENE	TKDIA	150	FT
TK-A131	TSTREAM 25	KEROSENE	TKCAP	54383.53	BBL
TK-A131	TSTREAM 25	KEROSENE	TKDIA	90.00	FT
TK-A131	TSTREAM 25	KEROSENE	TKCAP	54383.53	BBL
TK-A131	TSTREAM 25	KEROSENE	TKDIA	90.00	FT
TK-A131	TSTREAM 41	SOUR WATER	TKCAP	54383.53	BBL
TK-A131	TSTREAM 41	SOUR WATER	TKDIA	90.00	FT
TK-A132	TSTREAM 01	AC ASPHALT	TKCAP	134336.27	BBL
TK-A132	TSTREAM 01	AC ASPHALT	TKDIA	140.00	FT
TK-A133	TSTREAM 01	AC ASPHALT	TKCAP	82932.09	BBL
TK-A133	TSTREAM 01	AC ASPHALT	TKDIA	110.00	FT
TK-A134	TSTREAM 45	SR LGO	TKDIA	150	FT
TK-A135	TSTREAM 10	CC LGO	TKDIA	150	FT
TK-A136	TSTREAM 44	SR HVY NAPHTHA	TKDIA	160	FT
TK-A137	TSTREAM 44	SR HVY NAPHTHA	TKDIA	160	FT
TK-A138	TSTREAM 46	SR LT NAPHTHA	TKDIA	160	FT
TK-A139	TSTREAM 44	SR HVY NAPHTHA	TKDIA	160	FT
TK-A139	TSTREAM 46	SR LT NAPHTHA	TKDIA	160	FT
TK-A140	TSTREAM 24	JET A	TKDIA	150	FT
TK-A141	TSTREAM 35	NO.6 OIL	TKCAP	98696.04	BBL
TK-A141	TSTREAM 35	NO.6 OIL	TKDIA	120.00	FT
TK-A142	TSTREAM 01	AC ASPHALT	TKCAP	98696.04	BBL
TK-A142	TSTREAM 01	AC ASPHALT	TKDIA	120.00	FT
TK-A142	TSTREAM 35	NO.6 OIL	TKCAP	98696.04	BBL
TK-A142	TSTREAM 35	NO.6 OIL	TKDIA	120.00	FT
TK-A143	TSTREAM 24	JET A	TKCAP	151065.36	BBL
TK-A143	TSTREAM 24	JET A	TKDIA	150.00	FT
TK-A144	TSTREAM 01	AC ASPHALT	TKCAP	268560.64	BBL
TK-A144	TSTREAM 01	AC ASPHALT	TKDIA	200.00	FT
TK-A146	TSTREAM 01	AC ASPHALT	TKCAP	268560.64	BBL
TK-A146	TSTREAM 01	AC ASPHALT	TKDIA	200.00	FT
TK-A147	TSTREAM 01	AC ASPHALT	TKCAP	268560.64	BBL
TK-A147	TSTREAM 01	AC ASPHALT	TKDIA	200.00	FT
TK-A148	TSTREAM 01	AC ASPHALT	TKCAP	268560.64	BBL
TK-A148	TSTREAM 01	AC ASPHALT	TKDIA	200.00	FT
TK-A149	WWSTREAM 02	WASTE WATER TO TRICKLING	TKCAP	7,200,000	GAL
TK-A149	WWSTREAM 02	WASTE WATER TO TRICKLING	TKDIA	165	FT
TK-A150	TSTREAM 33	MTBE	TKCAP	0	MGAL
TK-A150	TSTREAM 33	MTBE	TKDIA	167	FT
TK-A151	TSTREAM 33	MTBE	TKCAP	0	MGAL
TK-A151	TSTREAM 33	MTBE	TKDIA	167	FT
TK-ADD003	M 14	MISC. STREAM - GAS ADDITI	TKCAP	167.85	BBL
TK-ADD003	M 14	MISC. STREAM - GAS ADDITI	TKDIA	10.00	FT
TK-ADD004	M 14	MISC. STREAM - GAS ADDITI	TKCAP	363.68	BBL
TK-ADD004	M 14	MISC. STREAM - GAS ADDITI	TKDIA	10.00	FT
TK-ADD005	M 14	MISC. STREAM - GAS ADDITI	TKCAP	363.68	BBL
TK-ADD005	M 14	MISC. STREAM - GAS ADDITI	TKDIA	10.00	FT
TK-ADD006	M 14	MISC. STREAM - GAS ADDITI	TKCAP	363.68	BBL
TK-ADD006	M 14	MISC. STREAM - GAS ADDITI	TKDIA	10.00	FT
TK-ADD007	M 14	MISC. STREAM - GAS ADDITI	TKCAP	363.68	BBL

WRMC TANK LIST WITH DIAMETER OR CAPACITY FOR SARA 313

Tank Number	Material ID	Material Name	Diameter or Capacity	Value	Units
TK-ADD007	M 14	MISC. STREAM - GAS ADDITI	TKDIA	10.00	FT
TK-ADD008	TSTREAM 39	SLOP OIL	TKCAP	363.68	BBL
TK-ADD008	TSTREAM 39	SLOP OIL	TKDIA	10.00	FT
TK-ADD009	M 14	MISC. STREAM - GAS ADDITI	TKCAP	363.68	BBL
TK-ADD009	M 14	MISC. STREAM - GAS ADDITI	TKDIA	10.00	FT
TK-ADD010	M 14	MISC. STREAM - GAS ADDITI	TKCAP	363.68	BBL
TK-ADD010	M 14	MISC. STREAM - GAS ADDITI	TKDIA	10.00	FT
TK-ADD011	M 14	MISC. STREAM - GAS ADDITI	TKCAP	293.74	BBL
TK-ADD011	M 14	MISC. STREAM - GAS ADDITI	TKDIA	10.00	FT
TK-ADD012	M 14	MISC. STREAM - GAS ADDITI	TKCAP	321.71	BBL
TK-ADD012	M 14	MISC. STREAM - GAS ADDITI	TKDIA	10.00	FT
TK-B058	M 01	MISC. STREAM - SULFOLANE	TKCAP	1007.10	BBL
TK-B058	M 01	MISC. STREAM - SULFOLANE	TKDIA	20.00	FT
TK-B083	M 02	MISC. STREAM - NMP SOLVEN	TKCAP	406.20	BBL
TK-B083	M 02	MISC. STREAM - NMP SOLVEN	TKDIA	11.00	FT
TK-B084	M 03	MISC. STREAM - LUBE OILS	TKCAP	592.37	BBL
TK-B084	M 03	MISC. STREAM - LUBE OILS	TKDIA	11.00	FT
TK-B096	M 04	MISC. STREAM - METHANOL	TKCAP	107.00	BBL
TK-B096	M 04	MISC. STREAM - METHANOL	TKDIA	8.00	FT
TK-B111	M 05	MISC. STREAM - PROCESSING	TKCAP	6.29	BBL
TK-B111	M 05	MISC. STREAM - PROCESSING	TKDIA	3.00	FT
TK-B113	M 07	MISC. STREAM - PETROTEC P	TKCAP	6.29	BBL
TK-B113	M 07	MISC. STREAM - PETROTEC P	TKDIA	3.00	FT
TK-B114	333139	BETZ 10K	TKCAP	192.61	BBL
TK-B114	333139	BETZ 10K	TKDIA	9.00	FT
TK-B121	WWSTREAM 01	WASTE WATER SLOP OIL	TKCAP	860.00	BBL
TK-B121	WWSTREAM 01	WASTE WATER SLOP OIL	TKDIA	25.00	FT
TK-C029	TSTREAM 39	SLOP OIL	TKDIA	25	FT
TK-C032	M 12	MISC. STREAM - LUBE ADDIT	TKCAP	727.35	BBL
TK-C032	M 12	MISC. STREAM - LUBE ADDIT	TKDIA	20.00	FT
TK-C036	M 08	MISC. STREAM - CAUSTIC 50	TKCAP	1063.05	BBL
TK-C036	M 08	MISC. STREAM - CAUSTIC 50	TKDIA	20.00	FT
TK-C037	M 09	MISC. STREAM - CAUSTIC 32	TKCAP	1063.05	BBL
TK-C037	M 09	MISC. STREAM - CAUSTIC 32	TKDIA	20.00	FT
TK-C038	M 13	HITEC 644	TKCAP	1566.60	BBL
TK-C038	M 13	HITEC 644	TKDIA	20.00	FT
TK-C045	TSTREAM 16	CRUDE-ILLINOIS LITE	TKCAP	951.15	BBL
TK-C045	TSTREAM 16	CRUDE-ILLINOIS LITE	TKDIA	20.00	FT
TK-C046	WWSTREAM 02	WASTE WATER TO TRICKLING	TKCAP	47,999	GAL
TK-C046	WWSTREAM 02	WASTE WATER TO TRICKLING	TKDIA	20	FT
TK-C047	WWSTREAM 02	WASTE WATER TO TRICKLING	TKCAP	47,000	GAL
TK-C047	WWSTREAM 02	WASTE WATER TO TRICKLING	TKDIA	20	FT
TK-CH114	M 12	MISC. STREAM - LUBE ADDIT	TKCAP	507.75	BBL
TK-CH114	M 12	MISC. STREAM - LUBE ADDIT	TKDIA	11.00	FT
TK-CH140	TSTREAM 47	SR XHGO/XXHGO	TKCAP	5619.63	BBL
TK-CH140	TSTREAM 47	SR XHGO/XXHGO	TKDIA	36.00	FT
TK-CH148	M 10	MISC. STREAM - CAUSTIC 20	TKCAP	2098.13	BBL
TK-CH148	M 10	MISC. STREAM - CAUSTIC 20	TKDIA	25.00	FT
TK-CH153	M 10	MISC. STREAM - CAUSTIC 20	TKCAP	335.70	BBL
TK-CH153	M 10	MISC. STREAM - CAUSTIC 20	TKDIA	10.00	FT
TK-CH172	M 10	MISC. STREAM - CAUSTIC 20	TKCAP	1049.07	BBL
TK-CH172	M 10	MISC. STREAM - CAUSTIC 20	TKDIA	25.00	FT

WRMC TANK LIST WITH DIAMETER OR CAPACITY FOR SARA 313

Tank Number	Material ID	Material Name	Diameter or Capacity	Value	Units
TK-CH184	M 10	MISC. STREAM - CAUSTIC 20	TKCAP	377.66	BBL
TK-CH184	M 10	MISC. STREAM - CAUSTIC 20	TKDIA	15.00	FT
TK-CH197	340059	1,1,1-TRICHLOROETHANE	TKCAP	89.52	BBL
TK-CH197	340059	1,1,1-TRICHLOROETHANE	TKDIA	8.00	FT
TK-CH197	TCE	TRICHLOROETHYLENE	TKCAP	89.52	BBL
TK-CH197	TCE	TRICHLOROETHYLENE	TKDIA	8.00	FT
TK-CH209	M 10	MISC. STREAM - CAUSTIC 20	TKCAP	33.57	BBL
TK-CH209	M 10	MISC. STREAM - CAUSTIC 20	TKDIA	4.00	FT
TK-CH212	M 10	MISC. STREAM - CAUSTIC 20	TKCAP	62.94	BBL
TK-CH212	M 10	MISC. STREAM - CAUSTIC 20	TKDIA	5.00	FT
TK-CH235	PSTREAM 44	DEA_SGP/CGP/SRU/SCOT	TKCAP	1573.60	BBL
TK-CH235	PSTREAM 44	DEA_SGP/CGP/SRU/SCOT	TKDIA	25.00	FT
TK-CH237	SULFUR	SULFUR	TKCAP	1007.10	BBL
TK-CH237	SULFUR	SULFUR	TKDIA	30.00	FT
TK-CH238	SULFUR	SULFUR	TKCAP	485.09	BBL
TK-CH238	SULFUR	SULFUR	TKDIA	17.00	FT
TK-CH239	SULFUR	SULFUR	TKCAP	485.09	BBL
TK-CH239	SULFUR	SULFUR	TKDIA	17.00	FT
TK-CH240	SULFUR	SULFUR	TKCAP	485.09	BBL
TK-CH240	SULFUR	SULFUR	TKDIA	17.00	FT
TK-CH265	M 03	MISC. STREAM - LUBE OILS	TKCAP	139.88	BBL
TK-CH265	M 03	MISC. STREAM - LUBE OILS	TKDIA	10.00	FT
TK-CH267	M 10	MISC. STREAM - CAUSTIC 20	TKCAP	4028.41	BBL
TK-CH267	M 10	MISC. STREAM - CAUSTIC 20	TKDIA	30.00	FT
TK-CH278	840109	SPENT SULFIDE CAUSTIC SOL	TKCAP	110,000	GAL
TK-CH278	840109	SPENT SULFIDE CAUSTIC SOL	TKDIA	25	FT
TK-D001	TSTREAM 40	SOL 71	TKCAP	5619.63	BBL
TK-D001	TSTREAM 40	SOL 71	TKDIA	36.00	FT
TK-D003	TSTREAM 40	SOL 71	TKCAP	5619.63	BBL
TK-D003	TSTREAM 40	SOL 71	TKDIA	36.00	FT
TK-D004	TSTREAM 40	SOL 71	TKCAP	5619.63	BBL
TK-D004	TSTREAM 40	SOL 71	TKDIA	36.00	FT
TK-D020	M 08	MISC. STREAM - CAUSTIC 50	TKCAP	5438.35	BBL
TK-D020	M 08	MISC. STREAM - CAUSTIC 50	TKDIA	36.00	FT
TK-D021	M 08	MISC. STREAM - CAUSTIC 50	TKCAP	5438.35	BBL
TK-D021	M 08	MISC. STREAM - CAUSTIC 50	TKDIA	36.00	FT
TK-D027	M 01	MISC. STREAM - SULFOLANE	TKCAP	5438.35	BBL
TK-D027	M 01	MISC. STREAM - SULFOLANE	TKDIA	36.00	FT
TK-D030	M 01	MISC. STREAM - SULFOLANE	TKCAP	5438.35	BBL
TK-D030	M 01	MISC. STREAM - SULFOLANE	TKDIA	36.00	FT
TK-D034	TSTREAM 47	SR XHGO/XXHGO	TKCAP	5413.18	BBL
TK-D034	TSTREAM 47	SR XHGO/XXHGO	TKDIA	30.00	FT
TK-D037	TSTREAM 47	SR XHGO/XXHGO	TKCAP	5413.18	BBL
TK-D037	TSTREAM 47	SR XHGO/XXHGO	TKDIA	30.00	FT
TK-D041	TSTREAM 34	NAP-91	TKCAP	5413.18	BBL
TK-D041	TSTREAM 34	NAP-91	TKDIA	30.00	FT
TK-D046	TSTREAM 47	SR XHGO/XXHGO	TKCAP	5413.18	BBL
TK-D046	TSTREAM 47	SR XHGO/XXHGO	TKDIA	30.00	FT
TK-D049	TSTREAM 01	AC ASPHALT	TKCAP	3021.31	BBL
TK-D049	TSTREAM 01	AC ASPHALT	TKDIA	30.00	FT
TK-D050	TSTREAM 31	MOTOR ALKYLATE	TKCAP	2622.66	BBL
TK-D050	TSTREAM 31	MOTOR ALKYLATE	TKDIA	25.00	FT

WRMC TANK LIST WITH DIAMETER OR CAPACITY FOR SARA 313

Tank Number	Material ID	Material Name	Diameter or Capacity	Value	Units
TK-D052	WWSTREAM 01	WASTE WATER SLOP OIL	TKCAP	210000.00	BBL
TK-D052	WWSTREAM 01	WASTE WATER SLOP OIL	TKDIA	30.00	FT
TK-D053	WWSTREAM 01	WASTE WATER SLOP OIL	TKCAP	210000.00	BBL
TK-D053	WWSTREAM 01	WASTE WATER SLOP OIL	TKDIA	30.00	FT
TK-D054	WWSTREAM 01	WASTE WATER SLOP OIL	TKCAP	210000.00	BBL
TK-D054	WWSTREAM 01	WASTE WATER SLOP OIL	TKDIA	30.00	FT
TK-DX006	M 03	MISC. STREAM - LUBE OILS	TKCAP	1119.00	BBL
TK-DX006	M 03	MISC. STREAM - LUBE OILS	TKDIA	20.00	FT
TK-E024	TSTREAM 47	SR XHGO/XXHGO	TKCAP	5413.18	BBL
TK-E024	TSTREAM 47	SR XHGO/XXHGO	TKDIA	30.00	FT
TK-E030	TSTREAM 34	NAP-91	TKCAP	10196.91	BBL
TK-E030	TSTREAM 34	NAP-91	TKDIA	45.00	FT
TK-F003	TSTREAM 40	SOL 71	TKCAP	15352.72	BBL
TK-F003	TSTREAM 40	SOL 71	TKDIA	56.00	FT
TK-F010	PSTREAM 43	CRESYLIC CAUSTIC_LOT	TKCAP	17134.73	BBL
TK-F010	PSTREAM 43	CRESYLIC CAUSTIC_LOT	TKDIA	50.00	FT
TK-F012	TSTREAM 44	SR HVY NAPHTHA	TKCAP	17134.73	BBL
TK-F012	TSTREAM 44	SR HVY NAPHTHA	TKDIA	50.00	FT
TK-F021	TSTREAM 39	SLOP OIL	TKCAP	0	MGAL
TK-F021	TSTREAM 39	SLOP OIL	TKDIA	50	FT
TK-F022	M 03	MISC. STREAM - LUBE OILS	TKCAP	16230.01	BBL
TK-F022	M 03	MISC. STREAM - LUBE OILS	TKDIA	56.00	FT
TK-F023	M 03	MISC. STREAM - LUBE OILS	TKCAP	16230.01	BBL
TK-F023	M 03	MISC. STREAM - LUBE OILS	TKDIA	56.00	FT
TK-F024	M 03	MISC. STREAM - LUBE OILS	TKCAP	16230.01	BBL
TK-F024	M 03	MISC. STREAM - LUBE OILS	TKDIA	56.00	FT
TK-F025	TSTREAM 01	AC ASPHALT	TKCAP	16230.01	BBL
TK-F025	TSTREAM 01	AC ASPHALT	TKDIA	56.00	FT
TK-F033	TSTREAM 33	MTBE	TKCAP	0	MGAL
TK-F033	TSTREAM 33	MTBE	TKDIA	78	FT
TK-F034	M 03	MISC. STREAM - LUBE OILS	TKCAP	15106.54	BBL
TK-F034	M 03	MISC. STREAM - LUBE OILS	TKDIA	60.00	FT
TK-F035	TSTREAM 24	JET A	TKCAP	15106.54	BBL
TK-F035	TSTREAM 24	JET A	TKDIA	60.00	FT
TK-F041	TSTREAM 49	VFC HGO	TKCAP	15106.54	BBL
TK-F041	TSTREAM 49	VFC HGO	TKDIA	60.00	FT
TK-F045	840109	SPENT SULFIDE CAUSTIC SOL	TKCAP	15106.54	BBL
TK-F045	840109	SPENT SULFIDE CAUSTIC SOL	TKDIA	60.00	FT
TK-F046	M 03	MISC. STREAM - LUBE OILS	TKCAP	15106.54	BBL
TK-F046	M 03	MISC. STREAM - LUBE OILS	TKDIA	60.00	FT
TK-F047	M 03	MISC. STREAM - LUBE OILS	TKCAP	15106.54	BBL
TK-F047	M 03	MISC. STREAM - LUBE OILS	TKDIA	60.00	FT
TK-F048	M 03	MISC. STREAM - LUBE OILS	TKCAP	15106.54	BBL
TK-F048	M 03	MISC. STREAM - LUBE OILS	TKDIA	60.00	FT
TK-F050	TSTREAM 07	CC CLARIFIED OIL	TKCAP	30636.06	BBL
TK-F050	TSTREAM 07	CC CLARIFIED OIL	TKDIA	78.00	FT
TK-F051	TSTREAM 31	MOTOR ALKYLATE	TKCAP	0	MGAL
TK-F051	TSTREAM 31	MOTOR ALKYLATE	TKDIA	60	FT
TK-F054	TSTREAM 19	GASOLINE BASE	TKCAP	10071.02	BBL
TK-F054	TSTREAM 19	GASOLINE BASE	TKDIA	40.00	FT
TK-F056	TSTREAM 19	GASOLINE BASE	TKCAP	31487.06	BBL
TK-F056	TSTREAM 19	GASOLINE BASE	TKDIA	78.00	FT

WRMC TANK LIST WITH DIAMETER OR CAPACITY FOR SARA 313

Tank Number	Material ID	Material Name	Diameter or Capacity	Value	Units
TK-F057	TSTREAM 33	MTBE	TKCAP	0	MGAL
TK-F057	TSTREAM 33	MTBE	TKDIA	78	FT
TK-F058	TSTREAM 25	KEROSENE	TKCAP	25530.05	BBL
TK-F058	TSTREAM 25	KEROSENE	TKDIA	78.00	FT
TK-F059	TSTREAM 33	MTBE	TKCAP	0	MGAL
TK-F059	TSTREAM 33	MTBE	TKDIA	78	FT
TK-F064	TSTREAM 18	DIESELINE	TKDIA	48	FT
TK-F066	TSTREAM 19	GASOLINE BASE	TKCAP	17134.73	BBL
TK-F066	TSTREAM 19	GASOLINE BASE	TKDIA	50.00	FT
TK-F067	TSTREAM 39	SLOP OIL	TKCAP	0	BBL
TK-F067	TSTREAM 39	SLOP OIL	TKDIA	48	FT
TK-F069	TSTREAM 19	GASOLINE BASE	TKCAP	15791.37	BBL
TK-F069	TSTREAM 19	GASOLINE BASE	TKDIA	48.00	FT
TK-F071	TSTREAM 07	CC CLARIFIED OIL	TKCAP	17134.73	BBL
TK-F071	TSTREAM 07	CC CLARIFIED OIL	TKDIA	50.00	FT
TK-F072	TSTREAM 41	SOUR WATER	TKCAP	17134.73	BBL
TK-F072	TSTREAM 41	SOUR WATER	TKDIA	50.00	FT
TK-F073	TSTREAM 24	JET A	TKCAP	17134.73	BBL
TK-F073	TSTREAM 24	JET A	TKDIA	50.00	FT
TK-F074	TSTREAM 24	JET A	TKCAP	17134.73	BBL
TK-F074	TSTREAM 24	JET A	TKDIA	50.00	FT
TK-F075	TSTREAM 18	DIESELINE	TKCAP	17134.73	BBL
TK-F075	TSTREAM 18	DIESELINE	TKDIA	50.00	FT
TK-F076	TSTREAM 35	NO.6 OIL	TKCAP	42969.70	BBL
TK-F076	TSTREAM 35	NO.6 OIL	TKDIA	80.00	FT
TK-F077	TSTREAM 35	NO.6 OIL	TKCAP	42969.70	BBL
TK-F077	TSTREAM 35	NO.6 OIL	TKDIA	80.00	FT
TK-F078	TSTREAM 35	NO.6 OIL	TKCAP	43864.90	BBL
TK-F078	TSTREAM 35	NO.6 OIL	TKDIA	80.00	FT
TK-F080	TSTREAM 41	SOUR WATER	TKCAP	33584.07	BBL
TK-F080	TSTREAM 41	SOUR WATER	TKDIA	70.00	FT
TK-F081	TSTREAM 26	LT REFORMATE	TKDIA	70	FT
TK-F082	TSTREAM 26	LT REFORMATE	TKDIA	70	FT
TK-FW002	TSTREAM 25	KEROSENE	TKCAP	419.63	BBL
TK-FW002	TSTREAM 25	KEROSENE	TKDIA	10.00	FT
TK-FW003	TSTREAM 43	SR HGO	TKCAP	50.36	BBL
TK-FW003	TSTREAM 43	SR HGO	TKDIA	6.00	FT
TK-G006	TSTREAM 24	JET A	TKDIA	120	FT
TK-G007	TSTREAM 25	KEROSENE	TKDIA	120	FT
TK-H018	M 03	MISC. STREAM - LUBE OILS	TKCAP	503.55	BBL
TK-H018	M 03	MISC. STREAM - LUBE OILS	TKDIA	15.00	FT
TK-H044	M 03	MISC. STREAM - LUBE OILS	TKCAP	185.06	BBL
TK-H044	M 03	MISC. STREAM - LUBE OILS	TKDIA	7.00	FT
TK-H045	M 03	MISC. STREAM - LUBE OILS	TKCAP	185.06	BBL
TK-H045	M 03	MISC. STREAM - LUBE OILS	TKDIA	7.00	FT
TK-H046	M 03	MISC. STREAM - LUBE OILS	TKCAP	185.06	BBL
TK-H046	M 03	MISC. STREAM - LUBE OILS	TKDIA	7.00	FT
TK-H047	M 03	MISC. STREAM - LUBE OILS	TKCAP	185.06	BBL
TK-H047	M 03	MISC. STREAM - LUBE OILS	TKDIA	7.00	FT
TK-H048	M 03	MISC. STREAM - LUBE OILS	TKCAP	185.06	BBL
TK-H048	M 03	MISC. STREAM - LUBE OILS	TKDIA	7.00	FT
TK-H049	M 03	MISC. STREAM - LUBE OILS	TKCAP	185.06	BBL

WRMC TANK LIST WITH DIAMETER OR CAPACITY FOR SARA 313

Tank Number	Material ID	Material Name	Diameter or Capacity	Value	Units
TK-H049	M 03	MISC. STREAM - LUBE OILS	TKDIA	7.00	FT
TK-L002	M 03	MISC. STREAM - LUBE OILS	TKCAP	2710.08	BBL
TK-L002	M 03	MISC. STREAM - LUBE OILS	TKDIA	25.00	FT
TK-L004	M 03	MISC. STREAM - LUBE OILS	TKCAP	1985.67	BBL
TK-L004	M 03	MISC. STREAM - LUBE OILS	TKDIA	26.00	FT
TK-L010	M 03	MISC. STREAM - LUBE OILS	TKCAP	1174.95	BBL
TK-L010	M 03	MISC. STREAM - LUBE OILS	TKDIA	20.00	FT
TK-L011	M 03	MISC. STREAM - LUBE OILS	TKCAP	1985.67	BBL
TK-L011	M 03	MISC. STREAM - LUBE OILS	TKDIA	26.00	FT
TK-L013	M 03	MISC. STREAM - LUBE OILS	TKCAP	1985.67	BBL
TK-L013	M 03	MISC. STREAM - LUBE OILS	TKDIA	26.00	FT
TK-L014	M 03	MISC. STREAM - LUBE OILS	TKCAP	1985.67	BBL
TK-L014	M 03	MISC. STREAM - LUBE OILS	TKDIA	26.00	FT
TK-L015	M 03	MISC. STREAM - LUBE OILS	TKCAP	1985.67	BBL
TK-L015	M 03	MISC. STREAM - LUBE OILS	TKDIA	26.00	FT
TK-L016	M 03	MISC. STREAM - LUBE OILS	TKCAP	1985.67	BBL
TK-L016	M 03	MISC. STREAM - LUBE OILS	TKDIA	26.00	FT
TK-L017	M 03	MISC. STREAM - LUBE OILS	TKCAP	1985.67	BBL
TK-L017	M 03	MISC. STREAM - LUBE OILS	TKDIA	26.00	FT
TK-L018	M 12	MISC. STREAM - LUBE ADDIT	TKCAP	1174.95	BBL
TK-L018	M 12	MISC. STREAM - LUBE ADDIT	TKDIA	20.00	FT
TK-L019	M 12	MISC. STREAM - LUBE ADDIT	TKCAP	1174.95	BBL
TK-L019	M 12	MISC. STREAM - LUBE ADDIT	TKDIA	20.00	FT
TK-L020	M 12	MISC. STREAM - LUBE ADDIT	TKCAP	1985.67	BBL
TK-L020	M 12	MISC. STREAM - LUBE ADDIT	TKDIA	26.00	FT
TK-L021	M 03	MISC. STREAM - LUBE OILS	TKCAP	1985.67	BBL
TK-L021	M 03	MISC. STREAM - LUBE OILS	TKDIA	26.00	FT
TK-L022	M 03	MISC. STREAM - LUBE OILS	TKCAP	1985.67	BBL
TK-L022	M 03	MISC. STREAM - LUBE OILS	TKDIA	26.00	FT
TK-L023	M 03	MISC. STREAM - LUBE OILS	TKCAP	1985.67	BBL
TK-L023	M 03	MISC. STREAM - LUBE OILS	TKDIA	26.00	FT
TK-L024	M 03	MISC. STREAM - LUBE OILS	TKCAP	1174.95	BBL
TK-L024	M 03	MISC. STREAM - LUBE OILS	TKDIA	20.00	FT
TK-L025	M 03	MISC. STREAM - LUBE OILS	TKCAP	1312.87	BBL
TK-L025	M 03	MISC. STREAM - LUBE OILS	TKDIA	19.00	FT
TK-L026	M 03	MISC. STREAM - LUBE OILS	TKCAP	1312.87	BBL
TK-L026	M 03	MISC. STREAM - LUBE OILS	TKDIA	19.00	FT
TK-L028	M 03	MISC. STREAM - LUBE OILS	TKCAP	2710.08	BBL
TK-L028	M 03	MISC. STREAM - LUBE OILS	TKDIA	25.00	FT
TK-L029	TSTREAM 45	SR LGO	TKCAP	2710.08	BBL
TK-L029	TSTREAM 45	SR LGO	TKDIA	25.00	FT
TK-L032	M 03	MISC. STREAM - LUBE OILS	TKCAP	2797.51	BBL
TK-L032	M 03	MISC. STREAM - LUBE OILS	TKDIA	25.00	FT
TK-L033	TSTREAM 06	BLACK OIL	TKCAP	2797.51	BBL
TK-L033	TSTREAM 06	BLACK OIL	TKDIA	25.00	FT
TK-L034	M 03	MISC. STREAM - LUBE OILS	TKCAP	2710.08	BBL
TK-L034	M 03	MISC. STREAM - LUBE OILS	TKDIA	25.00	FT
TK-L035	M 03	MISC. STREAM - LUBE OILS	TKCAP	1174.95	BBL
TK-L035	M 03	MISC. STREAM - LUBE OILS	TKDIA	20.00	FT
TK-L036	M 03	MISC. STREAM - LUBE OILS	TKCAP	1174.95	BBL
TK-L036	M 03	MISC. STREAM - LUBE OILS	TKDIA	20.00	FT
TK-L037	M 03	MISC. STREAM - LUBE OILS	TKCAP	1230.90	BBL

WRMC TANK LIST WITH DIAMETER OR CAPACITY FOR SARA 313

Tank Number	Material ID	Material Name	Diameter or Capacity	Value	Units
TK-L037	M 03	MISC. STREAM - LUBE OILS	TKDIA	20.00	FT
TK-L038	M 03	MISC. STREAM - LUBE OILS	TKCAP	2710.08	BBL
TK-L038	M 03	MISC. STREAM - LUBE OILS	TKDIA	25.00	FT
TK-L039	M 03	MISC. STREAM - LUBE OILS	TKCAP	2710.08	BBL
TK-L039	M 03	MISC. STREAM - LUBE OILS	TKDIA	25.00	FT
TK-L040	M 03	MISC. STREAM - LUBE OILS	TKCAP	2710.08	BBL
TK-L040	M 03	MISC. STREAM - LUBE OILS	TKDIA	25.00	FT
TK-L041	M 03	MISC. STREAM - LUBE OILS	TKCAP	2710.08	BBL
TK-L041	M 03	MISC. STREAM - LUBE OILS	TKDIA	25.00	FT
TK-L042	M 03	MISC. STREAM - LUBE OILS	TKCAP	2710.08	BBL
TK-L042	M 03	MISC. STREAM - LUBE OILS	TKDIA	25.00	FT
TK-L043	M 03	MISC. STREAM - LUBE OILS	TKCAP	2710.08	BBL
TK-L043	M 03	MISC. STREAM - LUBE OILS	TKDIA	25.00	FT
TK-L044	M 03	MISC. STREAM - LUBE OILS	TKCAP	2710.08	BBL
TK-L044	M 03	MISC. STREAM - LUBE OILS	TKDIA	25.00	FT
TK-L045	M 03	MISC. STREAM - LUBE OILS	TKCAP	2710.08	BBL
TK-L045	M 03	MISC. STREAM - LUBE OILS	TKDIA	25.00	FT
TK-L046	M 03	MISC. STREAM - LUBE OILS	TKCAP	2797.51	BBL
TK-L046	M 03	MISC. STREAM - LUBE OILS	TKDIA	25.00	FT
TK-L049	M 03	MISC. STREAM - LUBE OILS	TKCAP	1454.70	BBL
TK-L049	M 03	MISC. STREAM - LUBE OILS	TKDIA	20.00	FT
TK-L050	M 12	MISC. STREAM - LUBE ADDIT	TKCAP	1454.70	BBL
TK-L050	M 12	MISC. STREAM - LUBE ADDIT	TKDIA	20.00	FT
TK-L053	M 03	MISC. STREAM - LUBE OILS	TKCAP	1454.70	BBL
TK-L053	M 03	MISC. STREAM - LUBE OILS	TKDIA	20.00	FT
TK-L054	M 03	MISC. STREAM - LUBE OILS	TKCAP	1454.70	BBL
TK-L054	M 03	MISC. STREAM - LUBE OILS	TKDIA	20.00	FT
TK-L055	M 03	MISC. STREAM - LUBE OILS	TKCAP	1454.70	BBL
TK-L055	M 03	MISC. STREAM - LUBE OILS	TKDIA	20.00	FT
TK-L056	M 03	MISC. STREAM - LUBE OILS	TKCAP	1454.70	BBL
TK-L056	M 03	MISC. STREAM - LUBE OILS	TKDIA	20.00	FT
TK-L057	M 03	MISC. STREAM - LUBE OILS	TKCAP	1454.70	BBL
TK-L057	M 03	MISC. STREAM - LUBE OILS	TKDIA	20.00	FT
TK-L058	M 03	MISC. STREAM - LUBE OILS	TKCAP	1510.65	BBL
TK-L058	M 03	MISC. STREAM - LUBE OILS	TKDIA	20.00	FT
TK-L059	M 03	MISC. STREAM - LUBE OILS	TKCAP	1603.81	BBL
TK-L059	M 03	MISC. STREAM - LUBE OILS	TKDIA	21.00	FT
TK-L062	M 03	MISC. STREAM - LUBE OILS	TKCAP	10490.65	BBL
TK-L062	M 03	MISC. STREAM - LUBE OILS	TKDIA	50.00	FT
TK-L063	M 03	MISC. STREAM - LUBE OILS	TKCAP	10140.96	BBL
TK-L063	M 03	MISC. STREAM - LUBE OILS	TKDIA	50.00	FT
TK-L064	TSTREAM 45	SR LGO	TKCAP	10490.65	BBL
TK-L064	TSTREAM 45	SR LGO	TKDIA	50.00	FT
TK-L065	M 03	MISC. STREAM - LUBE OILS	TKCAP	10490.65	BBL
TK-L065	M 03	MISC. STREAM - LUBE OILS	TKDIA	50.00	FT
TK-L066	M 03	MISC. STREAM - LUBE OILS	TKCAP	10490.65	BBL
TK-L066	M 03	MISC. STREAM - LUBE OILS	TKDIA	50.00	FT
TK-L069	M 03	MISC. STREAM - LUBE OILS	TKCAP	1454.70	BBL
TK-L069	M 03	MISC. STREAM - LUBE OILS	TKDIA	20.00	FT
TK-L070	M 03	MISC. STREAM - LUBE OILS	TKCAP	1454.70	BBL
TK-L070	M 03	MISC. STREAM - LUBE OILS	TKDIA	20.00	FT
TK-L071	M 03	MISC. STREAM - LUBE OILS	TKCAP	2185.55	BBL

WRMC TANK LIST WITH DIAMETER OR CAPACITY FOR SARA 313

Tank Number	Material ID	Material Name	Diameter or Capacity	Value	Units
TK-L071	M 03	MISC. STREAM - LUBE OILS	TKDIA	25.00	FT
TK-L072	M 03	MISC. STREAM - LUBE OILS	TKCAP	1454.70	BBL
TK-L072	M 03	MISC. STREAM - LUBE OILS	TKDIA	20.00	FT
TK-L073	M 03	MISC. STREAM - LUBE OILS	TKCAP	1398.75	BBL
TK-L073	M 03	MISC. STREAM - LUBE OILS	TKDIA	20.00	FT
TK-L074	M 03	MISC. STREAM - LUBE OILS	TKCAP	1603.81	BBL
TK-L074	M 03	MISC. STREAM - LUBE OILS	TKDIA	21.00	FT
TK-L076	M 03	MISC. STREAM - LUBE OILS	TKCAP	1542.13	BBL
TK-L076	M 03	MISC. STREAM - LUBE OILS	TKDIA	21.00	FT
TK-L089	TSTREAM 45	SR LGO	TKCAP	807.92	BBL
TK-L089	TSTREAM 45	SR LGO	TKDIA	19.00	FT
TK-L090	M 03	MISC. STREAM - LUBE OILS	TKCAP	858.41	BBL
TK-L090	M 03	MISC. STREAM - LUBE OILS	TKDIA	19.00	FT
TK-L102	M 03	MISC. STREAM - LUBE OILS	TKCAP	2710.08	BBL
TK-L102	M 03	MISC. STREAM - LUBE OILS	TKDIA	25.00	FT
TK-L122	M 03	MISC. STREAM - LUBE OILS	TKCAP	3273.08	BBL
TK-L122	M 03	MISC. STREAM - LUBE OILS	TKDIA	30.00	FT
TK-L123	TSTREAM 27	MC-250 CUTBACK	TKCAP	3360.50	BBL
TK-L123	TSTREAM 27	MC-250 CUTBACK	TKDIA	31.00	FT
TK-L124	TSTREAM 36	RC-30/70 CUTBACK	TKCAP	2014.20	BBL
TK-L124	TSTREAM 36	RC-30/70 CUTBACK	TKDIA	24.00	FT
TK-L130	M 03	MISC. STREAM - LUBE OILS	TKCAP	25530.05	BBL
TK-L130	M 03	MISC. STREAM - LUBE OILS	TKDIA	78.00	FT
TK-L131	M 03	MISC. STREAM - LUBE OILS	TKCAP	25530.05	BBL
TK-L131	M 03	MISC. STREAM - LUBE OILS	TKDIA	78.00	FT
TK-L132	M 03	MISC. STREAM - LUBE OILS	TKCAP	5438.35	BBL
TK-L132	M 03	MISC. STREAM - LUBE OILS	TKDIA	36.00	FT
TK-L133	M 03	MISC. STREAM - LUBE OILS	TKCAP	7734.55	BBL
TK-L133	M 03	MISC. STREAM - LUBE OILS	TKDIA	48.00	FT
TK-L134	M 03	MISC. STREAM - LUBE OILS	TKCAP	1510.65	BBL
TK-L134	M 03	MISC. STREAM - LUBE OILS	TKDIA	20.00	FT
TK-L136	M 03	MISC. STREAM - LUBE OILS	TKCAP	2417.05	BBL
TK-L136	M 03	MISC. STREAM - LUBE OILS	TKDIA	24.00	FT
TK-L137	M 03	MISC. STREAM - LUBE OILS	TKCAP	7734.55	BBL
TK-L137	M 03	MISC. STREAM - LUBE OILS	TKDIA	48.00	FT
TK-L138	M 03	MISC. STREAM - LUBE OILS	TKCAP	9668.18	BBL
TK-L138	M 03	MISC. STREAM - LUBE OILS	TKDIA	48.00	FT
TK-L139	TSTREAM 36	RC-30/70 CUTBACK	TKCAP	3021.31	BBL
TK-L139	TSTREAM 36	RC-30/70 CUTBACK	TKDIA	30.00	FT
TK-L142	M 12	MISC. STREAM - LUBE ADDIT	TKCAP	3776.63	BBL
TK-L142	M 12	MISC. STREAM - LUBE ADDIT	TKDIA	30.00	FT
TK-L143	M 01	MISC. STREAM - SULFOLANE	TKCAP	1087.67	BBL
TK-L143	M 01	MISC. STREAM - SULFOLANE	TKDIA	18.00	FT
TK-L146	M 03	MISC. STREAM - LUBE OILS	TKCAP	8056.82	BBL
TK-L146	M 03	MISC. STREAM - LUBE OILS	TKDIA	48.00	FT
TK-L147	TSTREAM 01	AC ASPHALT	TKCAP	5106.01	BBL
TK-L147	TSTREAM 01	AC ASPHALT	TKDIA	39.00	FT
TK-L150	M 03	MISC. STREAM - LUBE OILS	TKCAP	3360.50	BBL
TK-L150	M 03	MISC. STREAM - LUBE OILS	TKDIA	31.00	FT
TK-L151	M 03	MISC. STREAM - LUBE OILS	TKCAP	3294.34	BBL
TK-L151	M 03	MISC. STREAM - LUBE OILS	TKDIA	32.00	FT
TK-L155	M 03	MISC. STREAM - LUBE OILS	TKCAP	1454.70	BBL

WRMC TANK LIST WITH DIAMETER OR CAPACITY FOR SARA 313

Tank Number	Material ID	Material Name	Diameter or Capacity	Value	Units
TK-L155	M 03	MISC. STREAM - LUBE OILS	TKDIA	20.00	FT
TK-L156	TSTREAM 01	AC ASPHALT	TKCAP	5311.77	BBL
TK-L156	TSTREAM 01	AC ASPHALT	TKDIA	35.00	FT
TK-L158	TSTREAM 01	AC ASPHALT	TKCAP	17545.96	BBL
TK-L158	TSTREAM 01	AC ASPHALT	TKDIA	56.00	FT
TK-L159	TSTREAM 01	AC ASPHALT	TKCAP	5311.77	BBL
TK-L159	TSTREAM 01	AC ASPHALT	TKDIA	35.00	FT
TK-L160	TSTREAM 01	AC ASPHALT	TKCAP	10363.08	BBL
TK-L160	TSTREAM 01	AC ASPHALT	TKDIA	42.00	FT
TK-L161	TSTREAM 01	AC ASPHALT	TKCAP	3147.20	BBL
TK-L161	TSTREAM 01	AC ASPHALT	TKDIA	30.00	FT
TK-L162	TSTREAM 01	AC ASPHALT	TKCAP	24674.01	BBL
TK-L162	TSTREAM 01	AC ASPHALT	TKDIA	60.00	FT
TK-L163	TSTREAM 01	AC ASPHALT	TKCAP	24674.01	BBL
TK-L163	TSTREAM 01	AC ASPHALT	TKDIA	60.00	FT
TK-L164	TSTREAM 01	AC ASPHALT	TKCAP	17134.73	BBL
TK-L164	TSTREAM 01	AC ASPHALT	TKDIA	50.00	FT
TK-L165	TSTREAM 01	AC ASPHALT	TKCAP	17134.73	BBL
TK-L165	TSTREAM 01	AC ASPHALT	TKDIA	50.00	FT
TK-L166	TSTREAM 01	AC ASPHALT	TKCAP	17134.73	BBL
TK-L166	TSTREAM 01	AC ASPHALT	TKDIA	50.00	FT
TK-L167	TSTREAM 27	MC-250 CUTBACK	TKCAP	5413.18	BBL
TK-L167	TSTREAM 27	MC-250 CUTBACK	TKDIA	30.00	FT
TK-L168	M 03	MISC. STREAM - LUBE OILS	TKCAP	727.35	BBL
TK-L168	M 03	MISC. STREAM - LUBE OILS	TKDIA	20.00	FT
TK-L169	TSTREAM 37	SC-250 CUTBACK	TKCAP	5413.18	BBL
TK-L169	TSTREAM 37	SC-250 CUTBACK	TKDIA	30.00	FT
TK-L170	TSTREAM 37	SC-250 CUTBACK	TKCAP	5413.18	BBL
TK-L170	TSTREAM 37	SC-250 CUTBACK	TKDIA	30.00	FT
TK-L171	TSTREAM 38	SC-800 CUTBACK	TKCAP	5287.29	BBL
TK-L171	TSTREAM 38	SC-800 CUTBACK	TKDIA	30.00	FT
TK-L172	TSTREAM 38	SC-800 CUTBACK	TKCAP	5413.18	BBL
TK-L172	TSTREAM 38	SC-800 CUTBACK	TKDIA	30.00	FT
TK-L173	TSTREAM 01	AC ASPHALT	TKCAP	24674.01	BBL
TK-L173	TSTREAM 01	AC ASPHALT	TKDIA	60.00	FT
TK-L174	TSTREAM 01	AC ASPHALT	TKCAP	24674.01	BBL
TK-L174	TSTREAM 01	AC ASPHALT	TKDIA	60.00	FT
TK-L177	M 12	MISC. STREAM - LUBE ADDIT	TKCAP	1398.75	BBL
TK-L177	M 12	MISC. STREAM - LUBE ADDIT	TKDIA	20.00	FT
TK-L178	M 03	MISC. STREAM - LUBE OILS	TKCAP	24674.01	BBL
TK-L178	M 03	MISC. STREAM - LUBE OILS	TKDIA	60.00	FT
TK-L179	M 03	MISC. STREAM - LUBE OILS	TKCAP	24674.01	BBL
TK-L179	M 03	MISC. STREAM - LUBE OILS	TKDIA	60.00	FT
TK-L180	M 03	MISC. STREAM - LUBE OILS	TKCAP	24674.01	BBL
TK-L180	M 03	MISC. STREAM - LUBE OILS	TKDIA	60.00	FT
TK-L181	M 03	MISC. STREAM - LUBE OILS	TKCAP	24674.01	BBL
TK-L181	M 03	MISC. STREAM - LUBE OILS	TKDIA	60.00	FT
TK-L182	M 03	MISC. STREAM - LUBE OILS	TKCAP	24674.01	BBL
TK-L182	M 03	MISC. STREAM - LUBE OILS	TKDIA	60.00	FT
TK-L183	M 03	MISC. STREAM - LUBE OILS	TKCAP	10966.23	BBL
TK-L183	M 03	MISC. STREAM - LUBE OILS	TKDIA	40.00	FT
TK-L184	TSTREAM 28	MC-30 CUTBACK	TKCAP	5413.18	BBL

WRMC TANK LIST WITH DIAMETER OR CAPACITY FOR SARA 313

Tank Number	Material ID	Material Name	Diameter or Capacity	Value	Units
TK-L184	TSTREAM 28	MC-30 CUTBACK	TKDIA	30.00	FT
TK-L185	TSTREAM 28	MC-30 CUTBACK	TKCAP	5413.18	BBL
TK-L185	TSTREAM 28	MC-30 CUTBACK	TKDIA	30.00	FT
TK-L186	TSTREAM 30	MC-800 CUTBACK	TKCAP	5413.18	BBL
TK-L186	TSTREAM 30	MC-800 CUTBACK	TKDIA	30.00	FT
TK-L187	TSTREAM 30	MC-800 CUTBACK	TKCAP	5413.18	BBL
TK-L187	TSTREAM 30	MC-800 CUTBACK	TKDIA	30.00	FT
TK-L188	TSTREAM 01	AC ASPHALT	TKCAP	17134.73	BBL
TK-L188	TSTREAM 01	AC ASPHALT	TKDIA	50.00	FT
TK-L189	TSTREAM 45	SR LGO	TKCAP	33584.07	BBL
TK-L189	TSTREAM 45	SR LGO	TKDIA	70.00	FT
TK-L190	TSTREAM 01	AC ASPHALT	TKCAP	33584.07	BBL
TK-L190	TSTREAM 01	AC ASPHALT	TKDIA	70.00	FT
TK-L191	TSTREAM 45	SR LGO	TKCAP	33584.07	BBL
TK-L191	TSTREAM 45	SR LGO	TKDIA	70.00	FT
TK-L192	TSTREAM 01	AC ASPHALT	TKCAP	33584.07	BBL
TK-L192	TSTREAM 01	AC ASPHALT	TKDIA	70.00	FT
TK-L193	TSTREAM 01	AC ASPHALT	TKCAP	10966.23	BBL
TK-L193	TSTREAM 01	AC ASPHALT	TKDIA	40.00	FT
TK-L194	TSTREAM 01	AC ASPHALT	TKCAP	11843.52	BBL
TK-L194	TSTREAM 01	AC ASPHALT	TKDIA	42.00	FT
TK-L195	M 03	MISC. STREAM - LUBE OILS	TKCAP	30767.12	BBL
TK-L195	M 03	MISC. STREAM - LUBE OILS	TKDIA	67.00	FT
TK-M004	TSTREAM 18	DIESELINE	TKCAP	2587.97	BBL
TK-M004	TSTREAM 18	DIESELINE	TKDIA	29.00	FT
TK-N001	M 03	MISC. STREAM - LUBE OILS	TKCAP	975.63	BBL
TK-N001	M 03	MISC. STREAM - LUBE OILS	TKDIA	15.00	FT
TK-N002	M 03	MISC. STREAM - LUBE OILS	TKCAP	975.63	BBL
TK-N002	M 03	MISC. STREAM - LUBE OILS	TKDIA	15.00	FT
TK-N003	M 03	MISC. STREAM - LUBE OILS	TKCAP	535.02	BBL
TK-N003	M 03	MISC. STREAM - LUBE OILS	TKDIA	15.00	FT
TK-N004	M 03	MISC. STREAM - LUBE OILS	TKCAP	535.02	BBL
TK-N004	M 03	MISC. STREAM - LUBE OILS	TKDIA	15.00	FT
TK-N005	M 03	MISC. STREAM - LUBE OILS	TKCAP	535.02	BBL
TK-N005	M 03	MISC. STREAM - LUBE OILS	TKDIA	15.00	FT
TK-N006	M 03	MISC. STREAM - LUBE OILS	TKCAP	535.02	BBL
TK-N006	M 03	MISC. STREAM - LUBE OILS	TKDIA	15.00	FT
TK-N007	M 03	MISC. STREAM - LUBE OILS	TKCAP	535.02	BBL
TK-N007	M 03	MISC. STREAM - LUBE OILS	TKDIA	15.00	FT
TK-N008	M 03	MISC. STREAM - LUBE OILS	TKCAP	535.02	BBL
TK-N008	M 03	MISC. STREAM - LUBE OILS	TKDIA	15.00	FT
TK-N009	M 03	MISC. STREAM - LUBE OILS	TKCAP	535.02	BBL
TK-N009	M 03	MISC. STREAM - LUBE OILS	TKDIA	15.00	FT
TK-N010	M 03	MISC. STREAM - LUBE OILS	TKCAP	535.02	BBL
TK-N010	M 03	MISC. STREAM - LUBE OILS	TKDIA	15.00	FT
TK-N035	M 03	MISC. STREAM - LUBE OILS	TKCAP	2710.08	BBL
TK-N035	M 03	MISC. STREAM - LUBE OILS	TKDIA	25.00	FT
TK-N036	M 03	MISC. STREAM - LUBE OILS	TKCAP	2797.51	BBL
TK-N036	M 03	MISC. STREAM - LUBE OILS	TKDIA	25.00	FT
TK-N037	M 03	MISC. STREAM - LUBE OILS	TKCAP	2797.51	BBL
TK-N037	M 03	MISC. STREAM - LUBE OILS	TKDIA	25.00	FT
TK-N038	M 03	MISC. STREAM - LUBE OILS	TKCAP	2797.51	BBL

WRMC TANK LIST WITH DIAMETER OR CAPACITY FOR SARA 313

Tank Number	Material ID	Material Name	Diameter or Capacity	Value	Units
TK-N038	M 03	MISC. STREAM - LUBE OILS	TKDIA	25.00	FT
TK-N039	M 03	MISC. STREAM - LUBE OILS	TKCAP	2797.51	BBL
TK-N039	M 03	MISC. STREAM - LUBE OILS	TKDIA	25.00	FT
TK-N040	M 03	MISC. STREAM - LUBE OILS	TKCAP	2797.51	BBL
TK-N040	M 03	MISC. STREAM - LUBE OILS	TKDIA	25.00	FT
TK-N041	M 03	MISC. STREAM - LUBE OILS	TKCAP	1007.10	BBL
TK-N041	M 03	MISC. STREAM - LUBE OILS	TKDIA	15.00	FT
TK-N042	M 03	MISC. STREAM - LUBE OILS	TKCAP	1007.10	BBL
TK-N042	M 03	MISC. STREAM - LUBE OILS	TKDIA	15.00	FT
TK-N043	M 03	MISC. STREAM - LUBE OILS	TKCAP	1007.10	BBL
TK-N043	M 03	MISC. STREAM - LUBE OILS	TKDIA	15.00	FT
TK-N044	M 03	MISC. STREAM - LUBE OILS	TKCAP	1007.10	BBL
TK-N044	M 03	MISC. STREAM - LUBE OILS	TKDIA	15.00	FT
TK-N045	M 03	MISC. STREAM - LUBE OILS	TKCAP	1007.10	BBL
TK-N045	M 03	MISC. STREAM - LUBE OILS	TKDIA	15.00	FT
TK-N046	M 03	MISC. STREAM - LUBE OILS	TKCAP	1007.10	BBL
TK-N046	M 03	MISC. STREAM - LUBE OILS	TKDIA	15.00	FT
TK-N047	M 03	MISC. STREAM - LUBE OILS	TKCAP	912.69	BBL
TK-N047	M 03	MISC. STREAM - LUBE OILS	TKDIA	15.00	FT
TK-N048	M 03	MISC. STREAM - LUBE OILS	TKCAP	975.63	BBL
TK-N048	M 03	MISC. STREAM - LUBE OILS	TKDIA	15.00	FT
TK-N049	M 03	MISC. STREAM - LUBE OILS	TKCAP	2797.51	BBL
TK-N049	M 03	MISC. STREAM - LUBE OILS	TKDIA	25.00	FT
TK-N050	M 03	MISC. STREAM - LUBE OILS	TKCAP	2797.51	BBL
TK-N050	M 03	MISC. STREAM - LUBE OILS	TKDIA	25.00	FT
TK-N051	M 03	MISC. STREAM - LUBE OILS	TKCAP	2797.51	BBL
TK-N051	M 03	MISC. STREAM - LUBE OILS	TKDIA	25.00	FT
TK-N052	M 03	MISC. STREAM - LUBE OILS	TKCAP	2797.51	BBL
TK-N052	M 03	MISC. STREAM - LUBE OILS	TKDIA	25.00	FT
TK-N053	M 03	MISC. STREAM - LUBE OILS	TKCAP	1230.90	BBL
TK-N053	M 03	MISC. STREAM - LUBE OILS	TKDIA	20.00	FT
TK-N054	M 03	MISC. STREAM - LUBE OILS	TKCAP	335.70	BBL
TK-N054	M 03	MISC. STREAM - LUBE OILS	TKDIA	10.00	FT
TK-N055	M 03	MISC. STREAM - LUBE OILS	TKCAP	265.76	BBL
TK-N055	M 03	MISC. STREAM - LUBE OILS	TKDIA	10.00	FT
TK-N056	M 03	MISC. STREAM - LUBE OILS	TKCAP	5438.35	BBL
TK-N056	M 03	MISC. STREAM - LUBE OILS	TKDIA	36.00	FT
TK-N057	M 03	MISC. STREAM - LUBE OILS	TKCAP	10840.34	BBL
TK-N057	M 03	MISC. STREAM - LUBE OILS	TKDIA	50.00	FT
TK-N058	M 03	MISC. STREAM - LUBE OILS	TKCAP	10840.34	BBL
TK-N058	M 03	MISC. STREAM - LUBE OILS	TKDIA	50.00	FT
TK-N059	M 03	MISC. STREAM - LUBE OILS	TKCAP	10840.34	BBL
TK-N059	M 03	MISC. STREAM - LUBE OILS	TKDIA	50.00	FT
TK-N060	M 03	MISC. STREAM - LUBE OILS	TKCAP	10840.34	BBL
TK-N060	M 03	MISC. STREAM - LUBE OILS	TKDIA	50.00	FT
TK-N061	M 03	MISC. STREAM - LUBE OILS	TKCAP	10840.34	BBL
TK-N061	M 03	MISC. STREAM - LUBE OILS	TKDIA	50.00	FT
TK-N062	M 03	MISC. STREAM - LUBE OILS	TKCAP	10840.34	BBL
TK-N062	M 03	MISC. STREAM - LUBE OILS	TKDIA	50.00	FT
TK-N063	M 03	MISC. STREAM - LUBE OILS	TKCAP	503.55	BBL
TK-N063	M 03	MISC. STREAM - LUBE OILS	TKDIA	15.00	FT
TK-N064	M 03	MISC. STREAM - LUBE OILS	TKCAP	10490.65	BBL

WRMC TANK LIST WITH DIAMETER OR CAPACITY FOR SARA 313

Tank Number	Material ID	Material Name	Diameter or Capacity	Value	Units
TK-N064	M 03	MISC. STREAM - LUBE OILS	TKDIA	50.00	FT
TK-N067	TSTREAM 01	AC ASPHALT	TKCAP	10140.96	BBL
TK-N067	TSTREAM 01	AC ASPHALT	TKDIA	50.00	FT
TK-N068	TSTREAM 01	AC ASPHALT	TKCAP	10490.65	BBL
TK-N068	TSTREAM 01	AC ASPHALT	TKDIA	50.00	FT
TK-N069	M 03	MISC. STREAM - LUBE OILS	TKCAP	10490.65	BBL
TK-N069	M 03	MISC. STREAM - LUBE OILS	TKDIA	50.00	FT
TK-N070	M 03	MISC. STREAM - LUBE OILS	TKCAP	10490.65	BBL
TK-N070	M 03	MISC. STREAM - LUBE OILS	TKDIA	50.00	FT
TK-N071	TSTREAM 01	AC ASPHALT	TKCAP	10490.65	BBL
TK-N071	TSTREAM 01	AC ASPHALT	TKDIA	50.00	FT
TK-N072	TSTREAM 45	SR LGO	TKCAP	10490.65	BBL
TK-N072	TSTREAM 45	SR LGO	TKDIA	50.00	FT
TK-N073	M 03	MISC. STREAM - LUBE OILS	TKCAP	10490.65	BBL
TK-N073	M 03	MISC. STREAM - LUBE OILS	TKDIA	50.00	FT
TK-N074	M 03	MISC. STREAM - LUBE OILS	TKCAP	10840.34	BBL
TK-N074	M 03	MISC. STREAM - LUBE OILS	TKDIA	50.00	FT
TK-N075	M 03	MISC. STREAM - LUBE OILS	TKCAP	16230.01	BBL
TK-N075	M 03	MISC. STREAM - LUBE OILS	TKDIA	56.00	FT
TK-N077	M 12	MISC. STREAM - LUBE ADDIT	TKCAP	2797.51	BBL
TK-N077	M 12	MISC. STREAM - LUBE ADDIT	TKDIA	25.00	FT
TK-N078	M 03	MISC. STREAM - LUBE OILS	TKCAP	2797.51	BBL
TK-N078	M 03	MISC. STREAM - LUBE OILS	TKDIA	25.00	FT
TK-N080	M 03	MISC. STREAM - LUBE OILS	TKCAP	9990.46	BBL
TK-N080	M 03	MISC. STREAM - LUBE OILS	TKDIA	48.00	FT
TK-N081	M 03	MISC. STREAM - LUBE OILS	TKCAP	9668.18	BBL
TK-N081	M 03	MISC. STREAM - LUBE OILS	TKDIA	48.00	FT
TK-N082	M 03	MISC. STREAM - LUBE OILS	TKCAP	7734.55	BBL
TK-N082	M 03	MISC. STREAM - LUBE OILS	TKDIA	48.00	FT
TK-N083	M 03	MISC. STREAM - LUBE OILS	TKCAP	9668.18	BBL
TK-N083	M 03	MISC. STREAM - LUBE OILS	TKDIA	48.00	FT
TK-N084	M 03	MISC. STREAM - LUBE OILS	TKCAP	9668.18	BBL
TK-N084	M 03	MISC. STREAM - LUBE OILS	TKDIA	48.00	FT
TK-N085	M 03	MISC. STREAM - LUBE OILS	TKCAP	349.69	BBL
TK-N085	M 03	MISC. STREAM - LUBE OILS	TKDIA	10.00	FT
TK-N086	M 03	MISC. STREAM - LUBE OILS	TKCAP	335.70	BBL
TK-N086	M 03	MISC. STREAM - LUBE OILS	TKDIA	10.00	FT
TK-N087	M 12	MISC. STREAM - LUBE ADDIT	TKCAP	196.94	BBL
TK-N087	M 12	MISC. STREAM - LUBE ADDIT	TKDIA	8.00	FT
TK-N088	M 12	MISC. STREAM - LUBE ADDIT	TKCAP	196.94	BBL
TK-N088	M 12	MISC. STREAM - LUBE ADDIT	TKDIA	8.00	FT
TK-N089	M 12	MISC. STREAM - LUBE ADDIT	TKCAP	196.94	BBL
TK-N089	M 12	MISC. STREAM - LUBE ADDIT	TKDIA	8.00	FT
TK-N090	M 12	MISC. STREAM - LUBE ADDIT	TKCAP	196.94	BBL
TK-N090	M 12	MISC. STREAM - LUBE ADDIT	TKDIA	8.00	FT
TK-N091	M 12	MISC. STREAM - LUBE ADDIT	TKCAP	143.23	BBL
TK-N091	M 12	MISC. STREAM - LUBE ADDIT	TKDIA	8.00	FT
TK-N093	M 12	MISC. STREAM - LUBE ADDIT	TKCAP	143.23	BBL
TK-N093	M 12	MISC. STREAM - LUBE ADDIT	TKDIA	8.00	FT
TK-N104	M 03	MISC. STREAM - LUBE OILS	TKCAP	2363.89	BBL
TK-N104	M 03	MISC. STREAM - LUBE OILS	TKDIA	26.00	FT
TK-N105	M 03	MISC. STREAM - LUBE OILS	TKCAP	2269.34	BBL

WRMC TANK LIST WITH DIAMETER OR CAPACITY FOR SARA 313

Tank Number	Material ID	Material Name	Diameter or Capacity	Value	Units
TK-N105	M 03	MISC. STREAM - LUBE OILS	TKDIA	26.00	FT
TK-N107	M 12	MISC. STREAM - LUBE ADDIT	TKCAP	466.06	BBL
TK-N107	M 12	MISC. STREAM - LUBE ADDIT	TKDIA	14.00	FT
TK-N110	M 03	MISC. STREAM - LUBE OILS	TKCAP	5438.35	BBL
TK-N110	M 03	MISC. STREAM - LUBE OILS	TKDIA	36.00	FT
TK-N111	M 03	MISC. STREAM - LUBE OILS	TKCAP	5438.35	BBL
TK-N111	M 03	MISC. STREAM - LUBE OILS	TKDIA	36.00	FT
TK-N112	M 03	MISC. STREAM - LUBE OILS	TKCAP	5438.35	BBL
TK-N112	M 03	MISC. STREAM - LUBE OILS	TKDIA	36.00	FT
TK-N113	M 03	MISC. STREAM - LUBE OILS	TKCAP	5438.35	BBL
TK-N113	M 03	MISC. STREAM - LUBE OILS	TKDIA	36.00	FT
TK-N120	M 12	MISC. STREAM - LUBE ADDIT	TKCAP	196.94	BBL
TK-N120	M 12	MISC. STREAM - LUBE ADDIT	TKDIA	8.00	FT
TK-N121	M 12	MISC. STREAM - LUBE ADDIT	TKCAP	196.94	BBL
TK-N121	M 12	MISC. STREAM - LUBE ADDIT	TKDIA	8.00	FT
TK-N122	M 03	MISC. STREAM - LUBE OILS	TKCAP	80.57	BBL
TK-N122	M 03	MISC. STREAM - LUBE OILS	TKDIA	8.00	FT
TK-N126	M 03	MISC. STREAM - LUBE OILS	TKCAP	335.70	BBL
TK-N126	M 03	MISC. STREAM - LUBE OILS	TKDIA	10.00	FT
TK-N127	M 12	MISC. STREAM - LUBE ADDIT	TKCAP	975.63	BBL
TK-N127	M 12	MISC. STREAM - LUBE ADDIT	TKDIA	15.00	FT
TK-N128	M 03	MISC. STREAM - LUBE OILS	TKCAP	975.63	BBL
TK-N128	M 03	MISC. STREAM - LUBE OILS	TKDIA	15.00	FT
TK-N129	M 03	MISC. STREAM - LUBE OILS	TKCAP	507.75	BBL
TK-N129	M 03	MISC. STREAM - LUBE OILS	TKDIA	11.00	FT
TK-N131	M 12	MISC. STREAM - LUBE ADDIT	TKCAP	507.75	BBL
TK-N131	M 12	MISC. STREAM - LUBE ADDIT	TKDIA	11.00	FT
TK-N132	M 12	MISC. STREAM - LUBE ADDIT	TKCAP	507.75	BBL
TK-N132	M 12	MISC. STREAM - LUBE ADDIT	TKDIA	11.00	FT
TK-N135	M 03	MISC. STREAM - LUBE OILS	TKCAP	152.18	BBL
TK-N135	M 03	MISC. STREAM - LUBE OILS	TKDIA	8.00	FT
TK-N136	M 03	MISC. STREAM - LUBE OILS	TKCAP	181.84	BBL
TK-N136	M 03	MISC. STREAM - LUBE OILS	TKDIA	10.00	FT
TK-N137	M 03	MISC. STREAM - LUBE OILS	TKCAP	321.71	BBL
TK-N137	M 03	MISC. STREAM - LUBE OILS	TKDIA	10.00	FT
TK-N138	M 12	MISC. STREAM - LUBE ADDIT	TKCAP	507.75	BBL
TK-N138	M 12	MISC. STREAM - LUBE ADDIT	TKDIA	11.00	FT
TK-N139	M 03	MISC. STREAM - LUBE OILS	TKCAP	609.30	BBL
TK-N139	M 03	MISC. STREAM - LUBE OILS	TKDIA	11.00	FT
TK-N139	M 03	MISC. STREAM - LUBE OILS	TKCAP	609.30	BBL
TK-N139	M 03	MISC. STREAM - LUBE OILS	TKDIA	11.00	FT
TK-N140	M 12	MISC. STREAM - LUBE ADDIT	TKCAP	490.82	BBL
TK-N140	M 12	MISC. STREAM - LUBE ADDIT	TKDIA	11.00	FT
TK-N141	M 12	MISC. STREAM - LUBE ADDIT	TKCAP	490.82	BBL
TK-N141	M 12	MISC. STREAM - LUBE ADDIT	TKDIA	11.00	FT
TK-N142	M 12	MISC. STREAM - LUBE ADDIT	TKCAP	268.56	BBL
TK-N142	M 12	MISC. STREAM - LUBE ADDIT	TKDIA	8.00	FT
TK-N143	M 03	MISC. STREAM - LUBE OILS	TKCAP	15.67	BBL
TK-N143	M 03	MISC. STREAM - LUBE OILS	TKDIA	4.00	FT
TK-N144	M 03	MISC. STREAM - LUBE OILS	TKCAP	321.71	BBL
TK-N144	M 03	MISC. STREAM - LUBE OILS	TKDIA	10.00	FT
TK-N145	M 12	MISC. STREAM - LUBE ADDIT	TKCAP	259.61	BBL

WRMC TANK LIST WITH DIAMETER OR CAPACITY FOR SARA 313

Tank Number	Material ID	Material Name	Diameter or Capacity	Value	Units
TK-N145	M 12	MISC. STREAM - LUBE ADDIT	TKDIA	8.00	FT
TK-N146	M 12	MISC. STREAM - LUBE ADDIT	TKCAP	259.61	BBL
TK-N146	M 12	MISC. STREAM - LUBE ADDIT	TKDIA	8.00	FT
TK-N147	M 03	MISC. STREAM - LUBE OILS	TKCAP	226.18	BBL
TK-N147	M 03	MISC. STREAM - LUBE OILS	TKDIA	7.00	FT
TK-N148	M 03	MISC. STREAM - LUBE OILS	TKCAP	259.61	BBL
TK-N148	M 03	MISC. STREAM - LUBE OILS	TKDIA	8.00	FT
TK-N149	M 03	MISC. STREAM - LUBE OILS	TKCAP	259.61	BBL
TK-N149	M 03	MISC. STREAM - LUBE OILS	TKDIA	8.00	FT
TK-N150	M 03	MISC. STREAM - LUBE OILS	TKCAP	2710.08	BBL
TK-N150	M 03	MISC. STREAM - LUBE OILS	TKDIA	25.00	FT
TK-N152	M 03	MISC. STREAM - LUBE OILS	TKCAP	307.73	BBL
TK-N152	M 03	MISC. STREAM - LUBE OILS	TKDIA	10.00	FT
TK-N153	M 03	MISC. STREAM - LUBE OILS	TKCAP	2710.08	BBL
TK-N153	M 03	MISC. STREAM - LUBE OILS	TKDIA	25.00	FT
TK-N154	M 03	MISC. STREAM - LUBE OILS	TKCAP	5413.18	BBL
TK-N154	M 03	MISC. STREAM - LUBE OILS	TKDIA	30.00	FT
TK-N155	M 03	MISC. STREAM - LUBE OILS	TKCAP	10966.23	BBL
TK-N155	M 03	MISC. STREAM - LUBE OILS	TKDIA	40.00	FT
TK-N156	M 03	MISC. STREAM - LUBE OILS	TKCAP	10966.23	BBL
TK-N156	M 03	MISC. STREAM - LUBE OILS	TKDIA	40.00	FT
TK-N158	M 03	MISC. STREAM - LUBE OILS	TKCAP	727.35	BBL
TK-N158	M 03	MISC. STREAM - LUBE OILS	TKDIA	20.00	FT
TK-N159	M 03	MISC. STREAM - LUBE OILS	TKCAP	2710.08	BBL
TK-N159	M 03	MISC. STREAM - LUBE OILS	TKDIA	25.00	FT
TK-N160	M 03	MISC. STREAM - LUBE OILS	TKCAP	2710.08	BBL
TK-N160	M 03	MISC. STREAM - LUBE OILS	TKDIA	25.00	FT
TK-N161	M 03	MISC. STREAM - LUBE OILS	TKCAP	2710.08	BBL
TK-N161	M 03	MISC. STREAM - LUBE OILS	TKDIA	25.00	FT
TK-N162	M 03	MISC. STREAM - LUBE OILS	TKCAP	2710.08	BBL
TK-N162	M 03	MISC. STREAM - LUBE OILS	TKDIA	25.00	FT
TK-N163	M 03	MISC. STREAM - LUBE OILS	TKCAP	2710.08	BBL
TK-N163	M 03	MISC. STREAM - LUBE OILS	TKDIA	25.00	FT
TK-N167	M 03	MISC. STREAM - LUBE OILS	TKCAP	2710.08	BBL
TK-N167	M 03	MISC. STREAM - LUBE OILS	TKDIA	25.00	FT
TK-N168	M 03	MISC. STREAM - LUBE OILS	TKCAP	2710.08	BBL
TK-N168	M 03	MISC. STREAM - LUBE OILS	TKDIA	25.00	FT
TK-N169	M 03	MISC. STREAM - LUBE OILS	TKCAP	2710.08	BBL
TK-N169	M 03	MISC. STREAM - LUBE OILS	TKDIA	25.00	FT
TK-N170	M 03	MISC. STREAM - LUBE OILS	TKCAP	2710.08	BBL
TK-N170	M 03	MISC. STREAM - LUBE OILS	TKDIA	25.00	FT
TK-N171	M 03	MISC. STREAM - LUBE OILS	TKCAP	2710.08	BBL
TK-N171	M 03	MISC. STREAM - LUBE OILS	TKDIA	25.00	FT
TK-N176	M 03	MISC. STREAM - LUBE OILS	TKCAP	17.90	BBL
TK-N176	M 03	MISC. STREAM - LUBE OILS	TKDIA	4.00	FT
TK-N181	M 03	MISC. STREAM - LUBE OILS	TKCAP	24674.01	BBL
TK-N181	M 03	MISC. STREAM - LUBE OILS	TKDIA	60.00	FT
TK-N182	M 03	MISC. STREAM - LUBE OILS	TKCAP	24674.01	BBL
TK-N182	M 03	MISC. STREAM - LUBE OILS	TKDIA	60.00	FT
TK-N183	M 03	MISC. STREAM - LUBE OILS	TKCAP	17134.73	BBL
TK-N183	M 03	MISC. STREAM - LUBE OILS	TKDIA	50.00	FT
TK-N184	M 03	MISC. STREAM - LUBE OILS	TKCAP	5413.18	BBL

WRMC TANK LIST WITH DIAMETER OR CAPACITY FOR SARA 313

Tank Number	Material ID	Material Name	Diameter or Capacity	Value	Units
TK-N184	M 03	MISC. STREAM - LUBE OILS	TKDIA	30.00	FT
TK-N185	M 03	MISC. STREAM - LUBE OILS	TKCAP	5413.18	BBL
TK-N185	M 03	MISC. STREAM - LUBE OILS	TKDIA	30.00	FT
TK-N186	M 03	MISC. STREAM - LUBE OILS	TKCAP	13.43	BBL
TK-N186	M 03	MISC. STREAM - LUBE OILS	TKDIA	4.00	FT
TK-N187	M 03	MISC. STREAM - LUBE OILS	TKCAP	685.39	BBL
TK-N187	M 03	MISC. STREAM - LUBE OILS	TKDIA	14.00	FT
TK-N188	M 03	MISC. STREAM - LUBE OILS	TKCAP	685.39	BBL
TK-N188	M 03	MISC. STREAM - LUBE OILS	TKDIA	14.00	FT
TK-N189	M 03	MISC. STREAM - LUBE OILS	TKCAP	685.39	BBL
TK-N189	M 03	MISC. STREAM - LUBE OILS	TKDIA	14.00	FT
TK-N190	M 03	MISC. STREAM - LUBE OILS	TKCAP	17.48	BBL
TK-N190	M 03	MISC. STREAM - LUBE OILS	TKDIA	5.00	FT
TK-N191	M 03	MISC. STREAM - LUBE OILS	TKCAP	6.29	BBL
TK-N191	M 03	MISC. STREAM - LUBE OILS	TKDIA	3.00	FT
TK-N192	M 03	MISC. STREAM - LUBE OILS	TKCAP	6.29	BBL
TK-N192	M 03	MISC. STREAM - LUBE OILS	TKDIA	3.00	FT
TK-N193	M 03	MISC. STREAM - LUBE OILS	TKCAP	6.29	BBL
TK-N193	M 03	MISC. STREAM - LUBE OILS	TKDIA	3.00	FT
TK-N194	M 03	MISC. STREAM - LUBE OILS	TKCAP	6.29	BBL
TK-N194	M 03	MISC. STREAM - LUBE OILS	TKDIA	3.00	FT
TK-N195	M 03	MISC. STREAM - LUBE OILS	TKCAP	17.48	BBL
TK-N195	M 03	MISC. STREAM - LUBE OILS	TKDIA	5.00	FT
TK-N196	M 03	MISC. STREAM - LUBE OILS	TKCAP	24674.01	BBL
TK-N196	M 03	MISC. STREAM - LUBE OILS	TKDIA	60.00	FT
TK-N197	M 12	MISC. STREAM - LUBE ADDIT	TKCAP	1063.05	BBL
TK-N197	M 12	MISC. STREAM - LUBE ADDIT	TKDIA	20.00	FT
TK-P074	M 12	MISC. STREAM - LUBE ADDIT	TKCAP	230.57	BBL
TK-P074	M 12	MISC. STREAM - LUBE ADDIT	TKDIA	18.00	FT
TK-R008	M 03	MISC. STREAM - LUBE OILS	TKCAP	2417.05	BBL
TK-R008	M 03	MISC. STREAM - LUBE OILS	TKDIA	24.00	FT
TK-RR031	TSTREAM 34	NAP-91	TKCAP	109.66	BBL
TK-RR031	TSTREAM 34	NAP-91	TKDIA	7.00	FT
TK-RR032	TSTREAM 34	NAP-91	TKCAP	109.66	BBL
TK-RR032	TSTREAM 34	NAP-91	TKDIA	7.00	FT

LISTING OF ALL WRMC TANKS FOR SARA 313 REPORT

Tank	Tank Type	Start Date	End Date	Material ID	Material Name	Throughput	Units
TK-A010	FIXTNK	01/01/92	12/31/92	TSTREAM 01	AC ASPHALT	1779.375	MBBL
TK-A012	EXTFLT	01/01/92	12/31/92	TSTREAM 25	KEROSENE	4270500.000	BBL
TK-A014	EXTFLT	01/01/92	12/31/92	TSTREAM 25	KEROSENE	4270500.000	BBL
TK-A016	EXTFLT	01/01/92	12/31/92	TSTREAM 07	CC CLARIFIED OIL	182500.000	BBL
TK-A019	EXTFLT	01/01/92	12/31/92	TSTREAM 17	DESULF HVY NAPHTHA	522165.000	BBL
TK-A022	FIXTNK	01/01/92	12/31/92	TSTREAM 35	NO.6 OIL	644.590	MBBL
TK-A023	EXTFLT	01/01/92	12/31/92	TSTREAM 04	BENZENE RAFFINATE	2062239.000	BBL
TK-A024	EXTFLT	01/01/92	12/31/92	TSTREAM 09	CC HVY GASOLINE	1783074.000	BBL
TK-A025	EXTFLT	01/01/92	12/31/92	TSTREAM 09	CC HVY GASOLINE	1783074.000	BBL
TK-A027	EXTFLT	01/01/92	02/26/92	TSTREAM 19	GASOLINE BASE	67178.000	BBL
TK-A027	EXTFLT	02/27/92	03/17/92	TSTREAM 04	BENZENE RAFFINATE	94888.000	BBL
TK-A027	EXTFLT	03/18/92	12/31/92	TSTREAM 09	CC HVY GASOLINE	1406918.000	BBL
TK-A028	EXTFLT	01/01/92	12/31/92	TSTREAM 20	GASOLINE RU2000	15493.044	MBBL
TK-A029	FIXTNK	01/01/92	12/31/92	TSTREAM 35	NO.6 OIL	663.205	MBBL
TK-A030	FIXTNK	01/01/92	12/31/92	TSTREAM 35	NO.6 OIL	663.205	MBBL
TK-A031	EXTFLT	01/01/92	12/31/92	TSTREAM 21	GASOLINE SR2000	5267066.000	BBL
TK-A032	EXTFLT	01/01/92	12/31/92	TSTREAM 20	GASOLINE RU2000	15493.044	MBBL
TK-A033	EXTFLT	01/01/92	12/31/92	TSTREAM 22	GASOLINE SU2000/SU2000E	3407085.000	BBL
TK-A034	EXTFLT	01/01/92	12/31/92	TSTREAM 21	GASOLINE SR2000	5267066.000	BBL
TK-A037	EXTFLT	01/01/92	03/08/92	TSTREAM 03	AVIATION GASOLINE	55658.000	BBL
TK-A037	EXTFLT	03/09/92	04/20/92	TSTREAM 09	CC HVY GASOLINE	244176.000	BBL
TK-A037	EXTFLT	04/21/92	12/31/92	TSTREAM 22	GASOLINE SU2000/SU2000E	2358751.000	BBL
TK-A039	FIXTNK	01/01/92	12/31/92	TSTREAM 01	AC ASPHALT	0.000	MBBL
TK-A040	EXTFLT	01/01/92	12/31/92	TSTREAM 23	HVY REFORMATE	2263601.000	BBL
TK-A041	EXTFLT	03/18/92	06/28/92	TSTREAM 09	CC HVY GASOLINE	853918.000	BBL
TK-A041	EXTFLT	12/18/92	12/31/92	TSTREAM 23	HVY REFORMATE	73817.000	BBL
TK-A041	EXTFLT	06/29/93	09/16/93	TSTREAM 23	HVY REFORMATE	489930.000	BBL
TK-A041	EXTFLT	09/17/93	12/17/93	TSTREAM 09	CC HVY GASOLINE	761829.000	BBL
TK-A042	FIXTNK	01/01/92	07/31/92	TSTREAM 35	NO.6 OIL	655.996	MBBL
TK-A042	FIXTNK	08/01/92	12/31/92	M 15	ROAD OIL FOR TANK A042	468.569	MBBL
TK-A044	FIXTNK	01/01/92	07/31/92	TSTREAM 47	SR XHGO/XXHGO	130.940	MBBL
TK-A046	FIXTNK	01/01/92	12/31/92	TSTREAM 43	SR HGO	1825.000	MBBL
TK-A047	FIXTNK	01/01/92	12/31/92	TSTREAM 01	AC ASPHALT	2190.000	MBBL
TK-A048	FIXTNK	01/01/92	12/31/92	TSTREAM 01	AC ASPHALT	2190.000	MBBL
TK-A049	FIXTNK	01/01/92	12/31/92	TSTREAM 01	AC ASPHALT	215.350	MBBL
TK-A050	FIXTNK	01/01/92	12/31/92	TSTREAM 47	SR XHGO/XXHGO	133.225	MBBL
TK-A052	EXTFLT	01/01/92	12/31/92	TSTREAM 23	HVY REFORMATE	1571945.000	BBL
TK-A053	INTFLT	01/01/92	12/31/92	TSTREAM 23	HVY REFORMATE	2456166.000	BBL
TK-A054	INTFLT	01/01/92	12/31/92	TSTREAM 09	CC HVY GASOLINE	3315633.000	BBL
TK-A055	FIXTNK	01/01/92	12/31/92	TSTREAM 41	SOUR WATER	113.150	MBBL
TK-A056	FIXTNK	01/01/92	12/31/92	TSTREAM 18	DIESELINE	985.500	MBBL
TK-A057	EXTFLT	01/01/92	12/31/92	TSTREAM 22	GASOLINE SU2000/SU2000E	1916485.000	BBL
TK-A058	EXTFLT	01/01/92	12/31/92	TSTREAM 22	GASOLINE SU2000/SU2000E	1916485.000	BBL
TK-A061	EXTFLT	01/01/92	12/31/92	TSTREAM 31	MOTOR ALKYLATE	1654351.000	BBL
TK-A062	INTFLT	01/01/92	12/31/92	TSTREAM 05	BENZENE	243390.000	BBL
TK-A063	INTFLT	01/01/92	12/31/92	TSTREAM 05	BENZENE	243390.000	BBL
TK-A064	INTFLT	01/01/92	12/31/92	TSTREAM 05	BENZENE	243390.000	BBL
TK-A065	EXTFLT	01/01/92	12/31/92	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	2161566.000	BBL
TK-A066	EXTFLT	01/01/92	12/31/92	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	3501379.000	BBL
TK-A067	EXTFLT	01/01/92	12/31/92	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	2161566.000	BBL
TK-A068	EXTFLT	01/01/92	12/31/92	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	3501379.000	BBL
TK-A069	EXTFLT	01/01/92	12/31/92	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	3501379.000	BBL

LISTING OF ALL WRMC TANKS FOR SARA 313 REPORT

Tank	Tank Type	Start Date	End Date	Material ID	Material Name	Throughput	Units
TK-A070	EXTFLT	01/01/92	12/31/92	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	2161566.000	BBL
TK-A071	EXTFLT	01/01/92	12/31/92	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	2161566.000	BBL
TK-A072	EXTFLT	01/01/92	12/31/92	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	2161566.000	BBL
TK-A073	EXTFLT	01/01/92	12/31/92	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	3501379.000	BBL
TK-A074	EXTFLT	01/01/92	12/31/92	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	3501379.000	BBL
TK-A075	EXTFLT	01/01/92	12/31/92	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	3501379.000	BBL
TK-A076	EXTFLT	01/01/92	12/31/92	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	3501379.000	BBL
TK-A077	EXTFLT	01/01/92	12/31/92	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	3501379.000	BBL
TK-A078	EXTFLT	01/01/92	12/31/92	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	3501379.000	BBL
TK-A079	EXTFLT	01/01/92	12/31/92	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	3501379.000	BBL
TK-A080	EXTFLT	01/01/92	12/31/92	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	3501379.000	BBL
TK-A081	EXTFLT	01/01/92	12/31/92	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	3501379.000	BBL
TK-A082	EXTFLT	01/01/92	12/31/92	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	3501379.000	BBL
TK-A083	EXTFLT	01/01/92	12/31/92	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	3501379.000	BBL
TK-A084	EXTFLT	01/01/92	12/31/92	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	3501379.000	BBL
TK-A088	EXTFLT	01/01/92	12/31/92	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	3501379.000	BBL
TK-A089	EXTFLT	01/01/92	12/31/92	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	3501379.000	BBL
TK-A090	EXTFLT	01/01/92	12/31/92	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	3501379.000	BBL
TK-A094	EXTFLT	01/01/92	12/31/92	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	3501379.000	BBL
TK-A095	EXTFLT	01/01/92	12/31/92	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	3501379.000	BBL
TK-A096	EXTFLT	01/01/92	12/31/92	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	3501379.000	BBL
TK-A097	EXTFLT	01/01/92	12/31/92	TSTREAM CR	AVERAGE CRUDE OIL (AVG 19	3501379.000	BBL
TK-A100	FIXTNK	01/01/92	12/31/92	TSTREAM 18	DIESELINE	3489.400	MBBL
TK-A101	FIXTNK	01/01/92	12/31/92	TSTREAM 18	DIESELINE	3489.400	MBBL
TK-A102	FIXTNK	01/01/92	12/31/92	TSTREAM 18	DIESELINE	2073.200	MBBL
TK-A103	FIXTNK	01/01/92	12/31/92	TSTREAM 45	SR LGO	2073.200	MBBL
TK-A104	FIXTNK	01/01/92	12/31/92	TSTREAM 18	DIESELINE	2409.000	MBBL
TK-A105	FIXTNK	01/01/92	12/31/92	TSTREAM 18	DIESELINE	3474.800	MBBL
TK-A106	EXTFLT	01/01/92	03/17/92	TSTREAM 23	HVY REFORMATE	327309.000	BBL
TK-A106	EXTFLT	03/18/92	05/20/92	TSTREAM 09	CC HVY GASOLINE	366264.000	BBL
TK-A106	EXTFLT	05/21/92	10/11/92	TSTREAM 23	HVY REFORMATE	615858.000	BBL
TK-A106	EXTFLT	10/12/92	12/13/92	TSTREAM 48	TOLUENE CONC.	244247.000	BBL
TK-A106	EXTFLT	12/14/92	12/28/92	TSTREAM 04	BENZENE RAFFINATE	83208.000	BBL
TK-A106	EXTFLT	12/29/92	12/31/92	TSTREAM 23	HVY REFORMATE	8613.000	BBL
TK-A107	EXTFLT	01/01/92	12/31/92	TSTREAM 26	LT REFORMATE	1495643.000	BBL
TK-A108	EXTFLT	01/01/92	03/17/92	TSTREAM 23	HVY REFORMATE	323003.000	BBL
TK-A108	EXTFLT	03/18/92	06/21/92	TSTREAM 09	CC HVY GASOLINE	552303.000	BBL
TK-A108	EXTFLT	06/22/92	12/13/92	TSTREAM 23	HVY REFORMATE	749366.000	BBL
TK-A108	EXTFLT	12/14/92	12/28/92	TSTREAM 04	BENZENE RAFFINATE	83208.000	BBL
TK-A108	EXTFLT	12/29/92	12/31/92	TSTREAM 23	HVY REFORMATE	8613.000	BBL
TK-A109	EXTFLT	01/01/92	06/28/92	TSTREAM 31	MOTOR ALKYLATE	811312.000	BBL
TK-A109	EXTFLT	06/29/92	08/17/92	TSTREAM 26	LT REFORMATE	200785.000	BBL
TK-A109	EXTFLT	08/18/92	12/31/92	TSTREAM 23	HVY REFORMATE	581404.000	BBL
TK-A110	EXTFLT	01/01/92	10/31/92	TSTREAM 24	JET A	2523200.000	BBL
TK-A111	EXTFLT	01/01/92	01/31/92	TSTREAM 24	JET A	257300.000	BBL
TK-A111	EXTFLT	04/01/92	04/30/92	TSTREAM 24	JET A	249000.000	BBL
TK-A112	EXTFLT	01/01/92	12/31/92	TSTREAM 25	KEROSENE	383250.000	BBL
TK-A113	EXTFLT	01/01/92	03/17/92	TSTREAM 23	HVY REFORMATE	323003.000	BBL
TK-A113	EXTFLT	03/18/92	06/21/92	TSTREAM 09	CC HVY GASOLINE	552302.000	BBL
TK-A113	EXTFLT	06/22/92	12/31/92	TSTREAM 48	TOLUENE CONC.	756376.000	BBL
TK-A114	FIXTNK	01/01/92	12/31/92	TSTREAM 47	SR XHGO/XXHGO	224.475	MBBL
TK-A115	EXTFLT	01/01/92	12/31/92	TSTREAM 48	TOLUENE CONC.	1437903.000	BBL

LISTING OF ALL WRMC TANKS FOR SARA 313 REPORT

Tank	Tank Type	Start Date	End Date	Material ID	Material Name	Throughput	Units
TK-A116	INTFLT	01/01/92	03/08/92	TSTREAM 02	AVIATION ALKYLATE	303675.000	BBL
TK-A116	INTFLT	03/09/92	09/16/92	TSTREAM 17	DESULF HVY NAPHTHA	287435.000	BBL
TK-A116	INTFLT	09/17/92	12/20/92	TSTREAM 26	LT REFORMATE	385179.000	BBL
TK-A116	INTFLT	12/21/92	12/31/92	TSTREAM 23	HVY REFORMATE	43067.000	BBL
TK-A117	FIXTNK	01/01/92	12/31/92	TSTREAM 47	SR XHGO/XXHGO	1368.750	MBBL
TK-A118	FIXTNK	01/01/92	12/31/92	TSTREAM 47	SR XHGO/XXHGO	1368.750	MBBL
TK-A119	EXTFLT	01/01/92	12/31/92	TSTREAM 11	CC LT GASOLINE	3285000.000	BBL
TK-A120	EXTFLT	01/01/92	04/30/92	TSTREAM 47	SR XHGO/XXHGO	606000.000	BBL
TK-A120	EXTFLT	05/01/92	09/30/92	TSTREAM 43	SR HGO	772650.000	BBL
TK-A120	EXTFLT	10/01/92	12/31/92	TSTREAM 10	CC LGO	464600.000	BBL
TK-A121	EXTFLT	01/01/92	12/31/92	TSTREAM 48	TOLUENE CONC.	1437903.000	BBL
TK-A122	INTFLT	01/01/92	12/31/92	TSTREAM 17	DESULF HVY NAPHTHA	747640.000	BBL
TK-A123	EXTFLT	01/01/92	12/31/92	TSTREAM 11	CC LT GASOLINE	3677826.000	BBL
TK-A124	EXTFLT	09/01/92	12/31/92	TSTREAM 47	SR XHGO/XXHGO	335500.000	BBL
TK-A125	EXTFLT	02/19/92	10/11/92	TSTREAM 09	CC HVY GASOLINE	2134723.000	BBL
TK-A125	EXTFLT	10/12/92	12/31/92	TSTREAM 23	HVY REFORMATE	538337.000	BBL
TK-A126	EXTFLT	01/01/92	12/31/92	TSTREAM 47	SR XHGO/XXHGO	1003750.000	BBL
TK-A127	EXTFLT	01/01/92	12/31/92	TSTREAM 31	MOTOR ALKYLATE	1390114.000	BBL
TK-A128	EXTFLT	01/01/92	12/31/92	TSTREAM 24	JET A	2409000.000	BBL
TK-A129	EXTFLT	01/01/92	12/31/92	TSTREAM 23	HVY REFORMATE	2456166.000	BBL
TK-A130	EXTFLT	01/01/92	12/31/92	TSTREAM 25	KEROSENE	1496500.000	BBL
TK-A131	FIXTNK	01/01/92	12/31/92	TSTREAM 25	KEROSENE	7301.000	MBBL
TK-A132	FIXTNK	01/01/92	12/31/92	TSTREAM 01	AC ASPHALT	4030.080	MBBL
TK-A133	FIXTNK	01/01/92	12/31/92	TSTREAM 01	AC ASPHALT	4673.719	MBBL
TK-A134	EXTFLT	01/01/92	12/31/92	TSTREAM 45	SR LGO	3467500.000	BBL
TK-A135	EXTFLT	01/01/92	12/31/92	TSTREAM 10	CC LGO	3467500.000	BBL
TK-A136	EXTFLT	01/01/92	12/31/92	TSTREAM 44	SR HVY NAPHTHA	3428182.000	BBL
TK-A137	EXTFLT	01/01/92	12/31/92	TSTREAM 44	SR HVY NAPHTHA	3428182.000	BBL
TK-A138	EXTFLT	01/01/92	12/31/92	TSTREAM 46	SR LT NAPHTHA	7400541.000	BBL
TK-A139	EXTFLT	01/01/92	03/25/92	TSTREAM 46	SR LT NAPHTHA	1662587.000	BBL
TK-A139	EXTFLT	03/26/92	12/31/92	TSTREAM 44	SR HVY NAPHTHA	2611054.000	BBL
TK-A140	EXTFLT	01/01/92	12/31/92	TSTREAM 24	JET A	3978500.000	BBL
TK-A141	FIXTNK	01/01/92	12/31/92	TSTREAM 35	NO.6 OIL	814.143	MBBL
TK-A142	FIXTNK	01/01/92	05/31/92	TSTREAM 35	NO.6 OIL	339.300	MBBL
TK-A142	FIXTNK	06/01/92	12/31/92	TSTREAM 01	AC ASPHALT	81.970	MBBL
TK-A143	FIXTNK	01/01/92	12/31/92	TSTREAM 24	JET A	3978.500	MBBL
TK-A144	FIXTNK	01/01/92	12/31/92	TSTREAM 01	AC ASPHALT	597.870	MBBL
TK-A146	FIXTNK	01/01/92	12/31/92	TSTREAM 01	AC ASPHALT	3381.725	MBBL
TK-A147	FIXTNK	01/01/92	12/31/92	TSTREAM 01	AC ASPHALT	597.870	MBBL
TK-A148	FIXTNK	01/01/92	12/31/92	TSTREAM 01	AC ASPHALT	597.870	MBBL
TK-A149	FIXTNK	01/01/92	12/31/92	WWSTREAM 02	WASTE WATER TO TRICKLING	8760.000	BBL
TK-A150	INTFLT	01/01/92	12/31/92	TSTREAM 33	MTBE	0.000	MBBL
TK-A151	INTFLT	01/01/92	12/31/92	TSTREAM 33	MTBE	0.000	MBBL
TK-ADD003	FIXTNK	01/01/92	12/31/92	M 14	MISC. STREAM - GAS ADDITI	1.095	MBBL
TK-ADD004	FIXTNK	01/01/92	12/31/92	M 14	MISC. STREAM - GAS ADDITI	0.365	MBBL
TK-ADD005	FIXTNK	01/01/92	12/31/92	M 14	MISC. STREAM - GAS ADDITI	0.365	MBBL
TK-ADD006	FIXTNK	01/01/92	12/31/92	M 14	MISC. STREAM - GAS ADDITI	0.365	MBBL
TK-ADD007	FIXTNK	01/01/92	12/31/92	M 14	MISC. STREAM - GAS ADDITI	1.095	MBBL
TK-ADD008	FIXTNK	01/01/92	12/31/92	TSTREAM 39	SLOP OIL	2.555	MBBL
TK-ADD009	FIXTNK	01/01/92	12/31/92	M 14	MISC. STREAM - GAS ADDITI	3.285	MBBL
TK-ADD010	FIXTNK	01/01/92	12/31/92	M 14	MISC. STREAM - GAS ADDITI	1.825	MBBL
TK-ADD011	FIXTNK	01/01/92	12/31/92	M 14	MISC. STREAM - GAS ADDITI	1.460	MBBL

LISTING OF ALL WRMC TANKS FOR SARA 313 REPORT

Tank	Tank Type	Start Date	End Date	Material ID	Material Name	Throughput	Units
TK-ADD012	FIXTNK	01/01/92	12/31/92	M 14	MISC. STREAM - GAS ADDITI	1.095	MBBL
TK-B058	FIXTNK	01/01/92	12/31/92	M 01	MISC. STREAM - SULFOLANE -	5.110	MBBL
TK-B083	FIXTNK	01/01/92	12/31/92	M 02	MISC. STREAM - NMP SOLVEN	0.000	MBBL
TK-B084	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	0.000	MBBL
TK-B096	FIXTNK	01/01/92	12/31/92	M 04	MISC. STREAM - METHANOL	2400.000	GAL
TK-B111	FIXTNK	01/01/92	12/31/92	M 05	MISC. STREAM - PROCESSING	0.000	MBBL
TK-B113	FIXTNK	01/01/92	12/31/92	M 07	MISC. STREAM - PETROTEC P	0.000	MBBL
TK-B114	FIXTNK	01/01/92	12/31/92	333139	BETZ 10K	0.000	MBBL
TK-B121	FIXTNK	01/01/92	12/31/92	WWSTREAM 01	WASTE WATER SLOP OIL	749.710	MBBL
TK-C029	EXTFLT	01/01/92	12/31/92	TSTREAM 39	SLOP OIL	175178.000	BBL
TK-C032	FIXTNK	01/01/92	12/31/92	M 12	MISC. STREAM - LUBE ADDIT	0.000	BBL
TK-C036	FIXTNK	01/01/92	12/31/92	M 08	MISC. STREAM - CAUSTIC 50	0.000	MBBL
TK-C037	FIXTNK	01/01/92	12/31/92	M 09	MISC. STREAM - CAUSTIC 32	0.000	MBBL
TK-C038	FIXTNK	01/01/92	12/31/92	M 13	HITEC 644	0.000	MBBL
TK-C045	FIXTNK	01/01/92	12/31/92	TSTREAM 16	CRUDE-ILLINOIS LITE	11431.000	BBL
TK-C046	FIXTNK	01/01/92	12/31/92	WWSTREAM 02	WASTE WATER TO TRICKLING	8760.000	BBL
TK-C047	FIXTNK	01/01/92	12/31/92	WWSTREAM 02	WASTE WATER TO TRICKLING	8760.000	BBL
TK-CH114	FIXTNK	01/01/92	12/31/92	M 12	MISC. STREAM - LUBE ADDIT	15.240	MBBL
TK-CH140	FIXTNK	01/01/92	05/31/92	TSTREAM 47	SR XHGO/XXHGO	0.000	MBBL
TK-CH148	FIXTNK	01/01/92	12/31/92	M 10	MISC. STREAM - CAUSTIC 20	0.000	MBBL
TK-CH153	FIXTNK	01/01/92	12/31/92	M 10	MISC. STREAM - CAUSTIC 20	0.000	MBBL
TK-CH172	FIXTNK	01/01/92	12/31/92	M 10	MISC. STREAM - CAUSTIC 20	0.000	MBBL
TK-CH184	FIXTNK	01/01/92	12/31/92	M 10	MISC. STREAM - CAUSTIC 20	0.000	MBBL
TK-CH197	FIXTNK	01/01/92	12/31/92	340059	1,1,1-TRICHLOROETHANE	1225.000	GAL
TK-CH209	FIXTNK	01/01/92	12/31/92	M 10	MISC. STREAM - CAUSTIC 20	0.000	MBBL
TK-CH212	FIXTNK	01/01/92	12/31/92	M 10	MISC. STREAM - CAUSTIC 20	0.000	MBBL
TK-CH235	FIXTNK	01/01/92	12/31/92	PSTREAM 44	DEA_SGP/CGP/SRU/SCOT	0.000	MBBL
TK-CH237	FIXTNK	01/01/92	12/31/92	SULFUR	SULFUR	0.000	MBBL
TK-CH238	FIXTNK	01/01/92	12/31/92	SULFUR	SULFUR	0.000	MBBL
TK-CH239	FIXTNK	01/01/92	12/31/92	SULFUR	SULFUR	0.000	MBBL
TK-CH240	FIXTNK	01/01/92	12/31/92	SULFUR	SULFUR	0.000	MBBL
TK-CH265	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	0.000	MBBL
TK-CH267	FIXTNK	01/01/92	12/31/92	M 10	MISC. STREAM - CAUSTIC 20	0.000	MBBL
TK-CH278	FIXTNK	01/01/92	12/31/92	840109	SPENT SULFIDE CAUSTIC SOL	8760.000	BBL
TK-D001	FIXTNK	01/01/92	12/31/92	TSTREAM 40	SOL 71	13899.000	BBL
TK-D003	FIXTNK	01/01/92	12/31/92	TSTREAM 40	SOL 71	13899.000	BBL
TK-D004	FIXTNK	01/01/92	12/31/92	TSTREAM 40	SOL 71	13899.000	BBL
TK-D020	FIXTNK	01/01/92	12/31/92	M 08	MISC. STREAM - CAUSTIC 50	0.000	MBBL
TK-D021	FIXTNK	01/01/92	12/31/92	M 08	MISC. STREAM - CAUSTIC 50	0.000	MBBL
TK-D027	FIXTNK	01/01/92	12/31/92	M 01	MISC. STREAM - SULFOLANE	0.000	MBBL
TK-D030	FIXTNK	01/01/92	12/31/92	M 01	MISC. STREAM - SULFOLANE	0.000	MBBL
TK-D034	FIXTNK	01/01/92	12/31/92	TSTREAM 47	SR XHGO/XXHGO	84.366	MBBL
TK-D037	FIXTNK	01/01/92	12/31/92	TSTREAM 47	SR XHGO/XXHGO	84.366	MBBL
TK-D041	FIXTNK	01/01/92	12/31/92	TSTREAM 34	NAP-91	48193.000	BBL
TK-D046	FIXTNK	01/01/92	12/31/92	TSTREAM 47	SR XHGO/XXHGO	84.366	MBBL
TK-D049	FIXTNK	01/01/92	12/31/92	TSTREAM 01	AC ASPHALT	91.250	MBBL
TK-D050	FIXTNK	01/01/92	12/31/92	TSTREAM 31	MOTOR ALKYLATE	71803.000	BBL
TK-D052	FIXTNK	05/01/92	12/31/92	WWSTREAM 01	WASTE WATER SLOP OIL	120.785	MBBL
TK-D053	FIXTNK	05/01/92	12/31/92	WWSTREAM 01	WASTE WATER SLOP OIL	120.785	MBBL
TK-D054	FIXTNK	05/01/92	12/31/92	WWSTREAM 01	WASTE WATER SLOP OIL	120.785	MBBL
TK-DX006	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	33.570	MBBL
TK-E024	FIXTNK	01/01/92	12/31/92	TSTREAM 47	SR XHGO/XXHGO	84.366	MBBL

LISTING OF ALL WRMC TANKS FOR SARA 313 REPORT

Tank	Tank Type	Start Date	End Date	Material ID	Material Name	Throughput	Units
TK-E030	FIXTNK	01/01/92	12/31/92	TSTREAM 34	NAP-91	0.000	MBBL
TK-F003	FIXTNK	01/01/92	12/31/92	TSTREAM 40	SOL 71	33936.000	BBL
TK-F010	FIXTNK	01/01/92	12/31/92	PSTREAM 43	CRESYLIC CAUSTIC_LOT	1.825	MBBL
TK-F012	FIXTNK	01/01/92	12/31/92	TSTREAM 44	SR HVY NAPHTHA	334783.000	BBL
TK-F021	INTFLT	01/01/92	12/31/92	TSTREAM 39	SLOP OIL	175178.000	BBL
TK-F022	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	194.545	MBBL
TK-F023	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	210.893	MBBL
TK-F024	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	205.561	MBBL
TK-F025	FIXTNK	01/01/92	12/31/92	TSTREAM 01	AC ASPHALT	659.927	MBBL
TK-F033	INTFLT	01/01/92	12/31/92	TSTREAM 33	MTBE	145243.000	BBL
TK-F034	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	191.333	MBBL
TK-F035	FIXTNK	01/01/92	12/31/92	TSTREAM 24	JET A	453.210	MBBL
TK-F041	FIXTNK	01/01/92	12/31/92	TSTREAM 49	VFC HGO	1418.025	MBBL
TK-F045	FIXTNK	01/01/92	12/31/92	840109	SPENT SULFIDE CAUSTIC SOL	0.000	MBBL
TK-F046	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	196.293	MBBL
TK-F047	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	408.026	MBBL
TK-F048	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	408.026	MBBL
TK-F050	FIXTNK	01/01/92	12/31/92	TSTREAM 07	CC CLARIFIED OIL	182.500	MBBL
TK-F051	INTFLT	01/01/92	12/31/92	TSTREAM 31	MOTOR ALKYLATE	413588.000	BBL
TK-F054	FIXTNK	01/01/92	12/31/92	TSTREAM 19	GASOLINE BASE	40.150	MBBL
TK-F056	FIXTNK	01/01/92	12/31/92	TSTREAM 19	GASOLINE BASE	20.075	MBBL
TK-F057	INTFLT	01/01/92	12/31/92	TSTREAM 33	MTBE	145243.000	BBL
TK-F058	FIXTNK	01/01/92	12/31/92	TSTREAM 25	KEROSENE	730.000	MBBL
TK-F059	INTFLT	01/01/92	12/31/92	TSTREAM 33	MTBE	145243.000	BBL
TK-F064	EXTFLT	01/01/92	12/31/92	TSTREAM 18	DIESELINE	29200.000	BBL
TK-F066	FIXTNK	01/01/92	12/31/92	TSTREAM 19	GASOLINE BASE	20.440	MBBL
TK-F067	INTFLT	01/01/92	12/31/92	TSTREAM 39	SLOP OIL	111348.000	BBL
TK-F069	FIXTNK	01/01/92	12/31/92	TSTREAM 19	GASOLINE BASE	9.490	MBBL
TK-F071	FIXTNK	01/01/92	12/31/92	TSTREAM 07	CC CLARIFIED OIL	246.375	MBBL
TK-F072	FIXTNK	01/01/92	12/31/92	TSTREAM 41	SOUR WATER	0.000	MBBL
TK-F073	FIXTNK	01/01/92	12/31/92	TSTREAM 24	JET A	365.000	MBBL
TK-F074	FIXTNK	01/01/92	12/31/92	TSTREAM 24	JET A	365.000	MBBL
TK-F075	FIXTNK	01/01/92	12/31/92	TSTREAM 18	DIESELINE	306.600	MBBL
TK-F076	FIXTNK	01/01/92	12/31/92	TSTREAM 35	NO.6 OIL	354.459	MBBL
TK-F077	FIXTNK	01/01/92	12/31/92	TSTREAM 35	NO.6 OIL	354.459	MBBL
TK-F078	FIXTNK	01/01/92	12/31/92	TSTREAM 35	NO.6 OIL	361.843	MBBL
TK-F080	FIXTNK	01/01/92	12/31/92	TSTREAM 41	SOUR WATER	483.625	MBBL
TK-F081	EXTFLT	01/01/92	12/31/92	TSTREAM 26	LT REFORMATE	508934.000	BBL
TK-F082	EXTFLT	01/01/92	12/31/92	TSTREAM 26	LT REFORMATE	508934.000	BBL
TK-FW002	FIXTNK	01/01/92	12/31/92	TSTREAM 25	KEROSENE	12.600	MBBL
TK-FW003	FIXTNK	01/01/92	12/31/92	TSTREAM 43	SR HGO	1.500	MBBL
TK-G006	EXTFLT	01/01/92	12/31/92	TSTREAM 24	JET A	2564125.000	BBL
TK-G007	EXTFLT	01/01/92	12/31/92	TSTREAM 25	KEROSENE	9125000.000	BBL
TK-H018	FIXTNK	01/01/92	08/31/92	M 03	MISC. STREAM - LUBE OILS	10.080	MBBL
TK-H044	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	5.550	MBBL
TK-H045	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	5.550	MBBL
TK-H046	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	5.550	MBBL
TK-H047	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	5.550	MBBL
TK-H048	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	5.550	MBBL
TK-H049	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	5.550	MBBL
TK-L002	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	0.000	MBBL
TK-L004	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	0.000	MBBL

LISTING OF ALL WRMC TANKS FOR SARA 313 REPORT

Tank	Tank Type	Start Date	End Date	Material ID	Material Name	Throughput	Units
TK-L010	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	35.250	MBBL
TK-L011	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	59.570	MBBL
TK-L013	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	0.000	MBBL
TK-L014	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	59.570	MBBL
TK-L015	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	59.570	MBBL
TK-L016	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	59.570	MBBL
TK-L017	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	59.570	MBBL
TK-L018	FIXTNK	01/01/92	12/31/92	M 12	MISC. STREAM - LUBE ADDIT	35.250	MBBL
TK-L019	FIXTNK	01/01/92	12/31/92	M 12	MISC. STREAM - LUBE ADDIT	35.250	MBBL
TK-L020	FIXTNK	01/01/92	12/31/92	M 12	MISC. STREAM - LUBE ADDIT	59.570	MBBL
TK-L021	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	59.570	MBBL
TK-L022	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	59.570	MBBL
TK-L023	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	44.501	MBBL
TK-L024	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	35.250	MBBL
TK-L025	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	29.423	MBBL
TK-L026	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	39.390	MBBL
TK-L028	FIXTNK	01/01/92	08/31/92	M 03	MISC. STREAM - LUBE OILS	54.200	MBBL
TK-L029	FIXTNK	01/01/92	12/31/92	TSTREAM 45	SR LGO	81.300	MBBL
TK-L032	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	0.000	MBBL
TK-L033	FIXTNK	01/01/92	12/31/92	TSTREAM 06	BLACK OIL	83.930	MBBL
TK-L034	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	0.000	MBBL
TK-L035	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	0.000	MBBL
TK-L036	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	0.000	MBBL
TK-L037	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	0.000	MBBL
TK-L038	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	0.000	MBBL
TK-L039	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	81.300	MBBL
TK-L040	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	0.000	MBBL
TK-L041	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	0.000	MBBL
TK-L042	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	0.000	MBBL
TK-L043	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	0.000	MBBL
TK-L044	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	0.000	MBBL
TK-L045	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	0.000	MBBL
TK-L046	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	0.000	MBBL
TK-L049	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	0.000	MBBL
TK-L050	FIXTNK	01/01/92	12/31/92	M 12	MISC. STREAM - LUBE ADDIT	43.640	MBBL
TK-L053	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	43.640	MBBL
TK-L054	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	43.640	MBBL
TK-L055	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	43.640	MBBL
TK-L056	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	43.640	MBBL
TK-L057	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	43.640	MBBL
TK-L058	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	45.320	MBBL
TK-L059	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	21.542	MBBL
TK-L062	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	55.141	MBBL
TK-L063	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	53.301	MBBL
TK-L064	FIXTNK	01/01/92	12/31/92	TSTREAM 45	SR LGO	0.000	MBBL
TK-L065	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	140.912	MBBL
TK-L066	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	55.141	MBBL
TK-L069	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	43.640	MBBL
TK-L070	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	43.640	MBBL
TK-L071	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	65.570	MBBL
TK-L072	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	43.640	MBBL
TK-L073	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	41.960	MBBL

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Tank	Tank Type	Start Date	End Date	Material ID	Material Name	Throughput	Units
TK-L074	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	48.110	MBBL
TK-L076	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	46.260	MBBL
TK-L089	FIXTNK	01/01/92	12/31/92	TSTREAM 45	SR LGO	24.240	MBBL
TK-L090	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	39.416	MBBL
TK-L102	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	81.300	MBBL
TK-L122	FIXTNK	01/01/92	08/31/92	M 03	MISC. STREAM - LUBE OILS	65.460	MBBL
TK-L123	FIXTNK	01/01/92	12/31/92	TSTREAM 27	MC-250 CUTBACK	4.292	MBBL
TK-L124	FIXTNK	01/01/92	12/31/92	TSTREAM 36	RC-30/70 CUTBACK	24.262	MBBL
TK-L130	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	331.738	MBBL
TK-L131	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	323.350	MBBL
TK-L132	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	28.583	MBBL
TK-L133	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	40.654	MBBL
TK-L134	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	45.320	MBBL
TK-L136	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	110.982	MBBL
TK-L137	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	232.040	MBBL
TK-L138	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	290.050	MBBL
TK-L139	FIXTNK	01/01/92	12/31/92	TSTREAM 36	RC-30/70 CUTBACK	36.391	MBBL
TK-L142	FIXTNK	01/01/92	12/31/92	M 12	MISC. STREAM - LUBE ADDIT	113.300	MBBL
TK-L143	FIXTNK	01/01/92	12/31/92	M 01	MISC. STREAM - SULFOLANE	5.475	MBBL
TK-L146	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	0.000	MBBL
TK-L147	FIXTNK	01/01/92	12/31/92	TSTREAM 01	AC ASPHALT	11.370	MBBL
TK-L150	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	100.820	MBBL
TK-L151	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	98.830	MBBL
TK-L155	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	43.640	MBBL
TK-L156	FIXTNK	01/01/92	12/31/92	TSTREAM 01	AC ASPHALT	11.826	MBBL
TK-L158	FIXTNK	01/01/92	12/31/92	TSTREAM 01	AC ASPHALT	220.949	MBBL
TK-L159	FIXTNK	01/01/92	12/31/92	TSTREAM 01	AC ASPHALT	57.969	MBBL
TK-L160	FIXTNK	01/01/92	12/31/92	TSTREAM 01	AC ASPHALT	130.498	MBBL
TK-L161	FIXTNK	01/01/92	12/31/92	TSTREAM 01	AC ASPHALT	7.008	MBBL
TK-L162	FIXTNK	01/01/92	12/31/92	TSTREAM 01	AC ASPHALT	194.545	MBBL
TK-L163	FIXTNK	01/01/92	12/31/92	TSTREAM 01	AC ASPHALT	740.220	MBBL
TK-L164	FIXTNK	01/01/92	12/31/92	TSTREAM 01	AC ASPHALT	38.150	MBBL
TK-L165	FIXTNK	01/01/92	12/31/92	TSTREAM 01	AC ASPHALT	331.785	MBBL
TK-L166	FIXTNK	01/01/92	12/31/92	TSTREAM 01	AC ASPHALT	215.770	MBBL
TK-L167	FIXTNK	01/01/92	12/31/92	TSTREAM 27	MC-250 CUTBACK	6.917	MBBL
TK-L168	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	3.285	MBBL
TK-L169	FIXTNK	01/01/92	12/31/92	TSTREAM 37	SC-250 CUTBACK	6.716	MBBL
TK-L170	FIXTNK	01/01/92	12/31/92	TSTREAM 37	SC-250 CUTBACK	6.716	MBBL
TK-L171	FIXTNK	01/01/92	12/31/92	TSTREAM 38	SC-800 CUTBACK	22.966	MBBL
TK-L172	FIXTNK	01/01/92	12/31/92	TSTREAM 38	SC-800 CUTBACK	23.513	MBBL
TK-L173	FIXTNK	01/01/92	12/31/92	TSTREAM 01	AC ASPHALT	310.706	MBBL
TK-L174	FIXTNK	01/01/92	12/31/92	TSTREAM 01	AC ASPHALT	310.706	MBBL
TK-L177	FIXTNK	01/01/92	12/31/92	M 12	MISC. STREAM - LUBE ADDIT	41.960	MBBL
TK-L178	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	552.968	MBBL
TK-L179	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	552.968	MBBL
TK-L180	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	552.968	MBBL
TK-L181	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	1132.956	MBBL
TK-L182	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	981.657	MBBL
TK-L183	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	436.292	MBBL
TK-L184	FIXTNK	01/01/92	12/31/92	TSTREAM 28	MC-30 CUTBACK	12.447	MBBL
TK-L185	FIXTNK	01/01/92	12/31/92	TSTREAM 28	MC-30 CUTBACK	12.447	MBBL
TK-L186	FIXTNK	01/01/92	12/31/92	TSTREAM 30	MC-800 CUTBACK	19.338	MBBL

LISTING OF ALL WRMC TANKS FOR SARA 313 REPORT

Tank	Tank Type	Start Date	End Date	Material ID	Material Name	Throughput	Units
TK-L187	FIXTNK	01/01/92	12/31/92	TSTREAM 30	MC-800 CUTBACK	19.338	MBBL
TK-L188	FIXTNK	01/01/92	12/31/92	TSTREAM 01	AC ASPHALT	24.393	MBBL
TK-L189	FIXTNK	01/01/92	12/31/92	TSTREAM 45	SR LGO	1007.520	MBBL
TK-L190	FIXTNK	01/01/92	12/31/92	TSTREAM 01	AC ASPHALT	1892.664	MBBL
TK-L191	FIXTNK	01/01/92	12/31/92	TSTREAM 45	SR LGO	2760.330	MBBL
TK-L192	FIXTNK	01/01/92	12/31/92	TSTREAM 01	AC ASPHALT	1365.564	MBBL
TK-L193	FIXTNK	01/01/92	12/31/92	TSTREAM 01	AC ASPHALT	38.427	MBBL
TK-L194	FIXTNK	01/01/92	12/31/92	TSTREAM 01	AC ASPHALT	3650.000	MBBL
TK-L195	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	389.681	MBBL
TK-M004	FIXTNK	01/01/92	12/31/92	TSTREAM 18	DIESELINE	456.250	MBBL
TK-N001	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	29.270	MBBL
TK-N002	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	29.270	MBBL
TK-N003	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	16.050	MBBL
TK-N004	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	16.050	MBBL
TK-N005	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	16.050	MBBL
TK-N006	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	16.050	MBBL
TK-N007	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	16.050	MBBL
TK-N008	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	16.050	MBBL
TK-N009	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	16.050	MBBL
TK-N010	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	16.050	MBBL
TK-N035	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	81.300	MBBL
TK-N036	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	83.930	MBBL
TK-N037	FIXTNK	01/01/92	10/31/92	M 03	MISC. STREAM - LUBE OILS	69.950	MBBL
TK-N038	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	83.930	MBBL
TK-N039	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	83.930	MBBL
TK-N040	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	83.930	MBBL
TK-N041	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	30.210	MBBL
TK-N042	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	30.210	MBBL
TK-N043	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	30.210	MBBL
TK-N044	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	30.210	MBBL
TK-N045	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	30.210	MBBL
TK-N046	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	30.210	MBBL
TK-N047	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	27.380	MBBL
TK-N048	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	29.270	MBBL
TK-N049	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	83.930	MBBL
TK-N050	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	83.930	MBBL
TK-N051	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	83.930	MBBL
TK-N052	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	21.239	MBBL
TK-N053	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	36.930	MBBL
TK-N054	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	10.070	MBBL
TK-N055	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	7.970	MBBL
TK-N056	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	163.150	MBBL
TK-N057	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	325.210	MBBL
TK-N058	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	152.731	MBBL
TK-N059	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	325.210	MBBL
TK-N060	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	325.210	MBBL
TK-N061	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	325.210	MBBL
TK-N062	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	325.210	MBBL
TK-N063	FIXTNK	01/01/92	08/31/92	M 03	MISC. STREAM - LUBE OILS	10.070	MBBL
TK-N064	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	314.720	MBBL
TK-N067	FIXTNK	01/01/92	12/31/92	TSTREAM 01	AC ASPHALT	22.579	MBBL
TK-N068	FIXTNK	01/01/92	12/31/92	TSTREAM 01	AC ASPHALT	10.490	MBBL

LISTING OF ALL WRMC TANKS FOR SARA 313 REPORT

Tank	Tank Type	Start Date	End Date	Material ID	Material Name	Throughput	Units
TK-N069	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	314.720	MBBL
TK-N070	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	314.720	MBBL
TK-N071	FIXTNK	01/01/92	12/31/92	TSTREAM 01	AC ASPHALT	36.759	MBBL
TK-N072	FIXTNK	01/01/92	12/31/92	TSTREAM 45	SR LGO	314.720	MBBL
TK-N073	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	55.141	MBBL
TK-N074	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	56.977	MBBL
TK-N075	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	486.900	MBBL
TK-N077	FIXTNK	01/01/92	12/31/92	M 12	MISC. STREAM - LUBE ADDIT	83.930	MBBL
TK-N078	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	83.930	MBBL
TK-N080	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	52.509	MBBL
TK-N081	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	50.815	MBBL
TK-N082	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	232.040	MBBL
TK-N083	FIXTNK	04/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	217.535	MBBL
TK-N084	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	290.050	MBBL
TK-N085	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	10.490	MBBL
TK-N086	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	10.070	MBBL
TK-N087	FIXTNK	01/01/92	12/31/92	M 12	MISC. STREAM - LUBE ADDIT	5.910	MBBL
TK-N088	FIXTNK	01/01/92	12/31/92	M 12	MISC. STREAM - LUBE ADDIT	5.910	MBBL
TK-N089	FIXTNK	01/01/92	05/31/92	M 12	MISC. STREAM - LUBE ADDIT	2.460	MBBL
TK-N090	FIXTNK	01/01/92	05/31/92	M 12	MISC. STREAM - LUBE ADDIT	2.460	MBBL
TK-N091	FIXTNK	01/01/92	12/31/92	M 12	MISC. STREAM - LUBE ADDIT	4.300	MBBL
TK-N093	FIXTNK	01/01/92	12/31/92	M 12	MISC. STREAM - LUBE ADDIT	4.300	MBBL
TK-N104	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	70.920	MBBL
TK-N105	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	68.080	MBBL
TK-N107	FIXTNK	01/01/92	05/31/92	M 12	MISC. STREAM - LUBE ADDIT	5.830	MBBL
TK-N110	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	41.289	MBBL
TK-N111	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	28.583	MBBL
TK-N112	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	28.583	MBBL
TK-N113	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	178.452	MBBL
TK-N120	FIXTNK	01/01/92	12/31/92	M 12	MISC. STREAM - LUBE ADDIT	5.910	MBBL
TK-N121	FIXTNK	01/01/92	12/31/92	M 12	MISC. STREAM - LUBE ADDIT	5.910	MBBL
TK-N122	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	2.420	MBBL
TK-N126	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	10.070	MBBL
TK-N127	FIXTNK	01/01/92	12/31/92	M 12	MISC. STREAM - LUBE ADDIT	29.270	MBBL
TK-N128	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	29.270	MBBL
TK-N129	FIXTNK	01/01/92	10/31/92	M 03	MISC. STREAM - LUBE OILS	12.690	MBBL
TK-N131	FIXTNK	01/01/92	12/31/92	M 12	MISC. STREAM - LUBE ADDIT	15.230	MBBL
TK-N132	FIXTNK	01/01/92	12/31/92	M 12	MISC. STREAM - LUBE ADDIT	15.230	MBBL
TK-N135	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	4.570	MBBL
TK-N136	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	5.460	MBBL
TK-N137	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	9.650	MBBL
TK-N138	FIXTNK	01/01/92	12/31/92	M 12	MISC. STREAM - LUBE ADDIT	15.230	MBBL
TK-N139	FIXTNK	01/01/92	08/31/92	M 03	MISC. STREAM - LUBE OILS	4.570	MBBL
TK-N139	FIXTNK	09/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	13.710	MBBL
TK-N140	FIXTNK	01/01/92	12/31/92	M 12	MISC. STREAM - LUBE ADDIT	14.720	MBBL
TK-N141	FIXTNK	01/01/92	12/31/92	M 12	MISC. STREAM - LUBE ADDIT	14.720	MBBL
TK-N142	FIXTNK	01/01/92	12/31/92	M 12	MISC. STREAM - LUBE ADDIT	8.060	MBBL
TK-N143	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	0.470	MBBL
TK-N144	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	9.650	MBBL
TK-N145	FIXTNK	01/01/92	12/31/92	M 12	MISC. STREAM - LUBE ADDIT	7.790	MBBL
TK-N146	FIXTNK	01/01/92	12/31/92	M 12	MISC. STREAM - LUBE ADDIT	7.790	MBBL
TK-N147	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	6.790	MBBL

LISTING OF ALL WRMC TANKS FOR SARA 313 REPORT

Tank	Tank Type	Start Date	End Date	Material ID	Material Name	Throughput	Units
TK-N148	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	7.790	MBBL
TK-N149	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	7.790	MBBL
TK-N150	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	81.300	MBBL
TK-N152	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	9.230	MBBL
TK-N153	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	81.300	MBBL
TK-N154	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	162.400	MBBL
TK-N155	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	328.990	MBBL
TK-N156	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	328.990	MBBL
TK-N158	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	21.820	MBBL
TK-N159	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	81.300	MBBL
TK-N160	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	81.300	MBBL
TK-N161	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	81.300	MBBL
TK-N162	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	81.300	MBBL
TK-N163	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	81.300	MBBL
TK-N167	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	81.300	MBBL
TK-N168	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	81.300	MBBL
TK-N169	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	81.300	MBBL
TK-N170	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	81.300	MBBL
TK-N171	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	81.300	MBBL
TK-N176	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	0.540	MBBL
TK-N181	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	129.688	MBBL
TK-N182	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	740.220	MBBL
TK-N183	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	90.060	MBBL
TK-N184	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	76.267	MBBL
TK-N185	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	76.267	MBBL
TK-N186	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	0.400	MBBL
TK-N187	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	20.560	MBBL
TK-N188	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	20.560	MBBL
TK-N189	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	20.560	MBBL
TK-N190	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	0.520	MBBL
TK-N191	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	0.190	MBBL
TK-N192	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	0.190	MBBL
TK-N193	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	0.190	MBBL
TK-N194	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	0.190	MBBL
TK-N195	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	0.520	MBBL
TK-N196	FIXTNK	01/01/92	12/31/92	M 03	MISC. STREAM - LUBE OILS	740.220	MBBL
TK-N197	FIXTNK	01/01/92	12/31/92	M 12	MISC. STREAM - LUBE ADDIT	31.890	MBBL
TK-P074	FIXTNK	01/01/92	12/31/92	M 12	MISC. STREAM - LUBE ADDIT	6.920	MBBL
TK-R008	FIXTNK	01/01/92	03/31/92	M 03	MISC. STREAM - LUBE OILS	9.130	MBBL
TK-RR031	FIXTNK	01/01/92	12/31/92	TSTREAM 34	NAP-91	0.365	MBBL
TK-RR032	FIXTNK	01/01/92	12/31/92	TSTREAM 34	NAP-91	0.365	MBBL

APPENDIX K

STORAGE TANK HYDROCARBON EMISSION ESTIMATES

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WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	(pounds) Annual Avg. Emissions	
TK-A010	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	19602.271578000	
TK-A010	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	40362.584468000	
* Sum for TK-A010					59964.856046000	
TK-A012	EXTFLT	TSTREAM 25	CASVOCP	100.000000000	293.182341590	
TK-A012	EXTFLT	TSTREAM 25	CASVOCP	100.000000000	354.558262500	
* Sum for TK-A012					647.740604090	
TK-A014	EXTFLT	TSTREAM 25	CASVOCP	100.000000000	62.388154054	
TK-A014	EXTFLT	TSTREAM 25	CASVOCP	100.000000000	354.558262500	
* Sum for TK-A014					416.946416554	
TK-A016	EXTFLT	TSTREAM 07	CASVOCP	100.000000000	65.823017028	
TK-A016	EXTFLT	TSTREAM 07	CASVOCP	100.000000000	18.715603138	
* Sum for TK-A016					84.538620166	
TK-A019	EXTFLT	TSTREAM 17	CASVOCP	100.000000000	4898.485178600	
TK-A019	EXTFLT	TSTREAM 17	CASVOCP	100.000000000	40.086540105	
* Sum for TK-A019					4938.571718705	
TK-A022	FIXTNK	TSTREAM 35	CASVOCP	100.000000000	4716.992635600	
TK-A022	FIXTNK	TSTREAM 35	CASVOCP	100.000000000	2110.709906900	
* Sum for TK-A022					6827.702542500	
TK-A023	EXTFLT	TSTREAM 04	CASVOCP	100.000000000	57621.932450000	
TK-A023	EXTFLT	TSTREAM 04	CASVOCP	100.000000000	137.624312830	
* Sum for TK-A023					57759.556762830	
TK-A024	EXTFLT	TSTREAM 09	CASVOCP	0.000000000	0.000000000	1564
TK-A024	EXTFLT	TSTREAM 09	CASVOCP	0.000000000	0.000000000	144
* Sum for TK-A024					0.000000000	1708
TK-A025	EXTFLT	TSTREAM 09	CASVOCP	0.000000000	0.000000000	1577
TK-A025	EXTFLT	TSTREAM 09	CASVOCP	0.000000000	0.000000000	144
* Sum for TK-A025						

WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions	
					0.000000000	1723
TK-A027	EXTFLT	TSTREAM 04	CASVOCP	100.000000000	149.041662050	
TK-A027	EXTFLT	TSTREAM 04	CASVOCP	100.000000000	6.735357268	
TK-A027	EXTFLT	TSTREAM 09	CASVOCP	0.000000000	0.000000000	1234.7
TK-A027	EXTFLT	TSTREAM 09	CASVOCP	0.000000000	0.000000000	113.8
TK-A027	EXTFLT	TSTREAM 19	CASVOCP	100.000000000	424.768736850	
TK-A027	EXTFLT	TSTREAM 19	CASVOCP	100.000000000	4.768441010	
* Sum for TK-A027					585.314197178	1934
TK-A028	EXTFLT	TSTREAM 20	CASVOCP	100.000000000	2841.483417400	
TK-A028	EXTFLT	TSTREAM 20	CASVOCP	100.000000000	1237.196324400	
* Sum for TK-A028					4078.679741800	
TK-A029	FIXTNK	TSTREAM 35	CASVOCP	100.000000000	4716.992635600	
TK-A029	FIXTNK	TSTREAM 35	CASVOCP	100.000000000	2171.664723000	
* Sum for TK-A029					6888.657358600	
TK-A030	FIXTNK	TSTREAM 35	CASVOCP	100.000000000	5603.645386700	
TK-A030	FIXTNK	TSTREAM 35	CASVOCP	100.000000000	2171.664723000	
* Sum for TK-A030					7775.310109700	
TK-A031	EXTFLT	TSTREAM 21	CASVOCP	100.000000000	3190.254101000	
TK-A031	EXTFLT	TSTREAM 21	CASVOCP	100.000000000	332.068947910	
* Sum for TK-A031					3522.323048910	
TK-A032	EXTFLT	TSTREAM 20	CASVOCP	100.000000000	2813.731766600	
TK-A032	EXTFLT	TSTREAM 20	CASVOCP	100.000000000	1237.196324400	
* Sum for TK-A032					4050.928091000	
TK-A033	EXTFLT	TSTREAM 22	CASVOCP	100.000000000	2613.039790000	
TK-A033	EXTFLT	TSTREAM 22	CASVOCP	100.000000000	255.825661970	
* Sum for TK-A033					2868.865451970	
TK-A034	EXTFLT	TSTREAM 21	CASVOCP	100.000000000	2990.751537300	
TK-A034	EXTFLT	TSTREAM 21	CASVOCP	100.000000000	332.068947910	
* Sum for TK-A034						

WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions	
		TSTREAM 03 TSTREAM 07			3322.820485210	
TK-A037	EXTFLT	TSTREAM 03	CASVOCP	100.000000000	364.720157510	258.93 — 276
TK-A037	EXTFLT	TSTREAM 03	CASVOCP	100.000000000	3.988897543	
TK-A037	EXTFLT	TSTREAM 22	CASVOCP	100.000000000	2472.785049300	
TK-A037	EXTFLT	TSTREAM 22	CASVOCP	100.000000000	177.110062120	
* Sum for TK-A037					3018.604166473	3275
TK-A039	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	28615.617747000	
* Sum for TK-A039					28615.617747000	
TK-A040	EXTFLT	TSTREAM 23	CASVOCP	100.000000000	1310.028155100	
TK-A040	EXTFLT	TSTREAM 23	CASVOCP	100.000000000	151.199115120	
* Sum for TK-A040					1461.227270220	
TK-A041	EXTFLT	TSTREAM 09	CASVOCP	0.000000000	0.000000000	550.3
TK-A041	EXTFLT	TSTREAM 09	CASVOCP	0.000000000	0.000000000	52.8
TK-A041	EXTFLT	TSTREAM 23	CASVOCP	100.000000000	36.958281203	
TK-A041	EXTFLT	TSTREAM 23	CASVOCP	100.000000000	4.930668030	
* Sum for TK-A041					41.888949233	645
TK-A042	FIXTNK	TSTREAM 35	CASVOCP	100.000000000	4163.725173500	
TK-A042	FIXTNK	TSTREAM 35	CASVOCP	100.000000000	2148.058853000	
* Sum for TK-A042					6311.784026500	
TK-A044	FIXTNK	TSTREAM 47	CASVOCP	100.000000000	644.352104560	
TK-A044	FIXTNK	TSTREAM 47	CASVOCP	100.000000000	50.163161233	
* Sum for TK-A044					694.515265793	
TK-A046	FIXTNK	TSTREAM 43	CASVOCP	100.000000000	2811.251061300	
TK-A046	FIXTNK	TSTREAM 43	CASVOCP	100.000000000	1803.092092500	
* Sum for TK-A046					4614.343153800	
TK-A047	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	28615.617747000	
TK-A047	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	49677.027038000	
* Sum for TK-A047					78292.644785000	

WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions
TK-A048	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	28615.617747000
TK-A048	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	49677.027038000
* Sum for TK-A048					
					78292.644785000
TK-A049	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	28615.617747000
TK-A049	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	4884.907658700
* Sum for TK-A049					
					33500.525405700
TK-A050	FIXTNK	TSTREAM 47	CASVOCP	100.000000000	782.193104810
TK-A050	FIXTNK	TSTREAM 47	CASVOCP	100.000000000	51.038545557
* Sum for TK-A050					
					833.231650367
TK-A052	EXTFLT	TSTREAM 23	CASVOCP	100.000000000	1134.081154600
TK-A052	EXTFLT	TSTREAM 23	CASVOCP	100.000000000	125.999251470
* Sum for TK-A052					
					1260.080406070
TK-A053	INTFLT	TSTREAM 23	CASVOCP	100.000000000	4389.094314800
TK-A053	INTFLT	TSTREAM 23	CASVOCP	100.000000000	157.499188580
* Sum for TK-A053					
					4546.593503380
TK-A054	INTFLT	TSTREAM 09	CASVOCP	0.000000000	0.000000000
TK-A054	INTFLT	TSTREAM 09	CASVOCP	0.000000000	0.000000000
* Sum for TK-A054					
					0.000000000
TK-A055	FIXTNK	TSTREAM 41	CASVOCP	0.100000000	2.935694489
TK-A055	FIXTNK	TSTREAM 41	CASVOCP	0.100000000	0.739194162
* Sum for TK-A055					
					3.674888651
TK-A056	FIXTNK	TSTREAM 18	CASVOCP	100.000000000	2939.500438900
TK-A056	FIXTNK	TSTREAM 18	CASVOCP	100.000000000	2597.512389700
* Sum for TK-A056					
					5537.012828600
TK-A057	EXTFLT	TSTREAM 22	CASVOCP	100.000000000	2491.548294300
TK-A057	EXTFLT	TSTREAM 22	CASVOCP	100.000000000	191.869215190
* Sum for TK-A057					

8882
197
9077

WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions
					2683.417509490
TK-A058	EXTFLT	TSTREAM 22	CASVOCP	100.000000000	2491.548294300
TK-A058	EXTFLT	TSTREAM 22	CASVOCP	100.000000000	191.869215190
* Sum for TK-A058					
					2683.417509490
TK-A061	EXTFLT	TSTREAM 31	CASVOCP	100.000000000	2485.735600700
TK-A061	EXTFLT	TSTREAM 31	CASVOCP	100.000000000	112.908835370
* Sum for TK-A061					
					2598.644436070
TK-A062	INTFLT	TSTREAM 05	CASVOCP	100.000000000	1559.704295400
TK-A062	INTFLT	TSTREAM 05	CASVOCP	100.000000000	30.385045131
* Sum for TK-A062					
					1590.089340531
TK-A063	INTFLT	TSTREAM 05	CASVOCP	100.000000000	1559.704295400
TK-A063	INTFLT	TSTREAM 05	CASVOCP	100.000000000	30.385045131
* Sum for TK-A063					
					1590.089340531
TK-A064	INTFLT	TSTREAM 05	CASVOCP	100.000000000	1559.704295400
TK-A064	INTFLT	TSTREAM 05	CASVOCP	100.000000000	30.385045131
* Sum for TK-A064					
					1590.089340531
TK-A065	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	508.425069840
TK-A065	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	797.182789710
* Sum for TK-A065					
					1305.607859550
TK-A066	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	508.425069840
TK-A066	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	1291.304118900
* Sum for TK-A066					
					1799.729188740
TK-A067	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	508.425069840
TK-A067	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	797.182789710
* Sum for TK-A067					
					1305.607859550
TK-A068	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	555.199653180
TK-A068	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	1014.596093400

WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions
* Sum for TK-A068					1569.795746580
TK-A069	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	555.199653180
TK-A069	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	1014.596093400
* Sum for TK-A069					1569.795746580
TK-A070	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	508.425069840
TK-A070	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	797.182789710
* Sum for TK-A070					1305.607859550
TK-A071	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	508.425069840
TK-A071	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	797.182789710
* Sum for TK-A071					1305.607859550
TK-A072	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	508.425069840
TK-A072	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	797.182789710
* Sum for TK-A072					1305.607859550
TK-A073	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	562.978592550
TK-A073	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	1014.596093400
* Sum for TK-A073					1577.574685950
TK-A074	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	555.199653180
TK-A074	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	1014.596093400
* Sum for TK-A074					1569.795746580
TK-A075	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	562.978592550
TK-A075	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	1014.596093400
* Sum for TK-A075					1577.574685950
TK-A076	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	562.978592550
TK-A076	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	1014.596093400
* Sum for TK-A076					1577.574685950

WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions
TK-A077	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	562.978592550
TK-A077	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	1014.596093400
* Sum for TK-A077					1577.574685950
TK-A078	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	562.978592550
TK-A078	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	1014.596093400
* Sum for TK-A078					1577.574685950
TK-A079	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	562.978592550
TK-A079	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	1014.596093400
* Sum for TK-A079					1577.574685950
TK-A080	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	562.978592550
TK-A080	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	1014.596093400
* Sum for TK-A080					1577.574685950
TK-A081	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	562.978592550
TK-A081	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	1014.596093400
* Sum for TK-A081					1577.574685950
TK-A082	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	555.199653180
TK-A082	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	1014.596093400
* Sum for TK-A082					1569.795746580
TK-A083	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	558.412693280
TK-A083	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	1014.596093400
* Sum for TK-A083					1573.008786680
TK-A084	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	558.412693280
TK-A084	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	1014.596093400
* Sum for TK-A084					1573.008786680
TK-A088	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	562.978592550
TK-A088	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	1014.596093400
* Sum for TK-A088					

WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions
					1577.574685950
TK-A089	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	562.978592550
TK-A089	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	1014.596093400
* Sum for TK-A089					
					1577.574685950
TK-A090	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	557.228941640
TK-A090	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	1014.596093400
* Sum for TK-A090					
					1571.825035040
TK-A094	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	562.978592550
TK-A094	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	1014.596093400
* Sum for TK-A094					
					1577.574685950
TK-A095	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	557.228941640
TK-A095	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	1014.596093400
* Sum for TK-A095					
					1571.825035040
TK-A096	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	557.228941640
TK-A096	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	1014.596093400
* Sum for TK-A096					
					1571.825035040
TK-A097	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	8008.110051600
TK-A097	EXTFLT	TSTREAM CR	CASVOCP	100.000000000	676.397395620
* Sum for TK-A097					
					8684.507447220
TK-A100	FIXTNK	TSTREAM 18	CASVOCP	100.000000000	5163.050042900
TK-A100	FIXTNK	TSTREAM 18	CASVOCP	100.000000000	9197.117942800
* Sum for TK-A100					
					14360.167985700
TK-A101	FIXTNK	TSTREAM 18	CASVOCP	100.000000000	5163.050042900
TK-A101	FIXTNK	TSTREAM 18	CASVOCP	100.000000000	9197.117942800
* Sum for TK-A101					
					14360.167985700
TK-A102	FIXTNK	TSTREAM 18	CASVOCP	100.000000000	3603.345892600
TK-A102	FIXTNK	TSTREAM 18	CASVOCP	100.000000000	5464.396434800

WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions	
* Sum for TK-A102						
					9067.742327400	
TK-A103	FIXTNK	TSTREAM 45	CASVOCP	100.000000000	3603.345892600	
TK-A103	FIXTNK	TSTREAM 45	CASVOCP	100.000000000	5464.396434800	
* Sum for TK-A103						
					9067.742327400	
TK-A104	FIXTNK	TSTREAM 18	CASVOCP	100.000000000	3603.345892600	
TK-A104	FIXTNK	TSTREAM 18	CASVOCP	100.000000000	6349.474730400	
* Sum for TK-A104						
					9952.820623000	
TK-A105	FIXTNK	TSTREAM 18	CASVOCP	100.000000000	5163.050042900	
TK-A105	FIXTNK	TSTREAM 18	CASVOCP	100.000000000	9158.636277800	
* Sum for TK-A105						
					14321.686320700	
TK-A106	EXTFLT	TSTREAM 04	CASVOCP	100.000000000	117.288215800	
TK-A106	EXTFLT	TSTREAM 04	CASVOCP	100.000000000	5.414094936	
TK-A106	EXTFLT	TSTREAM 09	CASVOCP	0.000000000	0.000000000	286.7
TK-A106	EXTFLT	TSTREAM 09	CASVOCP	0.000000000	0.000000000	57.1
TK-A106	EXTFLT	TSTREAM 23	CASVOCP	100.000000000	496.261269470	
TK-A106	EXTFLT	TSTREAM 23	CASVOCP	100.000000000	76.289925900	
TK-A106	EXTFLT	TSTREAM 48	CASVOCP	100.000000000	32.411213772	
TK-A106	EXTFLT	TSTREAM 48	CASVOCP	100.000000000	20.498917969	
* Sum for TK-A106						
					748.163637847	1062
TK-A107	EXTFLT	TSTREAM 26	CASVOCP	100.000000000	1239.733562100	
TK-A107	EXTFLT	TSTREAM 26	CASVOCP	100.000000000	119.883264660	
* Sum for TK-A107						
					1359.616826760	
TK-A108	EXTFLT	TSTREAM 04	CASVOCP	100.000000000	117.288215800	
TK-A108	EXTFLT	TSTREAM 04	CASVOCP	100.000000000	5.414094936	
TK-A108	EXTFLT	TSTREAM 09	CASVOCP	0.000000000	0.000000000	-30
TK-A108	EXTFLT	TSTREAM 09	CASVOCP	0.000000000	0.000000000	41
TK-A108	EXTFLT	TSTREAM 23	CASVOCP	100.000000000	564.940284430	
TK-A108	EXTFLT	TSTREAM 23	CASVOCP	100.000000000	86.646112210	
* Sum for TK-A108						
					774.288707376	1245
TK-A109	EXTFLT	TSTREAM 23	CASVOCP	100.000000000	301.301485030	
TK-A109	EXTFLT	TSTREAM 23	CASVOCP	100.000000000	46.602437620	

WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions
TK-A109	EXTFLT	TSTREAM 26	CASVOCP	100.000000000	169.362508520
TK-A109	EXTFLT	TSTREAM 26	CASVOCP	100.000000000	16.093921673
TK-A109	EXTFLT	TSTREAM 31	CASVOCP	100.000000000	1080.324550500
TK-A109	EXTFLT	TSTREAM 31	CASVOCP	100.000000000	55.371739758
* Sum for TK-A109					1669.056643101
TK-A110	EXTFLT	TSTREAM 24	CASVOCP	100.000000000	216.574451390
TK-A110	EXTFLT	TSTREAM 24	CASVOCP	100.000000000	185.316909230
* Sum for TK-A110					401.891360620
TK-A111	EXTFLT	TSTREAM 24	CASVOCP	100.000000000	43.314890281
TK-A111	EXTFLT	TSTREAM 24	CASVOCP	100.000000000	37.185300850
* Sum for TK-A111					80.500191131
TK-A112	EXTFLT	TSTREAM 25	CASVOCP	100.000000000	180.791043630
TK-A112	EXTFLT	TSTREAM 25	CASVOCP	100.000000000	40.658034375
* Sum for TK-A112					221.449078005
TK-A113	EXTFLT	TSTREAM 09	CASVOCP	0.000000000	0.000000000 438
TK-A113	EXTFLT	TSTREAM 09	CASVOCP	0.000000000	0.000000000 41
TK-A113	EXTFLT	TSTREAM 23	CASVOCP	100.000000000	173.440509690
TK-A113	EXTFLT	TSTREAM 23	CASVOCP	100.000000000	25.890305465
TK-A113	EXTFLT	TSTREAM 48	CASVOCP	100.000000000	100.950740040
TK-A113	EXTFLT	TSTREAM 48	CASVOCP	100.000000000	63.480368552
* Sum for TK-A113					363.761923747 843
TK-A114	FIXTNK	TSTREAM 47	CASVOCP	100.000000000	1107.196574000
TK-A114	FIXTNK	TSTREAM 47	CASVOCP	100.000000000	85.996453473
* Sum for TK-A114					1193.193027473
TK-A115	EXTFLT	TSTREAM 48	CASVOCP	100.000000000	191.440263490
TK-A115	EXTFLT	TSTREAM 48	CASVOCP	100.000000000	120.678885080
* Sum for TK-A115					312.119148570
TK-A116	INTFLT	TSTREAM 02	CASVOCP	100.000000000	787.784606640
TK-A116	INTFLT	TSTREAM 02	CASVOCP	100.000000000	23.489132188
TK-A116	INTFLT	TSTREAM 17	CASVOCP	100.000000000	448.596378060
TK-A116	INTFLT	TSTREAM 17	CASVOCP	100.000000000	24.383314650

WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions
TK-A116	INTFLT	TSTREAM 23	CASVOCP	100.000000000	72.938849350
TK-A116	INTFLT	TSTREAM 23	CASVOCP	100.000000000	3.912306769
TK-A116	INTFLT	TSTREAM 26	CASVOCP	100.000000000	963.107438940
TK-A116	INTFLT	TSTREAM 26	CASVOCP	100.000000000	34.990559111
* Sum for TK-A116					2359.202585708
TK-A117	FIXTNK	TSTREAM 47	CASVOCP	100.000000000	1864.328544100
TK-A117	FIXTNK	TSTREAM 47	CASVOCP	100.000000000	524.368618740
* Sum for TK-A117					2388.697162840
TK-A118	FIXTNK	TSTREAM 47	CASVOCP	100.000000000	1864.328544100
TK-A118	FIXTNK	TSTREAM 47	CASVOCP	100.000000000	524.368618740
* Sum for TK-A118					2388.697162840
TK-A119	EXTFLT	TSTREAM 11	CASVOCP	100.000000000	3278.997646500
TK-A119	EXTFLT	TSTREAM 11	CASVOCP	100.000000000	243.314574550
* Sum for TK-A119					3522.312221050
TK-A120	EXTFLT	TSTREAM 10	CASVOCP	100.000000000	40.236575876
TK-A120	EXTFLT	TSTREAM 10	CASVOCP	100.000000000	42.537255483
TK-A120	EXTFLT	TSTREAM 43	CASVOCP	100.000000000	25.071854428
TK-A120	EXTFLT	TSTREAM 43	CASVOCP	100.000000000	78.888478132
TK-A120	EXTFLT	TSTREAM 47	CASVOCP	100.000000000	7.687126503
TK-A120	EXTFLT	TSTREAM 47	CASVOCP	100.000000000	62.652577091
* Sum for TK-A120					257.073867513
TK-A121	EXTFLT	TSTREAM 48	CASVOCP	100.000000000	191.440263490
TK-A121	EXTFLT	TSTREAM 48	CASVOCP	100.000000000	120.678885080
* Sum for TK-A121					312.119148570
TK-A122	INTFLT	TSTREAM 17	CASVOCP	100.000000000	1613.888021500
TK-A122	INTFLT	TSTREAM 17	CASVOCP	100.000000000	54.476633161
* Sum for TK-A122					1668.364654661
TK-A123	EXTFLT	TSTREAM 11	CASVOCP	100.000000000	3352.284380600
TK-A123	EXTFLT	TSTREAM 11	CASVOCP	100.000000000	272.410553560
* Sum for TK-A123					

WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions
					3624.694934160
TK-A124	EXTFLT	TSTREAM 47	CASVOCP	100.000000000	0.752859346
TK-A124	EXTFLT	TSTREAM 47	CASVOCP	100.000000000	25.436670600
* Sum for TK-A124					
					26.189529946
TK-A125	EXTFLT	TSTREAM 09	CASVOCP	0.000000000	0.000000000
TK-A125	EXTFLT	TSTREAM 09	CASVOCP	0.000000000	0.000000000
TK-A125	EXTFLT	TSTREAM 23	CASVOCP	100.000000000	218.285714270
TK-A125	EXTFLT	TSTREAM 23	CASVOCP	100.000000000	34.520321788
* Sum for TK-A125					
					252.806036058
TK-A126	EXTFLT	TSTREAM 47	CASVOCP	100.000000000	2.258578038
TK-A126	EXTFLT	TSTREAM 47	CASVOCP	100.000000000	76.101514500
* Sum for TK-A126					
					78.360092538
TK-A127	EXTFLT	TSTREAM 31	CASVOCP	100.000000000	2098.874604600
TK-A127	EXTFLT	TSTREAM 31	CASVOCP	100.000000000	103.499737320
* Sum for TK-A127					
					2202.374341920
TK-A128	EXTFLT	TSTREAM 24	CASVOCP	100.000000000	237.948777730
TK-A128	EXTFLT	TSTREAM 24	CASVOCP	100.000000000	191.673590630
* Sum for TK-A128					
					429.622368360
TK-A129	EXTFLT	TSTREAM 23	CASVOCP	100.000000000	986.328042260
TK-A129	EXTFLT	TSTREAM 23	CASVOCP	100.000000000	157.499188580
* Sum for TK-A129					
					1143.827230840
TK-A130	EXTFLT	TSTREAM 25	CASVOCP	100.000000000	21.154252804
TK-A130	EXTFLT	TSTREAM 25	CASVOCP	100.000000000	95.255966250
* Sum for TK-A130					
					116.410219054
TK-A131	FIXTNK	TSTREAM 25	CASVOCP	100.000000000	1958.136088100
TK-A131	FIXTNK	TSTREAM 25	CASVOCP	100.000000000	16059.704863000
~~TK-A131~~	~~FIXTNK~~	~~TSTREAM 41~~	~~CASVOCP~~	~~0.100000000~~	~~0.800314062~~
~~TK-A131~~	~~FIXTNK~~	~~TSTREAM 41~~	~~CASVOCP~~	~~0.100000000~~	~~14.632576985~~
* Sum for TK-A131					

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WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions
					18033.273842147
TK-A132	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	27839.896057000
* Sum for TK-A132					
					27839.896057000
TK-A133	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	18343.214857000
TK-A133	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	74105.328348000
* Sum for TK-A133					
					92448.543205000
TK-A134	EXTFLT	TSTREAM 45	CASVOCP	100.000000000	220.443404770
TK-A134	EXTFLT	TSTREAM 45	CASVOCP	100.000000000	232.813498000
* Sum for TK-A134					
					453.256902770
TK-A135	EXTFLT	TSTREAM 10	CASVOCP	100.000000000	220.443404770
TK-A135	EXTFLT	TSTREAM 10	CASVOCP	100.000000000	232.813498000
* Sum for TK-A135					
					453.256902770
TK-A136	EXTFLT	TSTREAM 44	CASVOCP	100.000000000	299.062592710
TK-A136	EXTFLT	TSTREAM 44	CASVOCP	100.000000000	191.541955840
* Sum for TK-A136					
					490.604548550
TK-A137	EXTFLT	TSTREAM 44	CASVOCP	100.000000000	299.062592710
TK-A137	EXTFLT	TSTREAM 44	CASVOCP	100.000000000	191.541955840
* Sum for TK-A137					
					490.604548550
TK-A138	EXTFLT	TSTREAM 46	CASVOCP	100.000000000	1239.859415200
TK-A138	EXTFLT	TSTREAM 46	CASVOCP	100.000000000	400.403495600
* Sum for TK-A138					
					1640.262910800
TK-A139	EXTFLT	TSTREAM 44	CASVOCP	100.000000000	229.608165440
TK-A139	EXTFLT	TSTREAM 44	CASVOCP	100.000000000	145.886767380
TK-A139	EXTFLT	TSTREAM 46	CASVOCP	100.000000000	287.945492580
TK-A139	EXTFLT	TSTREAM 46	CASVOCP	100.000000000	89.953646167
* Sum for TK-A139					
					753.394071567
TK-A140	EXTFLT	TSTREAM 24	CASVOCP	100.000000000	306.785599490

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WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions
TK-A140	EXTFLT	TSTREAM 24	CASVOCP	100.000000000	253.241471250
* Sum for TK-A140					
					560.027070740
TK-A141	FIXTNK	TSTREAM 35	CASVOCP	100.000000000	4008.468127900
TK-A141	FIXTNK	TSTREAM 35	CASVOCP	100.000000000	2665.912666200
* Sum for TK-A141					
					6674.380794100
TK-A142	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	9374.124353000
TK-A142	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	1859.372560000
TK-A142	FIXTNK	TSTREAM 35	CASVOCP	100.000000000	1664.719003900
TK-A142	FIXTNK	TSTREAM 35	CASVOCP	100.000000000	1111.037824700
* Sum for TK-A142					
					14009.253741600
TK-A143	FIXTNK	TSTREAM 24	CASVOCP	100.000000000	7107.755291800
TK-A143	FIXTNK	TSTREAM 24	CASVOCP	100.000000000	14262.973621000
* Sum for TK-A143					
					21370.728912800
TK-A144	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	51060.025866000
TK-A144	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	13561.828381000
* Sum for TK-A144					
					64621.854247000
TK-A146	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	51060.025866000
TK-A146	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	76709.609251000
* Sum for TK-A146					
					127769.635117000
TK-A147	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	51060.025866000
TK-A147	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	13561.828381000
* Sum for TK-A147					
					64621.854247000
TK-A148	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	51060.025866000
TK-A148	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	13561.828381000
* Sum for TK-A148					
					64621.854247000
TK-ADD008	FIXTNK	TSTREAM 39	CASVOCP	100.000000000	59.915284475
TK-ADD008	FIXTNK	TSTREAM 39	CASVOCP	100.000000000	119.004078100
* Sum for TK-ADD008					

WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions
					178.919362575
TK-B084	FIXTNK	M 03	CASVOCP	100.000000000	0.000000000
* Sum for TK-B084					
B-096	Fixtnk	M 04	CASVOCP	100%	0.000000000
TK-B121	FIXTNK	WWSTREAM 01	CASVOCP	100.000000000	808.036943750
TK-B121	FIXTNK	WWSTREAM 01	CASVOCP	100.000000000	13678.346340000
* Sum for TK-B121					
					14486.383283750
TK-C029	EXTFLT	TSTREAM 39	CASVOCP	100.000000000	49.437145600
TK-C029	EXTFLT	TSTREAM 39	CASVOCP	100.000000000	282.281548920
* Sum for TK-C029					
					331.718694520
TK-C032	FIXTNK	M 12	CASVOCP	100.000000000	0.000000000
* Sum for TK-C032					
					0.000000000
TK-C038	FIXTNK	M 13	CASVOCP	100.000000000	0.000000000
* Sum for TK-C038					
					0.000000000
TK-C045	FIXTNK	TSTREAM 16	CASVOCP	100.000000000	498.315254400
TK-C045	FIXTNK	TSTREAM 16	CASVOCP	100.000000000	26856.586932000
* Sum for TK-C045					
					27354.902186400
TK-CH114	FIXTNK	M 12	CASVOCP	100.000000000	51.592278997
* Sum for TK-CH114					
					51.592278997
TK-CH140	FIXTNK	TSTREAM 47	CASVOCP	100.000000000	0.000000000
* Sum for TK-CH140					
					0.000000000
TK-CH197	FIXTNK	340059	CASVOCP	100.000000000	124.047168180
~~TK-CH197~~	~~FIXTNK~~	~~TCE~~	~~CASVOCP~~	~~100.000000000~~	~~84.774735612~~
* Sum for TK-CH197					
					208.821903792

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3.83

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WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions
TK-CH265	FIXTNK	M 03	CASVOCP	100.000000000	0.000000000
* Sum for TK-CH265					0.000000000
TK-D001	FIXTNK	TSTREAM 40	CASVOCP	100.000000000	107.812993640
TK-D001	FIXTNK	TSTREAM 40	CASVOCP	100.000000000	5.464835911
* Sum for TK-D001					113.277829551
TK-D003	FIXTNK	TSTREAM 40	CASVOCP	100.000000000	107.812993640
TK-D003	FIXTNK	TSTREAM 40	CASVOCP	100.000000000	5.464835911
* Sum for TK-D003					113.277829551
TK-D004	FIXTNK	TSTREAM 40	CASVOCP	100.000000000	107.812993640
TK-D004	FIXTNK	TSTREAM 40	CASVOCP	100.000000000	5.464835911
* Sum for TK-D004					113.277829551
TK-D034	FIXTNK	TSTREAM 47	CASVOCP	100.000000000	77.510127761
TK-D034	FIXTNK	TSTREAM 47	CASVOCP	100.000000000	32.320683343
* Sum for TK-D034					109.830811104
TK-D037	FIXTNK	TSTREAM 47	CASVOCP	100.000000000	77.510127761
TK-D037	FIXTNK	TSTREAM 47	CASVOCP	100.000000000	32.320683343
* Sum for TK-D037					109.830811104
TK-D041	FIXTNK	TSTREAM 34	CASVOCP	100.000000000	670.489548530
* Sum for TK-D041					670.489548530
TK-D046	FIXTNK	TSTREAM 47	CASVOCP	100.000000000	77.510127761
TK-D046	FIXTNK	TSTREAM 47	CASVOCP	100.000000000	32.320683343
* Sum for TK-D046					109.830811104
TK-D049	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	1599.554554800
TK-D049	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	2069.876126600
* Sum for TK-D049					3669.430681400

WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions
TK-D050	FIXTNK	TSTREAM 31	CASVOCP	100.000000000	6461.576680300
TK-D050	FIXTNK	TSTREAM 31	CASVOCP	100.000000000	26656.060084000
* Sum for TK-D050					33117.636764300
TK-D052	FIXTNK	WWSTREAM 01	CASVOCP	100.000000000	1531.848507700
TK-D052	FIXTNK	WWSTREAM 01	CASVOCP	100.000000000	10959.341938000
* Sum for TK-D052					12491.190445700
TK-D053	FIXTNK	WWSTREAM 01	CASVOCP	100.000000000	1531.848507700
TK-D053	FIXTNK	WWSTREAM 01	CASVOCP	100.000000000	10959.341938000
* Sum for TK-D053					12491.190445700
TK-D054	FIXTNK	WWSTREAM 01	CASVOCP	100.000000000	1531.848507700
TK-D054	FIXTNK	WWSTREAM 01	CASVOCP	100.000000000	10959.341938000
* Sum for TK-D054					12491.190445700
TK-DX006	FIXTNK	M 03	CASVOCP	100.000000000	53.109976924
* Sum for TK-DX006					53.109976924
TK-E024	FIXTNK	TSTREAM 47	CASVOCP	100.000000000	77.510127761
TK-E024	FIXTNK	TSTREAM 47	CASVOCP	100.000000000	32.320683343
* Sum for TK-E024					109.830811104
TK-E030	FIXTNK	TSTREAM 34	CASVOCP	100.000000000	1790.205635900
* Sum for TK-E030					1790.205635900
TK-F003	FIXTNK	TSTREAM 40	CASVOCP	100.000000000	246.327729840
TK-F003	FIXTNK	TSTREAM 40	CASVOCP	100.000000000	13.343022627
* Sum for TK-F003					259.670752467
TK-F012	FIXTNK	TSTREAM 44	CASVOCP	100.000000000	5151.329121700
TK-F012	FIXTNK	TSTREAM 44	CASVOCP	100.000000000	13191.684474000
* Sum for TK-F012					18343.013595700

WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions
TK-F021	INTFLT	TSTREAM 39	CASVOCP	100.000000000	215.068543420
TK-F021	INTFLT	TSTREAM 39	CASVOCP	100.000000000	141.140774460
* Sum for TK-F021					356.209317880
TK-F022	FIXTNK	M 03	CASVOCP	100.000000000	485.635895090
TK-F022	FIXTNK	M 03	CASVOCP	100.000000000	192.209617060
* Sum for TK-F022					677.845512150
TK-F023	FIXTNK	M 03	CASVOCP	100.000000000	485.635895090
TK-F023	FIXTNK	M 03	CASVOCP	100.000000000	208.361716020
* Sum for TK-F023					693.997611110
TK-F024	FIXTNK	M 03	CASVOCP	100.000000000	485.635895090
TK-F024	FIXTNK	M 03	CASVOCP	100.000000000	203.093080930
* Sum for TK-F024					688.728976020
TK-F025	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	4943.269325700
TK-F025	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	13539.557270000
* Sum for TK-F025					18482.826595700
TK-F033	INTFLT	TSTREAM 33	CASVOCP	100.000000000	7210.420454700
TK-F033	INTFLT	TSTREAM 33	CASVOCP	100.000000000	19.596409011
* Sum for TK-F033					7230.016863711
TK-F034	FIXTNK	M 03	CASVOCP	100.000000000	491.695367480
TK-F034	FIXTNK	M 03	CASVOCP	100.000000000	189.036174980
* Sum for TK-F034					680.731542460
TK-F035	FIXTNK	TSTREAM 24	CASVOCP	100.000000000	1146.027558400
* Sum for TK-F035					1146.027558400
TK-F041	FIXTNK	TSTREAM 49	CASVOCP	100.000000000	224.694567180
TK-F041	FIXTNK	TSTREAM 49	CASVOCP	100.000000000	208.547849370
* Sum for TK-F041					433.242416550

WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions
TK-F046	FIXTNK	M 03	CASVOCP	100.000000000	491.695367480
TK-F046	FIXTNK	M 03	CASVOCP	100.000000000	193.936979280
* Sum for TK-F046					685.632346760
TK-F047	FIXTNK	M 03	CASVOCP	100.000000000	491.695367480
TK-F047	FIXTNK	M 03	CASVOCP	100.000000000	403.128117670
* Sum for TK-F047					894.823485150
TK-F048	FIXTNK	M 03	CASVOCP	100.000000000	491.695367480
TK-F048	FIXTNK	M 03	CASVOCP	100.000000000	403.128117670
* Sum for TK-F048					894.823485150
TK-F050	FIXTNK	TSTREAM 07	CASVOCP	100.000000000	1009.266823900
TK-F050	FIXTNK	TSTREAM 07	CASVOCP	100.000000000	180.309209260
* Sum for TK-F050					1189.576033160
TK-F051	INTFLT	TSTREAM 31	CASVOCP	100.000000000	2693.451188900
TK-F051	INTFLT	TSTREAM 31	CASVOCP	100.000000000	56.454451809
* Sum for TK-F051					2749.905640709
TK-F054	FIXTNK	TSTREAM 19	CASVOCP	100.000000000	23029.393892000
TK-F054	FIXTNK	TSTREAM 19	CASVOCP	100.000000000	18484.399506000
* Sum for TK-F054					41513.793398000
TK-F056	FIXTNK	TSTREAM 19	CASVOCP	100.000000000	66173.923171000
TK-F056	FIXTNK	TSTREAM 19	CASVOCP	100.000000000	9242.199753000
* Sum for TK-F056					75416.122924000
TK-F057	INTFLT	TSTREAM 33	CASVOCP	100.000000000	6838.854114100
TK-F057	INTFLT	TSTREAM 33	CASVOCP	100.000000000	19.596409011
* Sum for TK-F057					6858.450523111
TK-F058	FIXTNK	TSTREAM 25	CASVOCP	100.000000000	1804.334531200
TK-F058	FIXTNK	TSTREAM 25	CASVOCP	100.000000000	2617.059380000
* Sum for TK-F058					

WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions
					4421.393911200
TK-F059	INTFLT	TSTREAM 33	CASVOCP	100.000000000	6824.065404000
TK-F059	INTFLT	TSTREAM 33	CASVOCP	100.000000000	19.596409011
* Sum for TK-F059					
					6843.661813011
TK-F064	EXTFLT	TSTREAM 18	CASVOCP	100.000000000	71.705676626
TK-F064	EXTFLT	TSTREAM 18	CASVOCP	100.000000000	6.126671000
* Sum for TK-F064					
					77.832347626
TK-F066	FIXTNK	TSTREAM 19	CASVOCP	100.000000000	35383.309339000
TK-F066	FIXTNK	TSTREAM 19	CASVOCP	100.000000000	9410.239748600
* Sum for TK-F066					
					44793.549087600
TK-F067	INTFLT	TSTREAM 39	CASVOCP	100.000000000	192.563273230
TK-F067	INTFLT	TSTREAM 39	CASVOCP	100.000000000	15575.172660000
* Sum for TK-F067					
					15767.735933230
TK-F069	FIXTNK	TSTREAM 19	CASVOCP	100.000000000	34458.061494000
TK-F069	FIXTNK	TSTREAM 19	CASVOCP	100.000000000	4369.039883300
* Sum for TK-F069					
					38827.101377300
TK-F071	FIXTNK	TSTREAM 07	CASVOCP	100.000000000	481.441896440
TK-F071	FIXTNK	TSTREAM 07	CASVOCP	100.000000000	243.417432500
* Sum for TK-F071					
					724.859328940
TK-F072	FIXTNK	TSTREAM 41	CASVOCP	0.100000000	0.000000000
* Sum for TK-F072					
					0.000000000
TK-F073	FIXTNK	TSTREAM 24	CASVOCP	100.000000000	1275.513655400
TK-F073	FIXTNK	TSTREAM 24	CASVOCP	100.000000000	1308.529690000
* Sum for TK-F073					
					2584.043345400
TK-F074	FIXTNK	TSTREAM 24	CASVOCP	100.000000000	1275.513655400
TK-F074	FIXTNK	TSTREAM 24	CASVOCP	100.000000000	1308.529690000
* Sum for TK-F074					

WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions
					2584.043345400
TK-F075	FIXTNK	TSTREAM 18	CASVOCP	100.000000000	1043.987637600
TK-F075	FIXTNK	TSTREAM 18	CASVOCP	100.000000000	808.114965690
* Sum for TK-F075					
					1852.102603290
TK-F076	FIXTNK	TSTREAM 35	CASVOCP	100.000000000	3107.639792400
TK-F076	FIXTNK	TSTREAM 35	CASVOCP	100.000000000	1160.675314100
* Sum for TK-F076					
					4268.315106500
TK-F077	FIXTNK	TSTREAM 35	CASVOCP	100.000000000	3107.639792400
TK-F077	FIXTNK	TSTREAM 35	CASVOCP	100.000000000	1160.675314100
* Sum for TK-F077					
					4268.315106500
TK-F078	FIXTNK	TSTREAM 35	CASVOCP	100.000000000	3140.491654000
TK-F078	FIXTNK	TSTREAM 35	CASVOCP	100.000000000	1184.854057800
* Sum for TK-F078					
					4325.345711800
TK-F080	FIXTNK	TSTREAM 41	CASVOCP	0.100000000	1.866096876
TK-F080	FIXTNK	TSTREAM 41	CASVOCP	0.100000000	3.159458920
* Sum for TK-F080					
					5.025555796
TK-F081	EXTFLT	TSTREAM 26	CASVOCP	100.000000000	852.874862370
TK-F081	EXTFLT	TSTREAM 26	CASVOCP	100.000000000	69.931893889
* Sum for TK-F081					
					922.806756259
TK-F082	EXTFLT	TSTREAM 26	CASVOCP	100.000000000	852.874862370
TK-F082	EXTFLT	TSTREAM 26	CASVOCP	100.000000000	69.931893889
* Sum for TK-F082					
					922.806756259
TK-FW002	FIXTNK	TSTREAM 25	CASVOCP	100.000000000	~~0.000000000~~ 19.7
* Sum for TK-FW002					
					~~0.000000000~~ 19.7
TK-FW003	FIXTNK	TSTREAM 43	CASVOCP	100.000000000	0.000000000
* Sum for TK-FW003					

WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions
					0.000000000
TK-G006	EXTFLT	TSTREAM 24	CASVOCP	100.000000000	619.721017250
TK-G006	EXTFLT	TSTREAM 24	CASVOCP	100.000000000	204.016208200
* Sum for TK-G006					823.737225450
TK-G007	EXTFLT	TSTREAM 25	CASVOCP	100.000000000	238.015376990
TK-G007	EXTFLT	TSTREAM 25	CASVOCP	100.000000000	726.036328120
* Sum for TK-G007					964.051705110
TK-H018	FIXTNK	M 03	CASVOCP	100.000000000	15.793925738
* Sum for TK-H018					15.793925738
TK-H044	FIXTNK	M 03	CASVOCP	100.000000000	3.881191764
* Sum for TK-H044					3.881191764
TK-H045	FIXTNK	M 03	CASVOCP	100.000000000	3.881191764
* Sum for TK-H045					3.881191764
TK-H046	FIXTNK	M 03	CASVOCP	100.000000000	3.881191764
* Sum for TK-H046					3.881191764
TK-H047	FIXTNK	M 03	CASVOCP	100.000000000	3.881191764
* Sum for TK-H047					3.881191764
TK-H048	FIXTNK	M 03	CASVOCP	100.000000000	3.881191764
* Sum for TK-H048					3.881191764
TK-H049	FIXTNK	M 03	CASVOCP	100.000000000	3.881191764
* Sum for TK-H049					3.881191764
TK-L002	FIXTNK	M 03	CASVOCP	100.000000000	81.147697416
* Sum for TK-L002					

WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions
					81.147697416
TK-L004	FIXTNK	M 03	CASVOCP	100.000000000	71.983583082
* Sum for TK-L004					71.983583082
TK-L010	FIXTNK	M 03	CASVOCP	100.000000000	40.938414064
* Sum for TK-L010					40.938414064
TK-L011	FIXTNK	M 03	CASVOCP	100.000000000	71.983583082
* Sum for TK-L011					71.983583082
TK-L013	FIXTNK	M 03	CASVOCP	100.000000000	71.983583082
* Sum for TK-L013					71.983583082
TK-L014	FIXTNK	M 03	CASVOCP	100.000000000	71.983583082
* Sum for TK-L014					71.983583082
TK-L015	FIXTNK	M 03	CASVOCP	100.000000000	71.983583082
* Sum for TK-L015					71.983583082
TK-L016	FIXTNK	M 03	CASVOCP	100.000000000	71.983583082
* Sum for TK-L016					71.983583082
TK-L017	FIXTNK	M 03	CASVOCP	100.000000000	71.983583082
* Sum for TK-L017					71.983583082
TK-L018	FIXTNK	M 12	CASVOCP	100.000000000	145.025697750
* Sum for TK-L018					145.025697750
TK-L019	FIXTNK	M 12	CASVOCP	100.000000000	145.025697750
* Sum for TK-L019					145.025697750

WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions
TK-L020	FIXTNK	M 12	CASVOCP	100.000000000	255.004244830
* Sum for TK-L020					
					255.004244830
TK-L021	FIXTNK	M 03	CASVOCP	100.000000000	71.983583082
* Sum for TK-L021					
					71.983583082
TK-L022	FIXTNK	M 03	CASVOCP	100.000000000	71.983583082
* Sum for TK-L022					
					71.983583082
TK-L023	FIXTNK	M 03	CASVOCP	100.000000000	71.983583082
TK-L023	FIXTNK	M 03	CASVOCP	100.000000000	43.966597583
* Sum for TK-L023					
					115.950180665
TK-L024	FIXTNK	M 03	CASVOCP	100.000000000	40.938414064
* Sum for TK-L024					
					40.938414064
TK-L025	FIXTNK	M 03	CASVOCP	100.000000000	40.532102121
TK-L025	FIXTNK	M 03	CASVOCP	100.000000000	29.069450715
* Sum for TK-L025					
					69.601552836
TK-L026	FIXTNK	M 03	CASVOCP	100.000000000	40.532102121
* Sum for TK-L026					
					40.532102121
TK-L028	FIXTNK	M 03	CASVOCP	100.000000000	54.098464944
* Sum for TK-L028					
					54.098464944
TK-L029	FIXTNK	TSTREAM 45	CASVOCP	100.000000000	154.805144570
* Sum for TK-L029					
					154.805144570
TK-L032	FIXTNK	M 03	CASVOCP	100.000000000	82.472322754
* Sum for TK-L032					
					82.472322754

WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions
TK-L033	FIXTNK	TSTREAM 06	CASVOCP	100.000000000	118.079216770
* Sum for TK-L033					
					118.079216770
TK-L034	FIXTNK	M 03	CASVOCP	100.000000000	81.147697416
* Sum for TK-L034					
					81.147697416
TK-L035	FIXTNK	M 03	CASVOCP	100.000000000	40.938414064
* Sum for TK-L035					
					40.938414064
TK-L036	FIXTNK	M 03	CASVOCP	100.000000000	40.938414064
* Sum for TK-L036					
					40.938414064
TK-L037	FIXTNK	M 03	CASVOCP	100.000000000	41.921299934
* Sum for TK-L037					
					41.921299934
TK-L038	FIXTNK	M 03	CASVOCP	100.000000000	81.147697416
* Sum for TK-L038					
					81.147697416
TK-L039	FIXTNK	M 03	CASVOCP	100.000000000	81.147697416
* Sum for TK-L039					
					81.147697416
TK-L040	FIXTNK	M 03	CASVOCP	100.000000000	81.147697416
* Sum for TK-L040					
					81.147697416
TK-L041	FIXTNK	M 03	CASVOCP	100.000000000	81.147697416
* Sum for TK-L041					
					81.147697416
TK-L042	FIXTNK	M 03	CASVOCP	100.000000000	81.147697416
* Sum for TK-L042					
					81.147697416
TK-L043	FIXTNK	M 03	CASVOCP	100.000000000	81.147697416
* Sum for TK-L043					

WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions
					81.147697416
TK-L044	FIXTNK	M 03	CASVOCP	100.000000000	81.147697416
* Sum for TK-L044					
					81.147697416
TK-L045	FIXTNK	M 03	CASVOCP	100.000000000	81.147697416
* Sum for TK-L045					
					81.147697416
TK-L046	FIXTNK	M 03	CASVOCP	100.000000000	82.472322754
* Sum for TK-L046					
					82.472322754
TK-L049	FIXTNK	M 03	CASVOCP	100.000000000	45.649453369
* Sum for TK-L049					
					45.649453369
TK-L050	FIXTNK	M 12	CASVOCP	100.000000000	161.714711670
* Sum for TK-L050					
					161.714711670
TK-L053	FIXTNK	M 03	CASVOCP	100.000000000	45.649453369
* Sum for TK-L053					
					45.649453369
TK-L054	FIXTNK	M 03	CASVOCP	100.000000000	45.649453369
* Sum for TK-L054					
					45.649453369
TK-L055	FIXTNK	M 03	CASVOCP	100.000000000	45.649453369
* Sum for TK-L055					
					45.649453369
TK-L056	FIXTNK	M 03	CASVOCP	100.000000000	45.649453369
* Sum for TK-L056					
					45.649453369
TK-L057	FIXTNK	M 03	CASVOCP	100.000000000	45.649453369
* Sum for TK-L057					
					45.649453369

WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions
TK-L058	FIXTNK	M 03	CASVOCP	100.000000000	46.536604657
* Sum for TK-L058					
					46.536604657
TK-L059	FIXTNK	M 03	CASVOCP	100.000000000	51.000218473
TK-L059	FIXTNK	M 03	CASVOCP	100.000000000	21.283699060
* Sum for TK-L059					
					72.283917533
TK-L062	FIXTNK	M 03	CASVOCP	100.000000000	269.687563690
TK-L062	FIXTNK	M 03	CASVOCP	100.000000000	54.478624483
* Sum for TK-L062					
					324.166188173
TK-L063	FIXTNK	M 03	CASVOCP	100.000000000	265.064800450
TK-L063	FIXTNK	M 03	CASVOCP	100.000000000	52.661107653
* Sum for TK-L063					
					317.725908103
TK-L064	FIXTNK	TSTREAM 45	CASVOCP	100.000000000	514.481909110
* Sum for TK-L064					
					514.481909110
TK-L065	FIXTNK	M 03	CASVOCP	100.000000000	269.687563690
TK-L065	FIXTNK	M 03	CASVOCP	100.000000000	139.220346650
* Sum for TK-L065					
					408.907910340
TK-L066	FIXTNK	M 03	CASVOCP	100.000000000	269.687563690
TK-L066	FIXTNK	M 03	CASVOCP	100.000000000	54.478624483
* Sum for TK-L066					
					324.166188173
TK-L069	FIXTNK	M 03	CASVOCP	100.000000000	45.649453369
* Sum for TK-L069					
					45.649453369
TK-L070	FIXTNK	M 03	CASVOCP	100.000000000	45.649453369
* Sum for TK-L070					
					45.649453369
TK-L071	FIXTNK	M 03	CASVOCP	100.000000000	72.716194347
* Sum for TK-L071					

WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions
					72.716194347
TK-L072	FIXTNK	M 03	CASVOCP	100.000000000	45.649453369
* Sum for TK-L072					45.649453369
TK-L073	FIXTNK	M 03	CASVOCP	100.000000000	44.745418915
* Sum for TK-L073					44.745418915
TK-L074	FIXTNK	M 03	CASVOCP	100.000000000	51.000218473
* Sum for TK-L074					51.000218473
TK-L076	FIXTNK	M 03	CASVOCP	100.000000000	49.990218325
* Sum for TK-L076					49.990218325
TK-L089	FIXTNK	TSTREAM 45	CASVOCP	100.000000000	60.363317493
* Sum for TK-L089					60.363317493
TK-L090	FIXTNK	M 03	CASVOCP	100.000000000	32.635605192
TK-L090	FIXTNK	M 03	CASVOCP	100.000000000	31.933691321
* Sum for TK-L090					64.569296513
TK-L102	FIXTNK	M 03	CASVOCP	100.000000000	81.147697416
* Sum for TK-L102					81.147697416
TK-L122	FIXTNK	M 03	CASVOCP	100.000000000	69.067842762
* Sum for TK-L122					69.067842762
TK-L123	FIXTNK	TSTREAM 27	CASVOCP	100.000000000	986.530324690
TK-L123	FIXTNK	TSTREAM 27	CASVOCP	100.000000000	114.503560240
* Sum for TK-L123					1101.033884930
TK-L124	FIXTNK	TSTREAM 36	CASVOCP	100.000000000	1352.344838900
TK-L124	FIXTNK	TSTREAM 36	CASVOCP	100.000000000	2081.503126700

WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions
* Sum for TK-L124					3433.847965600
TK-L130	FIXTNK	M 03	CASVOCP	100.000000000	582.058284690
TK-L130	FIXTNK	M 03	CASVOCP	100.000000000	327.755262020
* Sum for TK-L130					909.813546710
TK-L131	FIXTNK	M 03	CASVOCP	100.000000000	582.058284690
TK-L131	FIXTNK	M 03	CASVOCP	100.000000000	319.468250760
* Sum for TK-L131					901.526535450
TK-L132	FIXTNK	M 03	CASVOCP	100.000000000	152.772835320
TK-L132	FIXTNK	M 03	CASVOCP	100.000000000	28.240028353
* Sum for TK-L132					181.012863673
TK-L133	FIXTNK	M 03	CASVOCP	100.000000000	224.267347490
TK-L133	FIXTNK	M 03	CASVOCP	100.000000000	40.165679452
* Sum for TK-L133					264.433026942
TK-L134	FIXTNK	M 03	CASVOCP	100.000000000	46.536604657
* Sum for TK-L134					46.536604657
TK-L136	FIXTNK	M 03	CASVOCP	100.000000000	73.345477269
TK-L136	FIXTNK	M 03	CASVOCP	100.000000000	89.915987204
* Sum for TK-L136					163.261464473
TK-L137	FIXTNK	M 03	CASVOCP	100.000000000	224.267347490
* Sum for TK-L137					224.267347490
TK-L138	FIXTNK	M 03	CASVOCP	100.000000000	251.298648610
* Sum for TK-L138					251.298648610
TK-L139	FIXTNK	TSTREAM 36	CASVOCP	100.000000000	2012.495977400
TK-L139	FIXTNK	TSTREAM 36	CASVOCP	100.000000000	3122.098115500
* Sum for TK-L139					

WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions
					5134.594092900
TK-L142	FIXTNK	M 12	CASVOCP	100.000000000	394.799444100
* Sum for TK-L142					394.799444100
TK-L146	FIXTNK	M 03	CASVOCP	100.000000000	228.985360360
* Sum for TK-L146					228.985360360
TK-L147	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	1593.910638700
TK-L147	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	257.906565370
* Sum for TK-L147					1851.817204070
TK-L150	FIXTNK	M 03	CASVOCP	100.000000000	107.477141510
* Sum for TK-L150					107.477141510
TK-L151	FIXTNK	M 03	CASVOCP	100.000000000	108.818223450
* Sum for TK-L151					108.818223450
TK-L155	FIXTNK	M 03	CASVOCP	100.000000000	45.649453369
* Sum for TK-L155					45.649453369
TK-L156	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	1506.075163000
TK-L156	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	268.255946010
* Sum for TK-L156					1774.331109010
TK-L158	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	3867.500230400
TK-L158	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	5011.915257900
* Sum for TK-L158					8879.415488300
TK-L159	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	1506.075163000
TK-L159	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	1314.950905700
* Sum for TK-L159					2821.026068700

WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions
TK-L160	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	2410.420856300
TK-L160	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	2960.171246200
* Sum for TK-L160					5370.592102500
TK-L161	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	1033.674115300
TK-L161	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	158.966486520
* Sum for TK-L161					1192.640601820
TK-L162	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	4832.992597300
TK-L162	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	4412.975901900
* Sum for TK-L162					9245.968499200
TK-L163	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	4832.992597300
* Sum for TK-L163					4832.992597300
TK-L164	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	3525.596239400
TK-L164	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	865.373811000
* Sum for TK-L164					4390.970050400
TK-L165	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	3525.596239400
TK-L165	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	7526.069596300
* Sum for TK-L165					11051.665835700
TK-L166	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	3525.596239400
TK-L166	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	4894.429088900
* Sum for TK-L166					8420.025328300
TK-L167	FIXTNK	TSTREAM 27	CASVOCP	100.000000000	1229.119157200
TK-L167	FIXTNK	TSTREAM 27	CASVOCP	100.000000000	184.510413820
* Sum for TK-L167					1413.629571020
TK-L168	FIXTNK	M 03	CASVOCP	100.000000000	32.056070432
TK-L168	FIXTNK	M 03	CASVOCP	100.000000000	3.245565767
* Sum for TK-L168					35.301636199

WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions
TK-L169	FIXTNK	TSTREAM 37	CASVOCP	100.000000000	460.207700240
TK-L169	FIXTNK	TSTREAM 37	CASVOCP	100.000000000	33.799807623
* Sum for TK-L169					
					494.007507863
TK-L170	FIXTNK	TSTREAM 37	CASVOCP	100.000000000	460.207700240
TK-L170	FIXTNK	TSTREAM 37	CASVOCP	100.000000000	33.799807623
* Sum for TK-L170					
					494.007507863
TK-L171	FIXTNK	TSTREAM 38	CASVOCP	100.000000000	1056.439112600
TK-L171	FIXTNK	TSTREAM 38	CASVOCP	100.000000000	396.799102520
* Sum for TK-L171					
					1453.238215120
TK-L172	FIXTNK	TSTREAM 38	CASVOCP	100.000000000	1069.193342700
TK-L172	FIXTNK	TSTREAM 38	CASVOCP	100.000000000	406.258712400
* Sum for TK-L172					
					1475.452055100
TK-L173	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	4832.992597300
TK-L173	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	7047.928211000
* Sum for TK-L173					
					11880.920808300
TK-L174	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	4832.992597300
TK-L174	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	7047.928211000
* Sum for TK-L174					
					11880.920808300
TK-L177	FIXTNK	M 12	CASVOCP	100.000000000	158.512139460
* Sum for TK-L177					
					158.512139460
TK-L178	FIXTNK	M 03	CASVOCP	100.000000000	474.802105920
TK-L178	FIXTNK	M 03	CASVOCP	100.000000000	546.329691660
* Sum for TK-L178					
					1021.131797580
TK-L179	FIXTNK	M 03	CASVOCP	100.000000000	474.802105920
TK-L179	FIXTNK	M 03	CASVOCP	100.000000000	546.329691660
* Sum for TK-L179					
					1021.131797580

WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions
TK-L180	FIXTNK	M 03	CASVOCP	100.000000000	474.802105920
TK-L180	FIXTNK	M 03	CASVOCP	100.000000000	546.329691660
* Sum for TK-L180					
					1021.131797580
TK-L181	FIXTNK	M 03	CASVOCP	100.000000000	474.802105920
TK-L181	FIXTNK	M 03	CASVOCP	100.000000000	917.893776590
* Sum for TK-L181					
					1392.695882510
TK-L182	FIXTNK	M 03	CASVOCP	100.000000000	474.802105920
TK-L182	FIXTNK	M 03	CASVOCP	100.000000000	892.979852110
* Sum for TK-L182					
					1367.781958030
TK-L183	FIXTNK	M 03	CASVOCP	100.000000000	235.437023390
TK-L183	FIXTNK	M 03	CASVOCP	100.000000000	396.880033070
* Sum for TK-L183					
					632.317056460
TK-L184	FIXTNK	TSTREAM 28	CASVOCP	100.000000000	309.487123190
TK-L184	FIXTNK	TSTREAM 28	CASVOCP	100.000000000	39.099720845
* Sum for TK-L184					
					348.586844035
TK-L185	FIXTNK	TSTREAM 28	CASVOCP	100.000000000	309.487123190
TK-L185	FIXTNK	TSTREAM 28	CASVOCP	100.000000000	39.099720845
* Sum for TK-L185					
					348.586844035
TK-L186	FIXTNK	TSTREAM 30	CASVOCP	100.000000000	3686.538098300
TK-L186	FIXTNK	TSTREAM 30	CASVOCP	100.000000000	2520.472265300
* Sum for TK-L186					
					6207.010363600
TK-L187	FIXTNK	TSTREAM 30	CASVOCP	100.000000000	3686.538098300
TK-L187	FIXTNK	TSTREAM 30	CASVOCP	100.000000000	2520.472265300
* Sum for TK-L187					
					6207.010363600
TK-L188	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	3525.596239400
TK-L188	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	553.319286160
* Sum for TK-L188					

WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions
TK-L189	FIXTNK	TSTREAM 45	CASVOCP	100.000000000	4078.915525560
* Sum for TK-L189					1182.605163200
					1182.605163200
TK-L190	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	6310.068531400
TK-L190	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	30009.598281000
* Sum for TK-L190					36319.666812400
TK-L191	FIXTNK	TSTREAM 45	CASVOCP	100.000000000	1182.605163200
* Sum for TK-L191					1182.605163200
TK-L192	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	6310.068531400
TK-L192	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	28016.845739000
* Sum for TK-L192					34326.914270400
TK-L193	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	2396.504516200
TK-L193	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	871.666234430
* Sum for TK-L193					3268.170750630
TK-L194	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	2580.291486100
TK-L194	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	21858.775044000
* Sum for TK-L194					24439.066530100
TK-L195	FIXTNK	M 03	CASVOCP	100.000000000	574.672456140
TK-L195	FIXTNK	M 03	CASVOCP	100.000000000	385.003435960
* Sum for TK-L195					959.675892100
TK-M004	FIXTNK	TSTREAM 18	CASVOCP	100.000000000	171.160782900
TK-M004	FIXTNK	TSTREAM 18	CASVOCP	100.000000000	405.061081170
* Sum for TK-M004					576.221864070
TK-N001	FIXTNK	M 03	CASVOCP	100.000000000	24.958758707
* Sum for TK-N001					24.958758707

WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions
TK-N002	FIXTNK	M 03	CASVOCP	100.000000000	24.958758707
* Sum for TK-N002					24.958758707
TK-N003	FIXTNK	M 03	CASVOCP	100.000000000	18.372043647
* Sum for TK-N003					18.372043647
TK-N004	FIXTNK	M 03	CASVOCP	100.000000000	18.372043647
* Sum for TK-N004					18.372043647
TK-N005	FIXTNK	M 03	CASVOCP	100.000000000	18.372043647
* Sum for TK-N005					18.372043647
TK-N006	FIXTNK	M 03	CASVOCP	100.000000000	18.372043647
* Sum for TK-N006					18.372043647
TK-N007	FIXTNK	M 03	CASVOCP	100.000000000	18.372043647
* Sum for TK-N007					18.372043647
TK-N008	FIXTNK	M 03	CASVOCP	100.000000000	18.372043647
* Sum for TK-N008					18.372043647
TK-N009	FIXTNK	M 03	CASVOCP	100.000000000	18.372043647
* Sum for TK-N009					18.372043647
TK-N010	FIXTNK	M 03	CASVOCP	100.000000000	18.372043647
* Sum for TK-N010					18.372043647
TK-N035	FIXTNK	M 03	CASVOCP	100.000000000	81.147697416
* Sum for TK-N035					81.147697416
TK-N036	FIXTNK	M 03	CASVOCP	100.000000000	82.472322754
* Sum for TK-N036					

WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions
					82.472322754
TK-N037	FIXTNK	M 03	CASVOCP	100.000000000	68.726935628
* Sum for TK-N037					68.726935628
TK-N038	FIXTNK	M 03	CASVOCP	100.000000000	82.472322754
* Sum for TK-N038					82.472322754
TK-N039	FIXTNK	M 03	CASVOCP	100.000000000	82.472322754
* Sum for TK-N039					82.472322754
TK-N040	FIXTNK	M 03	CASVOCP	100.000000000	82.472322754
* Sum for TK-N040					82.472322754
TK-N041	FIXTNK	M 03	CASVOCP	100.000000000	25.366176357
* Sum for TK-N041					25.366176357
TK-N042	FIXTNK	M 03	CASVOCP	100.000000000	25.366176357
* Sum for TK-N042					25.366176357
TK-N043	FIXTNK	M 03	CASVOCP	100.000000000	25.366176357
* Sum for TK-N043					25.366176357
TK-N044	FIXTNK	M 03	CASVOCP	100.000000000	25.366176357
* Sum for TK-N044					25.366176357
TK-N045	FIXTNK	M 03	CASVOCP	100.000000000	25.366176357
* Sum for TK-N045					25.366176357
TK-N046	FIXTNK	M 03	CASVOCP	100.000000000	25.366176357
* Sum for TK-N046					25.366176357

WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions
TK-N047	FIXTNK	M 03	CASVOCP	100.000000000	24.124120968
* Sum for TK-N047					24.124120968
TK-N048	FIXTNK	M 03	CASVOCP	100.000000000	24.958758707
* Sum for TK-N048					24.958758707
TK-N049	FIXTNK	M 03	CASVOCP	100.000000000	82.472322754
* Sum for TK-N049					82.472322754
TK-N050	FIXTNK	M 03	CASVOCP	100.000000000	82.472322754
* Sum for TK-N050					82.472322754
TK-N051	FIXTNK	M 03	CASVOCP	100.000000000	82.472322754
* Sum for TK-N051					82.472322754
TK-N052	FIXTNK	M 03	CASVOCP	100.000000000	82.472322754
TK-N052	FIXTNK	M 03	CASVOCP	100.000000000	20.984385772
* Sum for TK-N052					103.456708526
TK-N053	FIXTNK	M 03	CASVOCP	100.000000000	41.921299934
* Sum for TK-N053					41.921299934
TK-N054	FIXTNK	M 03	CASVOCP	100.000000000	7.546408650
* Sum for TK-N054					7.546408650
TK-N055	FIXTNK	M 03	CASVOCP	100.000000000	6.698798624
* Sum for TK-N055					6.698798624
TK-N056	FIXTNK	M 03	CASVOCP	100.000000000	152.772835320
* Sum for TK-N056					152.772835320
TK-N057	FIXTNK	M 03	CASVOCP	100.000000000	274.235417950

WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions
* Sum for TK-N057					274.235417950
TK-N058	FIXTNK	M 03	CASVOCP	100.000000000	274.235417950
TK-N058	FIXTNK	M 03	CASVOCP	100.000000000	150.897171040
* Sum for TK-N058					425.132588990
TK-N059	FIXTNK	M 03	CASVOCP	100.000000000	274.235417950
* Sum for TK-N059					274.235417950
TK-N060	FIXTNK	M 03	CASVOCP	100.000000000	274.235417950
* Sum for TK-N060					274.235417950
TK-N061	FIXTNK	M 03	CASVOCP	100.000000000	274.235417950
* Sum for TK-N061					274.235417950
TK-N062	FIXTNK	M 03	CASVOCP	100.000000000	274.235417950
* Sum for TK-N062					274.235417950
TK-N063	FIXTNK	M 03	CASVOCP	100.000000000	11.875132134
* Sum for TK-N063					11.875132134
TK-N064	FIXTNK	M 03	CASVOCP	100.000000000	269.687563690
* Sum for TK-N064					269.687563690
TK-N067	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	2698.084533400
TK-N067	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	512.170148760
* Sum for TK-N067					3210.254682160
TK-N068	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	2745.139464800
* Sum for TK-N068					2745.139464800
TK-N069	FIXTNK	M 03	CASVOCP	100.000000000	269.687563690

WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions
* Sum for TK-N069					269.687563690
TK-N070	FIXTNK	M 03	CASVOCP	100.000000000	269.687563690
* Sum for TK-N070					269.687563690
TK-N071	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	2745.139464800
TK-N071	FIXTNK	TSTREAM 01	CASVOCP	100.000000000	833.828898830
* Sum for TK-N071					3578.968363630
TK-N072	FIXTNK	TSTREAM 45	CASVOCP	100.000000000	514.481909110
* Sum for TK-N072					514.481909110
TK-N073	FIXTNK	M 03	CASVOCP	100.000000000	269.687563690
TK-N073	FIXTNK	M 03	CASVOCP	100.000000000	54.478624483
* Sum for TK-N073					324.166188173
TK-N074	FIXTNK	M 03	CASVOCP	100.000000000	274.235417950
TK-N074	FIXTNK	M 03	CASVOCP	100.000000000	56.292535128
* Sum for TK-N074					330.527953078
TK-N075	FIXTNK	M 03	CASVOCP	100.000000000	365.139770750
* Sum for TK-N075					365.139770750
TK-N077	FIXTNK	M 12	CASVOCP	100.000000000	292.160955080
* Sum for TK-N077					292.160955080
TK-N078	FIXTNK	M 03	CASVOCP	100.000000000	82.472322754
* Sum for TK-N078					82.472322754
TK-N080	FIXTNK	M 03	CASVOCP	100.000000000	255.536402890
TK-N080	FIXTNK	M 03	CASVOCP	100.000000000	51.878565685
* Sum for TK-N080					307.414968575

WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions
TK-N081	FIXTNK	M 03	CASVOCP	100.000000000	251.298648610
TK-N081	FIXTNK	M 03	CASVOCP	100.000000000	50.205296223
* Sum for TK-N081					
					301.503944833
TK-N082	FIXTNK	M 03	CASVOCP	100.000000000	224.267347490
* Sum for TK-N082					
					224.267347490
TK-N083	FIXTNK	M 03	CASVOCP	100.000000000	188.817290620
* Sum for TK-N083					
					188.817290620
TK-N084	FIXTNK	M 03	CASVOCP	100.000000000	251.298648610
* Sum for TK-N084					
					251.298648610
TK-N085	FIXTNK	M 03	CASVOCP	100.000000000	7.705165837
* Sum for TK-N085					
					7.705165837
TK-N086	FIXTNK	M 03	CASVOCP	100.000000000	7.546408650
* Sum for TK-N086					
					7.546408650
TK-N087	FIXTNK	M 12	CASVOCP	100.000000000	8.181323717
* Sum for TK-N087					
					8.181323717
TK-N088	FIXTNK	M 12	CASVOCP	100.000000000	8.181323717
* Sum for TK-N088					
					8.181323717
TK-N089	FIXTNK	M 12	CASVOCP	100.000000000	3.397708210
* Sum for TK-N089					
					3.397708210
TK-N090	FIXTNK	M 12	CASVOCP	100.000000000	3.397708210
* Sum for TK-N090					
					3.397708210
TK-N091	FIXTNK	M 12	CASVOCP	100.000000000	8.181323717

WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions
* Sum for TK-N091					
					8.181323717
TK-N093	FIXTNK	M 12	CASVOCP	100.000000000	8.181323717
* Sum for TK-N093					
					8.181323717
TK-N104	FIXTNK	M 03	CASVOCP	100.000000000	78.677585678
* Sum for TK-N104					
					78.677585678
TK-N105	FIXTNK	M 03	CASVOCP	100.000000000	77.056513215
* Sum for TK-N105					
					77.056513215
TK-N107	FIXTNK	M 12	CASVOCP	100.000000000	22.694551558
* Sum for TK-N107					
					22.694551558
TK-N110	FIXTNK	M 03	CASVOCP	100.000000000	152.772835320
TK-N110	FIXTNK	M 03	CASVOCP	100.000000000	40.793155501
* Sum for TK-N110					
					193.565990821
TK-N111	FIXTNK	M 03	CASVOCP	100.000000000	152.772835320
TK-N111	FIXTNK	M 03	CASVOCP	100.000000000	28.240028353
* Sum for TK-N111					
					181.012863673
TK-N112	FIXTNK	M 03	CASVOCP	100.000000000	152.772835320
TK-N112	FIXTNK	M 03	CASVOCP	100.000000000	28.240028353
* Sum for TK-N112					
					181.012863673
TK-N113	FIXTNK	M 03	CASVOCP	100.000000000	152.772835320
TK-N113	FIXTNK	M 03	CASVOCP	100.000000000	176.309950990
* Sum for TK-N113					
					329.082786310
TK-N120	FIXTNK	M 12	CASVOCP	100.000000000	13.705132888
* Sum for TK-N120					
					13.705132888

WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions
TK-N121	FIXTNK	M 12	CASVOCP	100.000000000	13.705132888
* Sum for TK-N121					
					13.705132888
TK-N122	FIXTNK	M 03	CASVOCP	100.000000000	2.452434484
* Sum for TK-N122					
					2.452434484
TK-N126	FIXTNK	M 03	CASVOCP	100.000000000	7.546408650
* Sum for TK-N126					
					7.546408650
TK-N127	FIXTNK	M 12	CASVOCP	100.000000000	88.417235481
* Sum for TK-N127					
					88.417235481
TK-N128	FIXTNK	M 03	CASVOCP	100.000000000	24.958758707
* Sum for TK-N128					
					24.958758707
TK-N129	FIXTNK	M 03	CASVOCP	100.000000000	9.125105119
* Sum for TK-N129					
					9.125105119
TK-N131	FIXTNK	M 12	CASVOCP	100.000000000	38.791187216
* Sum for TK-N131					
					38.791187216
TK-N132	FIXTNK	M 12	CASVOCP	100.000000000	38.791187216
* Sum for TK-N132					
					38.791187216
TK-N135	FIXTNK	M 03	CASVOCP	100.000000000	3.392053429
* Sum for TK-N135					
					3.392053429
TK-N136	FIXTNK	M 03	CASVOCP	100.000000000	5.520058695
* Sum for TK-N136					
					5.520058695
TK-N137	FIXTNK	M 03	CASVOCP	100.000000000	7.384375664
* Sum for TK-N137					

WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions
					7.384375664
TK-N138	FIXTNK	M 12	CASVOCP	100.000000000	38.791187216
* Sum for TK-N138					
					38.791187216
TK-N139	FIXTNK	M 03	CASVOCP	100.000000000	12.017152089
* Sum for TK-N139					
					12.017152089
TK-N140	FIXTNK	M 12	CASVOCP	100.000000000	38.126260469
* Sum for TK-N140					
					38.126260469
TK-N141	FIXTNK	M 12	CASVOCP	100.000000000	38.126260469
* Sum for TK-N141					
					38.126260469
TK-N142	FIXTNK	M 12	CASVOCP	100.000000000	16.053861933
* Sum for TK-N142					
					16.053861933
TK-N143	FIXTNK	M 03	CASVOCP	100.000000000	0.250587343
* Sum for TK-N143					
					0.250587343
TK-N144	FIXTNK	M 03	CASVOCP	100.000000000	7.384375664
* Sum for TK-N144					
					7.384375664
TK-N145	FIXTNK	M 12	CASVOCP	100.000000000	15.778679786
* Sum for TK-N145					
					15.778679786
TK-N146	FIXTNK	M 12	CASVOCP	100.000000000	15.778679786
* Sum for TK-N146					
					15.778679786
TK-N147	FIXTNK	M 03	CASVOCP	100.000000000	3.232660151
* Sum for TK-N147					
					3.232660151

WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions
TK-N148	FIXTNK	M 03	CASVOCP	100.000000000	4.454066669
* Sum for TK-N148					4.454066669
TK-N149	FIXTNK	M 03	CASVOCP	100.000000000	4.454066669
* Sum for TK-N149					4.454066669
TK-N150	FIXTNK	M 03	CASVOCP	100.000000000	81.147697416
* Sum for TK-N150					81.147697416
TK-N152	FIXTNK	M 03	CASVOCP	100.000000000	7.218852252
* Sum for TK-N152					7.218852252
TK-N153	FIXTNK	M 03	CASVOCP	100.000000000	81.147697416
* Sum for TK-N153					81.147697416
TK-N154	FIXTNK	M 03	CASVOCP	100.000000000	133.905882360
* Sum for TK-N154					133.905882360
TK-N155	FIXTNK	M 03	CASVOCP	100.000000000	235.437023390
* Sum for TK-N155					235.437023390
TK-N156	FIXTNK	M 03	CASVOCP	100.000000000	235.437023390
* Sum for TK-N156					235.437023390
TK-N158	FIXTNK	M 03	CASVOCP	100.000000000	32.056070432
* Sum for TK-N158					32.056070432
TK-N159	FIXTNK	M 03	CASVOCP	100.000000000	81.147697416
* Sum for TK-N159					81.147697416
TK-N160	FIXTNK	M 03	CASVOCP	100.000000000	81.147697416
* Sum for TK-N160					81.147697416

WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions
TK-N161	FIXTNK	M 03	CASVOCP	100.000000000	81.147697416
* Sum for TK-N161					81.147697416
TK-N162	FIXTNK	M 03	CASVOCP	100.000000000	81.147697416
* Sum for TK-N162					81.147697416
TK-N163	FIXTNK	M 03	CASVOCP	100.000000000	81.147697416
* Sum for TK-N163					81.147697416
TK-N167	FIXTNK	M 03	CASVOCP	100.000000000	81.147697416
* Sum for TK-N167					81.147697416
TK-N168	FIXTNK	M 03	CASVOCP	100.000000000	81.147697416
* Sum for TK-N168					81.147697416
TK-N169	FIXTNK	M 03	CASVOCP	100.000000000	81.147697416
* Sum for TK-N169					81.147697416
TK-N170	FIXTNK	M 03	CASVOCP	100.000000000	81.147697416
* Sum for TK-N170					81.147697416
TK-N171	FIXTNK	M 03	CASVOCP	100.000000000	81.147697416
* Sum for TK-N171					81.147697416
TK-N176	FIXTNK	M 03	CASVOCP	100.000000000	0.268247093
* Sum for TK-N176					0.268247093
TK-N181	FIXTNK	M 03	CASVOCP	100.000000000	474.802105920
TK-N181	FIXTNK	M 03	CASVOCP	100.000000000	128.131330280
* Sum for TK-N181					

WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions
					602.933436200
TK-N182	FIXTNK	M 03	CASVOCP	100.000000000	474.802105920
* Sum for TK-N182					
					474.802105920
TK-N183	FIXTNK	M 03	CASVOCP	100.000000000	346.361076580
TK-N183	FIXTNK	M 03	CASVOCP	100.000000000	88.978988580
* Sum for TK-N183					
					435.340065160
TK-N184	FIXTNK	M 03	CASVOCP	100.000000000	133.905882360
TK-N184	FIXTNK	M 03	CASVOCP	100.000000000	75.351218545
* Sum for TK-N184					
					209.257100905
TK-N185	FIXTNK	M 03	CASVOCP	100.000000000	133.905882360
TK-N185	FIXTNK	M 03	CASVOCP	100.000000000	75.351218545
* Sum for TK-N185					
					209.257100905
TK-N186	FIXTNK	M 03	CASVOCP	100.000000000	0.231641447
* Sum for TK-N186					
					0.231641447
TK-N187	FIXTNK	M 03	CASVOCP	100.000000000	18.778703644
* Sum for TK-N187					
					18.778703644
TK-N188	FIXTNK	M 03	CASVOCP	100.000000000	18.778703644
* Sum for TK-N188					
					18.778703644
TK-N189	FIXTNK	M 03	CASVOCP	100.000000000	18.778703644
* Sum for TK-N189					
					18.778703644
TK-N190	FIXTNK	M 03	CASVOCP	100.000000000	0.442217697
* Sum for TK-N190					
					0.442217697
TK-N191	FIXTNK	M 03	CASVOCP	100.000000000	0.071731962
* Sum for TK-N191					

WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions
					0.071731962
TK-N192	FIXTNK	M 03	CASVOCP	100.000000000	0.071731962
* Sum for TK-N192					
					0.071731962
TK-N193	FIXTNK	M 03	CASVOCP	100.000000000	0.071731962
* Sum for TK-N193					
					0.071731962
TK-N194	FIXTNK	M 03	CASVOCP	100.000000000	0.071731962
* Sum for TK-N194					
					0.071731962
TK-N195	FIXTNK	M 03	CASVOCP	100.000000000	0.442217697
* Sum for TK-N195					
					0.442217697
TK-N196	FIXTNK	M 03	CASVOCP	100.000000000	474.802105920
* Sum for TK-N196					
					474.802105920
TK-N197	FIXTNK	M 12	CASVOCP	100.000000000	137.808961440
* Sum for TK-N197					
					137.808961440
TK-P074	FIXTNK	M 12	CASVOCP	100.000000000	121.311884790
* Sum for TK-P074					
					121.311884790
TK-R008	FIXTNK	M 03	CASVOCP	100.000000000	18.236170578
TK-R008	FIXTNK	M 03	CASVOCP	100.000000000	9.020400441
* Sum for TK-R008					
					27.256571019
TK-RR031	FIXTNK	TSTREAM 34	CASVOCP	100.000000000	12.195160315
TK-RR031	FIXTNK	TSTREAM 34	CASVOCP	100.000000000	5.078096097
* Sum for TK-RR031					
					17.273256412
TK-RR032	FIXTNK	TSTREAM 34	CASVOCP	100.000000000	12.195160315
TK-RR032	FIXTNK	TSTREAM 34	CASVOCP	100.000000000	5.078096097

WRMC TANK CASVOCP EMISSIONS - QA

Tank Number	Tank Type	Material ID	Chemical No.	Chemical %	Annual Avg. Emissions
* Sum for TK-RR032					
					17.273256412
					1769513.598743983

1,786,73[illegible]
VOCP
and 124 VO[illegible]