VENTURA COUNTY
AIR POLLUTION CONTROL DISTRICT

4567 Telephone Road
Ventura, CA 93003
805/303-4005

PART 70 PERMIT

Number 00041

Permit Term: April 1, 2022 to March 31, 2024

Company Name / Address:
Aera Energy LLC
3382 North Ventura Avenue
Ventura, CA 93001-1237

Facility Name / Address:
Ventura Avenue Oilfield
3382 North Ventura Avenue
Ventura, CA 93001-1237

Responsible Official:
Mr. Brent Ilott, Vice President
661/665-5306
Ms. Erin N. Larner, Manager of Operations
805/648-8438
3382 North Ventura Avenue
Ventura, CA 93001-1237

Title V Contact:
Mr. Christopher R. Logan
Environmental Advisor
3382 North Ventura Avenue
Ventura, CA 93001-1237
805/648-8207

The Part 70 permit consists of this page and the tables, attachments and conditions listed in the attached table of contents. The Part 70 permit application is included for reference only and is not a part of the Part 70 permit.

Pursuant to Rule 33.1, the Part 70 permit shall also serve as a permit to operate issued to fulfill the requirements of Rule 10.B.

Ali R. Ghasemi
Interim Air Pollution Control Officer

December 5, 2022

PART 70 PERMIT NO. 00041
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00041-641	04/12/2001	Well Replacement / Minor Part 70 Permit Modification (Revision also includes corrections to Oil Well List)	• Signature Cover Page • Revisions Table • Oil Well List • Attachment PO0041PC1

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00041-989	01/24/08	Well Replacements / Minor Part 70 Permit Modification	• Signature Cover Page • Permit Revisions Table • Oil Well List • Attachment PO00041PC1
00041-986 00041-997	06/04/08	986: Part 70 Reissuance Application 997: Solids Processing System	See "Permit Summary and Statement of Basis"
00041-961 00041-963 00041-973 00041-975 00041-977 00041-993 00041-1071 00041-1081 00041-1121	05/27/09	Well and Tank Replacements / Minor Part 70 Permit Modifications Administrative Amendment to change a Responsible Official and the Title V Contact	• Signature Cover Page • Permit Revisions Table • Table No. 2 • Table No. 3 • Table No. 4 • Oil Well List • Attachment PO00041PC1

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1.b. PERMIT SUMMARY AND STATEMENT OF BASIS

Stationary Source Description

This stationary source is a crude oil and natural gas production and processing facility. The stationary source is located north of the city of Ventura, and includes properties on both sides of the Ventura River and Highway 33. This source has a Standard Industrial Classification (SIC) Code of 1311, Crude Petroleum and Natural Gas. The source operates various oil production and processing equipment, including wells, oil storage tanks, oil and water processing tanks, LACT tanks, pits, sumps, oil loading facilities, process heaters, flares, glycol dehydration systems, a filter agent storage silo, and solvent wipe cleaning operations. The oil processing operations are separated into two separate entities: "Central Field" and "East Field". Although there is an oil loading facility (Lloyd Tank Farm - East Field), the current practice is to ship all oil off the stationary source via pipeline. The permittee operates seven engines that burn produced field gas to operate compressors throughout the oil field. (As noted in the permit, three of these engines are designated "out of service" and are disconnected from fuel supply.) This stationary source is subject to the Part 70 permit program based upon the potential to emit reactive organic compounds (ROC), nitrogen oxides (NOx), and carbon monoxide (CO).

As discussed in more detail throughout this Permit Summary and Statement of Basis, this permit applies to emissions units that are required to have a permit to operate pursuant to District Rule 10, "Permits Required", and District Rule 23, "Exemptions from Permit". These emissions units are listed in Table No. 2 in Section No. 2 of this permit. However, as discussed below, some equipment that is exempt from permit pursuant to District Rule 23, "Exemptions from Permit", may be subject to District rules such as District Rule 50, "Opacity". This includes "Insignificant Activities" as listed in Section No. 6 of the permit. In addition, "Short Term Activities" as listed in Section No. 10 of the permit are subject to certain rules and regulations. This permit does not regulate or restrict the use of motor vehicles and mobile equipment such as cars, trucks, bulldozers, and forklifts, however, any smoke or dust emissions generated from the use of such equipment is subject to District Rule 50, "Opacity". This permit does not shield the permittee from complying with any Federal, State, or District rule or regulation that is not specifically addressed in the permit or any rule or regulation that may come into effect during the term of the permit.

Stationary Source Emissions

In Ventura County, the Part 70 permit thresholds are 50 tons per year for ROC and NOx and 100 tons per year for PM, SOx, and CO, pursuant to Rule 33.B.2 and Ventura County's "Serious" nonattainment classification with the federal ozone standard. This stationary source is subject to the Part 70 permit program based upon the potential to emit reactive organic compounds (ROC) and carbon monoxide (CO) in excess of these thresholds as shown in Table No. 4 in Section No. 4 of this Permit to Operate. Oxides of nitrogen (NOx) emissions will most likely also exceed the 50 tons per year potential to emit threshold when the insignificant activities are included. The purpose of Table No. 4 is to document the permitted emissions of the criteria pollutants ROC, NOx, PM, SOx, and CO for this stationary source. District Rule 29, "Conditions on Permits", requires permitted emissions to be included on each Permit to Operate. District Rule 29 requires

that annual permitted emissions be based on a 12 calendar month rolling period and be expressed in units of tons per year. Hourly permitted emissions are required to be expressed in units of pounds per hour. Permitted emissions for a stationary source are required to be determined by aggregating the permitted emissions for each emissions unit at the stationary source.

Criteria pollutant emissions (ROC, NOx, PM, SOx, and CO) result from the combustion of natural gas in the engines, heaters, and glycol reboilers, waste gas in the flares, and diesel fuel in the emergency engines. Reactive Organic Compound (ROC) emissions result from the tanks, pits, loading racks, and the glycol dehydrators.

This stationary source is not a major source of federal Hazardous Air Pollutants (HAPs). The source is well below the HAP major source levels of 10 tons per year of a single HAP or 25 tons per year of combined HAPs. The Part 70 Permit re-issuance application includes a summary (in the units of pounds per year and pounds per hour) of pollutants that are subject to the State of California AB2588 Air Toxics "Hot Spot" Program. The goal of the Air Toxics "Hot Spots" Information and Assessment Act of 1987 (California Health and Safety Code Section 44300) is to collect air toxics emission data, to identify facilities having localized adverse health impacts, to ascertain health risks, to notify nearby workers and residents of significant risks, and to reduce significant risks if they exist. Under state law, motor vehicles (on-road and off-road) are not subject to the "Hot Spots" program. This facility has been subject to the "Hot Spots" program since 1989. Based on the quantity of toxic air contaminants released from the facility as determined by source testing, material balance calculations, and other engineering estimates, the potency and toxicity of materials released, and the proximity to sensitive receptors, this facility has been classified as "intermediate level". As an intermediate level facility, the stationary source is required to submit an AB2588 Toxics Report/Survey every four years. Some submittals do not require a detailed report. The most recent detailed report was submitted to the District on November 9, 2020for the calendar year 2019.

The United States EPA has added greenhouse gases (GHGs) to the list of regulated air pollutants. As of January 2, 2011, EPA has required that GHGs be calculated for each Title V stationary source and included in the Part 70 Permit. However, in a Federal Register notice dated August 19, 2015, EPA ruled that GHG emissions alone cannot be used to determine Title V applicability. This ruling was based on the U.S. Supreme Court decision of June 23, 2015. Greenhouse gases are defined as the aggregate group of six greenhouse gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons (by category), perfluorocarbons (by category), and sulfur hexafluoride. CO_{2e} is the amount of greenhouse gases emitted relative to the global warming potential of each pollutant.

The Part 70 Permit Reissuance application includes greenhouse gas potential to emit calculations with a total CO_{2e} potential to emit of 49,301 tons per year. The District has calculated a CO_{2e} potential to emit for the stationary source to be 44,383.51 tons per year. The District's potential to emit is based on the permitted annual combustion and operational (hours per year) limits listed in Table No. 3 of the permit. The District has used emission factors of 10.14 kg CO_{2e}/gallon diesel (22.33 lb CO_{2e}/gallon diesel) and 53.02 kg CO_{2e}/MMBTU natural gas (116.78 lb CO_{2e}/MMBTU natural gas) from the *Regulation For The Mandatory Reporting of Greenhouse Gas Emissions*, California Code of Regulations, title 17, Subchapter 10, Article 2, sections 95100

to 95133; Appendix A, Table 4. This CO2e potential to emit does not include insignificant activities or equipment exempt from permit pursuant to Rule 23, "Exemptions From Permit". Note that the emissions of greenhouse gases are not subject to Rule 42, "Permit Fees," and are not included in Table No. 4, "Permitted Emissions."

Starting in 2012, major GHG-emitting sources, such as electricity generation, and large stationary sources that emit more than 25,000 metric tons of carbon dioxide equivalent ($MTCO_2e$) per year were required to comply with the California Air Resources Board GHG Cap-and-Trade Program. This program is regulated and implemented by the California Air Resources Board (CARB), and not the District. A list of these GHG Cap-and-Trade sources can be found on CARB's website.

Compliance History

Upon reissuance of this Part 70 permit, the facility was determined to be in compliance with all applicable requirements. For the nine year time period January 1, 2013 to December 10, 2021, the facility received four (4) Notices of Violation (NOV) as detailed in the "NOV by Facility" history for Facility No. 00041 located at the end of this section of the Part 70 permit.

Equipment Description and Applicable Requirements - General

Applicable requirements for this stationary source are listed throughout the permit. The Table of Contents in the front of the permit summarizes the applicable requirements including the equipment specific requirements, the general applicable requirements, and the applicable requirements for short-term activities. Table No. 2 in Section No. 2 of this Permit to Operate details the applicable requirements for specific emissions units at the facility. Permit conditions that enforce these requirements are listed in Section No. 7, "Specific Applicable Requirements" and Section No. 8, "Permit Specific Conditions" of this permit.

In addition to the emission unit specific requirements in Section No. 7 and Section No. 8, there are additional general requirements that may apply to the emissions units listed in this table, or to the stationary source as a whole. Furthermore, some general requirements may apply to emissions units or short-term activities not required to be specifically listed on the permit. These general requirements are contained in the following sections of the Permit: Section No. 9, "General Applicable Requirements"; Section No. 10, "General Requirements for Short-Term Activities"; Section No. 11, "General Permit Conditions"; and Section No. 12, "Miscellaneous Federal Program Conditions". A detailed applicability discussion and additional legal basis for the permit condition(s) is included with each attachment or set of permit conditions.

Equipment Description and Applicable Requirements - Specific

The crude oil tanks and other processing tanks at this facility are subject to Rule 71.1, "Crude Oil Production and Separation". All of the stationary tanks are equipped with vapor recovery for Rule 71.1 compliance. There are also portable tanks included on the permit that are exempt from vapor recovery requirements pursuant to Rule 71.1.D.1.c. The crude oil loading rack is subject to Rule 71.3, "Transfer of Reactive Organic Compound Liquids". The pits and sumps are

subject to Rule 71.4, “Petroleum Sumps, Pits, Ponds and Well Cellars”. The facility includes pit(s) equipped with a cover as required by the rule; and pit(s) exempt from the cover requirements based on the exemptions for “emergency use” or an ROC content of less than 5 milligrams per liter. The glycol dehydrator systems are subject to Rule 71.5, “Glycol Dehydrators”. The glycol dehydrator is exempt and shielded from the requirements of 40 CFR Part 63, Subpart HH, “National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities”.

There are seven natural gas fired engines on permit and all of them are subject to Rule 74.9, “Stationary Internal Combustion Engines”. Two of the units are rich burn engines that are equipped with non selective catalytic reduction (NSCR) systems to comply with the NOx, ROC, and CO emission limits of Rule 74.9. The two rich burn engines are also subject to the monitoring requirements of 40 CFR Part 64, “Compliance Assurance Monitoring”, (CAM) and are required to monitor the NOx emissions on a daily basis with a portable analyzer. Five of the seven engines are lean burn engines that are subject to NOx, ROC, and CO emission limits of Rule 74.9. These lean burn engines are not subject to CAM as the lean burn technology is a combustion design feature that is not considered to be a control device as defined in 40 CFR Part 64. (As noted in the permit, three of the seven engines are designated “out of service” and are disconnected from fuel supply. The remaining active engines are lean burn units.) The natural gas fired engines are also subject to 40 CFR Part 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE MACT). The engines qualify as “remote” engines; and therefore, are not subject to any emission limits. The engines are required to conduct oil changes and other maintenance every 2,160 hours of operation or annually.

The stationary source includes two diesel-fired emergency electricity generating engines. (As noted in the permit, one unit is designated “out of service” and is disconnected from fuel supply.) The engines are subject to the California Air Toxic Control Measure for Stationary Compression Ignition Engines; but there are no applicable emissions standards since they are emergency use only and are limited to twenty hours of operation per year for maintenance and readiness testing. The emergency engines are exempt from Rule 74.9, “Stationary Internal Combustion Engines”. The diesel-fired emergency engines are also subject to 40 CFR Part 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE MACT). The emergency engines are not subject to any emission limits; but are subject to oil change and other maintenance requirements.

The engines at this stationary source are not subject to 40 CFR, Part 60, Subpart IIII, “Standards of Performance for Stationary Compression Ignition Internal Combustion Engines”, or 40 CFR, Part 60, Subpart JJJJ, “Standards of Performance for Stationary Spark Ignition Internal Combustion Engines”, because the engines at the stationary source were in operation prior to July 11, 2005 and June 12, 2006, respectively.

There are two process heaters at Gas Plant No. 7. They are subject to Rule 74.15, “Boilers, Steam Generators, and Process Heaters”. The BYIS Manufacturing 8.0 MMBTU/hr unit is equipped with a low NOx burner and is required to meet a 12 ppm NOx limit for BACT compliance. The Wheco 14.25 MMBTU/hr unit is equipped with a low NOx burner and

automatic oxygen control systems to comply with the 40 ppmv NOx for Rule 74.15 compliance. Both units are required to demonstrate compliance with a 400 ppmv CO limit pursuant to Rule 74.15. Rule 74.15 requires that both units meet the Rule 74.15.B.2 NOx limit for process heaters of 12 ppm by January 1, 2027, or upon resuming operation after the units are modified, whichever comes first, and demonstrate compliance within 6 months. (As noted in the permit, the Wheco 14.25 MMBTU/hr is designated "out of service" and is not subject to these requirements.)

The stationary source is subject to the fugitive leak and inspection requirements of Rule 74.10, "Components at Crude Oil and Natural Gas Production and Processing Facilities".

This stationary source is subject to 40 CFR Part 68, "Chemical Accident Prevention Provisions". Federal Risk Management Plans for Gas Plant No. 6 and Gas Plant No. 7 have been submitted to the Ventura County Environmental Health Department. Butane is regulated substance for both plants.

The stationary source is subject to 40 CFR Part 60, Subpart OOOO, "Standards of Performance (NSPS) for Crude Oil and Natural Gas Production, Transmission, and Distribution".

The stationary source is subject to California Code of Regulations, Sections 95665 to 95677, Greenhouse Gas Emission Starndards for Crude Oil and Natural Gas Facilities.

Permit Revisions Summary

The Permit Revisions Table (located in Section No. 1 of the permit) is a list of all permit revisions since Part 70 Permit No. 00041 was initially issued on April 1, 1998. A portion of the permit revisions are described in further detail below. The District's Engineering Analysis for each application can also be consulted for further details.

Application No. 00041-731: Application No. 00041-731 is for the reissuance of Part 70 Permit No. 00041 for the period April 1, 2003 to March 31, 2008. The following items summarize the changes from the initial Part 70 Permit No. 00041 (April 1, 1998 to March 31, 2003):

- The permit includes the equipment modifications requested in Application No. 00041-691 which was submitted on August 30, 2001. The application requested the shutdown of many emissions units.
- The permit includes the modifications to the Gas Plant No. 7 Wheco Heater No. 2 oxygen trim set points pursuant to Application No. 00041-721. This application was submitted on May 1, 2002 and deemed complete on May 29, 2002.
- This "Stationary Source Description" has been added to the permit. It was not included in the initial Part 70 Permit No. 00041.
- A "Periodic Monitoring Summary" (Section No. 1) has been added to the permit.
- A number of oil wells have been replaced. The total number of oil wells on the permit remains at 856 wells.

- Many emission units have been removed from the permit.
- The Rule 74.9 attachment for the rich burn engines has been updated to reflect the January 1, 2002 NOx emission limit (for engines that had emission controls installed between September 5, 1989 and March 5, 1992) that was reduced from 50 ppmv NOx to 25 ppmv NOx. The two 748 BHP Waukesha engines at Compressor Plant No. 2 are subject to this emission limit change. The Rule 74.9 rich burn engine attachment was also modified to include requirements for 40 CFR, Part 64, "Compliance Assurance Monitoring" (CAM), that applies to all four rich burn engines.
- The Rule 74.9 attachment for the lean burn engines has been updated to reflect the January 1, 2002 NOx emission limit (for engines that had emission controls installed between September 5, 1989 and March 5, 1992) that was reduced from 125 ppmv NOx to 45 ppmv NOx. The two 616 BHP Waukesha engines at Gas Plant No. 2 are subject to this emission limit change.
- A Rule 74.9 attachment for emergency engines has been added to the permit.
- A Rule 74.6.1, "Cold Cleaners", attachment for remote reservoir cold cleaners has been added to the permit.
- A permit attachment detailing the applicable requirements of Rule 74.11.1, "Large Water Heaters and Small Boilers", has been added to the permit.
- The permit attachment detailing the requirements of 40 CFR Part 68, "Chemical Accident Prevention Provisions", has been updated to reflect that Aera Energy LLC has submitted Risk Management Plans to the Ventura County Environmental Health Department.
- The following District rules have been revised and/or revisions of the rule have been adopted into the State Implementation Plan (SIP) since the initial issuance of Part 70 Permit No. 00041:
  a) Rule 54, "Sulfur Compounds"
  b) Rule 57, "Combustion Contaminants – Specific"
  c) Rule 64, "Sulfur Content of Fuels"
  d) Rule 68, "Carbon Monoxide"
  e) Rule 74.1, "Abrasive Blasting"
  f) Rule 74.2, "Architectural Coatings"
  g) Rule 74.6, "Surface Cleaning and Degreasing"
  h) Rule 74.9, "Stationary Internal Combustion Engines"
  i) Rule 74.10, "Components at Crude Oil and Natural Gas Production and Processing Facilities"
  j) Rule 74.16, "Oilfield Drilling Operations"
  k) Rule 74.29, "Soil Decontamination Operations"

Application No. 00041-986: Application No. 00041-986 is for the reissuance of Part 70 Permit No. 00041 for the period June 4, 2008 to March 31, 2013. The following items summarize the changes due to this reissuance application:

- Signature Cover Page revisions: The Responsible Official address has been changed to a Bakersfield, CA address.

- Application No. 00041-997 to permit the expansion of the solids dewatering system pursuant to Authority to Construct No. 00041-996 is being processed with the reissuance application. There are changes to the equipment list and additional permit condition attachments: Attachment 71.4N1 and Attachment PO00041PC14.
- Attachment 74.6 has been removed from the Specific Applicable Requirements section of the permit because specific wipecleaning operations are no longer listed on the permit.
- A permit shield for the engines from 40 CFR, Part 60, Subpart IIII; 40 CFR, Part 60, Subpart JJJJ; and 40 CFR Part 63, Subpart ZZZZ has been added to the permit.
- The following District rules have been revised and/or revisions of the rule have been adopted into the State Implementation Plan (SIP) since the last permit revision of Part 70 Permit No. 00041:
  a) Rule 50, "Opacity"
  b) Rule 57.1, "Particulate Matter Emissions From Fuel Burning Equipment"
  c) Rule 74.2, "Architectural Coatings"
  d) Rule 74.6, "Surface Cleaning and Degreasing"
  e) California Airborne Toxic Control Measure (ATCM) For Stationary Compression Ignition Engines

Application No. 00041-1431: Application No. 00041-1431 is for the reissuance of Part 70 Permit No. 00041 for the five-year term ending March 31, 2019. This permit also includes Application No. 00041-1311 for a produced water tank replacement; Application No. 00041-1471 for a tank removal and Out of Service tanks; and Application Nos. 00041-1264, 00041-1451, 00041-1491, 00041-1492, 00041-1521, and 00041-1522 for oil well replacements. The following items summarize the changes due to this reissuance application:

- The permit summary and statement of basis includes an estimate of the Greenhouse Gas emissions from the stationary source.
- The carbon monoxide (CO) permitted emissions for the two Gas Plant No. 7 heaters have been increased to the equivalent of 400 ppm CO concentration, which is the federally enforceable limit for the units.
- An Attachment for Rule 55, "Fugitive Dust", has been added to the permit.
- Attachments for 40 CFR Part 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE MACT) have been added to the permit.
- The permit shield for the engines from 40 CFR, Part 60, Subpart IIII and 40 CFR, Part 60, Subpart JJJJ no longer includes 40 CFR Part 63, Subpart ZZZZ (RICE MACT).
- The attachment(s) for Rule 74.9, "Stationary Internal Combustion Engines", include District approved methods for measuring the HHV of the fuel.
- Permit conditions for the flares have been revised to reflect that emergency flares are no longer exempt from permit (Rule 23.A.4).
- An attachment for 40 CFR Part 60, Subpart OOOO, Standards of Performance (NSPS) for Crude Oil and Natural Gas Production, Transmission, and Distribution has been added to the permit.

- A permit shield attachment for 40 CFR Part 63, Subpart HH, National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities has been added to the permit.
- The following District rules have been revised and/or revisions of the rule have been adopted into the State Implementation Plan (SIP) since the last permit revision of Part 70 Permit No. 00041:

  a) Rule 54, "Sulfur Compounds"
  b) Rule 74.2, "Architectural Coatings"
  c) Rule 74.9, "Stationary Internal Combustion Engines"
  d) Rule 74.11.1, "Large Water Heaters and Small Boilers"
  e) Rule 74.29, "Soil Decontamination Operations"

Application No. 00041-1691: Application No. 00041-1691 is for the reissuance of Part 70 Permit No. 00041 for the five-year term ending March 31, 2024. This permit also includes Application No. 00041-1701 for the removal of emissions units (two 625 BHP Rich Burn NG Engines at Waterflood Plant No. 1); and Application No. 00041-1721 for the removal of emissions units at the Lloyd Water Treating Plant and a Responsible Official change. The following items summarize the changes due to this reissuance application:

- An attachment for 40 CFR Part 60, Subpart OOOOa, Standards of Performance (NSPS) for Crude Oil and Natural Gas Production, Transmission, and Distribution has been added to the permit.
- An attachment for California Code of Regulations, Sections 95665 to 95677, Greenhouse Gas Emission Starndards for Crude Oil and Natural Gas Facilities has been added to the permit.
- 1,000 BBL Backwash Tank (T-103) at Waterflood Plant No. 4 has been added to the permit. The tank was previously categorized as exempt (< 5 mg/l ROC content). The permitted emissions are 0.02 tpy ROC and < 0.01 lb/hr ROC. Emission Reduction Credits in the amount of 0.03 tpy ROC (1.3:1 tradeoff ratio) have been used from ERC Certificate No. 1058.
- Pursuant to Application Nos. 00041-1701 and 00041-1721, emissions units have been removed from the permit. Associated applicable requirements and permitted emissions have been removed from the permit. See the Engineering analyses for these applications for details.
- An "Out of Service" permit condition was added to Attachment PO00041PC8 for the Lloyd Water Treating Plant Emergency Wastewater Pit (Emergency Bowl)
- The following District rules have been revised; revisions of the rule have been adopted into the State Implementation Plan (SIP); and/or "routine surveillance" language has been removed from the attachment since the last permit revision of Part 70 Permit No. 00041:

  a) Rule 50, "Opacity" (Removed "routine surveilance" language)
  b) Rule 54, "Sulfur Compounds" (Rule has been adopted into SIP)

c) Rule 71, “Crude Oil and Reactive Organic Compound Liquids (revised rule)
d) Rule 74.1, “Abrasive Blasting” (Removed “routine surveillance” language)
e) Rule 74.2, “Architectural Coatings” (Revised rule)
f) Rule 74.6, “Surface Cleaning and Degreasing” (Revised rule)
g) Rule 74.11.1. “Large Water Heaters and Small Boilers” (Rule has been adopted in SIP)
h) Rule 74.15, “Boilers, Steam Generators, and Process Heaters” (Rule revision)
i) Rule 74.26, “Crude Oil Storage Tank Degassing Operations” (Removed “routine surveillance” language)
j) Rule 74.29, “Soil Decontamination Operations” (Removed “routine surveillance” language)
k) 40 CFR Part 63, Subpart ZZZZ, NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE MACT)

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NOV by Facility

Since January 1, 2013

Facility selected

00041

Facility No 00041 Aera Energy LLC

NOV Date	NOV No	Rule Number	Comment	Settlement	Date Closed
02/19/2013	22650	071.1.B.1.a	Improper Vapor Recovery System - Vapor Recovery System	$5,000.00	03/29/2013
05/28/2013	23208	074.10	Exceeding Leak Rate Threshold - Oilfield Components	$5,500.00	07/08/2013
02/04/2014	22887	074.26.B.1.a	Failure To Use Vapor Recovery Recovery - Degassing	$4,000.00	03/17/2014
05/28/2020	24259	029.C	ICIS AIR #CAVCAA82276 Failing to perform the required maintenance on Engine C-201 within the specified time interval of 2160 hours	$5,000.00	07/06/2020
Total for 4 NOVs				$19,500.00	

1.c. PERIODIC MONITORING SUMMARY

This periodic monitoring summary is intended to aid the permittee in quickly identifying key monitoring, recordkeeping, and reporting requirements. It is not intended to be used as a "stand alone" monitoring guidance document that completely satisfies the requirements specifically applicable to this facility. The following tables are included in the periodic monitoring summary:

- Table 1.c.1 - Specific Applicable Requirements
- Table 1.c.2 - Permit-Specific Conditions
- Table 1.c.3 - General Applicable Requirements
- Table 1.c.4 - General Requirements for Short-Term Activities

1.c.1. Specific Applicable Requirements

The Specific Applicable Requirements Table includes a summary of the monitoring requirements, recordkeeping requirements, reporting requirements, and test methods associated with the attachments contained in Section No. 7 of this permit.

Attachment No./ Condition No.	Applicable Rule or Requirement	Monitoring	Recordkeeping	Semi-annual Reports	Test Methods	Comments
71.1N1	Rules 71.1.B.1.a, 74.10	•Quarterly inspection of the following components for proper operation: gas compressor, hatches, relief valves, pressure regulators, flare, as applicable •Notice of maintenance activities •Rule 74.10 inspections •Annual compliance certification including verification that tanks are equipped with a vapor recovery system	•Records of quarterly inspections and tank maintenance activities •Rule 74.10 records	None	None	
71.1N6	Rules 71.1.B.3, 71.1.D.1.c, 74.10	•Annual compliance certification including verification of the integrity of the roof and pressure-vacuum relief valve	•Records of number of days the tank has stored or held crude oil during the maintenance operation, location of the tank relative to a tank battery, and whether tank was connected to vapor recovery	None	None	

1.c.1. Specific Applicable Requirements (Continued)

Attachment No./ Condition No.	Applicable Rule or Requirement	Monitoring	Recordkeeping	Semi-annual Reports	Test Methods	Comments
71.4N1	Rule 71.4.B.2 and 74.10	•Notice of maintenance operations •Rule 74.10 inspections •Annual compliance certification including verifying the integrity of the cover	•Records of maintenance •Rule 74.10 records	None	None	
71.5N1	Rules 71.5.B.1.a.1, 71.5.B.2, 71.5.B.3, 71, 71.1, and 74.10	•Rule 74.10 inspections •Annual compliance certification including visual inspection to ensure system is closed and leak free	•Records of visual inspections •Records of current glycol dehydrator information •Rule 74.10 records	None	Gas Leak - EPA Method 21, Appendix A	
74.9N3-00041(CAM)	Rules 74.9.B.1, B.2 and 40 CFR Part 64 (CAM)	•Quarterly screening analysis •Biennial source test (ROC, NOx, CO) •Annual compliance certification •Daily measure NOx concentration with portable analyzer (CAM)	•Records of inspections •Records of maintenance •Records of daily portable NOx analyzer readings (ppmvd at 15% oxygen), time of measurement, excursions noted, corrective actions noted (CAM)	•Actual annual usage •Summary of maintenance and testing •Biennial Source Test Report •Number, duration, and cause of CAM excursions and corrective action taken	•ROC-EPA Method 25 or EPA Method 18 •NO_x-ARB Method 100 •CO-ARB Method 100	
74.9N4	Rules 74.9.B.1 74.9.B.2, and 74.9.B.5	•Quarterly screening analysis •Biennial source test (ROC, NOx, CO) •Annual compliance certification	•Records of inspections •Records of maintenance	•Actual annual usage •Summary of maintenance and testing •Biennial Source Test Report	•ROC-EPA Method 25 or EPA Method 18 •NO_x-ARB Method 100 •CO-ARB Method 100 •NH_3 – BAAQMD Method ST-1B	
74.9N7	Rule 74.9.D.3	•Annual compliance certification •Hours of operation	•Records of operating hours •Date, time, duration, and reason for emergency operation •Records of engine data	None	None	
74.15N1	Rule 74.15.B.1	•Annual compliance certification •Biennial Source Test (NO_x, CO)	•Records of source tests •Daily records of alternate fuel consumption	None	•NO_x-ARB Method 100 •CO-ARB Method 100	
ATCM Engine N2	ATCM for Stationary Compression Ignition Engines	•Hours of operation records for maintenance and testing •Fuel type records	•Hours of operation records for maintenance and testing •Fuel type records	None	None	Not Federally Enforceable

1.c.1. Specific Applicable Requirements (Continued)

40CFR63ZZZZN3	RICE MACT for emergency diesel engines – oil change and inspections	•Maintenance records •Annual compliance certification	•Maintenance records •Hours of operation records	None	None	
40CFR63ZZZZN7	RICE MACT for non-emergency spark ignited REMOTE engines – oil change and inspections	•Maintenance records •Annual compliance certification	•Maintenance records	None	None	

1.c.2. Permit-Specific Conditions

The Permit-Specific Conditions Table includes a summary of the monitoring requirements, recordkeeping requirements, reporting requirements, and test methods associated with the attachments contained in Section No. 8 of this permit.

Attachment No./ Condition No.	Applicable Rule or Requirement	Monitoring	Recordkeeping	Semi-annual Reports	Test Methods	Comments
PO00041PC1 - Condition No. 1	Rules 26 and 29 General Recordkeeping	•Annual compliance certification •Monthly records of throughput and consumption	•Monthly records	None	None	
PO00041PC1 - Condition No. 2	Rule 26 Natural Gas Only	•Annual compliance certification	None	None	None	
PO00041PC1 - Condition No. 3	Rule 29 Maximum Number of Oil Wells	•Annual compliance certification	None	None	None	
PO00041PC1 - Condition No. 4	Rule 26 Oil Well BACT Requirements	•Annual compliance certification	None	None	None	
PO00041PC1 - Condition No.5	Rule 29 Exempt Solvents	•Maintain a list of solvents in use and permit exemption status	None	None	None	
PO00041PC2 - Condition Nos. 1, 2, and 5	Rule 26 Flare Fuel Consumption	•Fuel consumption •Identify emergency vs. non-emergency usage •Annual compliance certification	•Monthly records of fuel consumption	None	None	
PO00041PC2 - Condition Nos. 3 and 4	Rules 71.1 and 71.3 Flare Ignition System Operation	•Monthly tests of flare's ignition system •Annual compliance certification	•Records of ignition system •Maintenance records	None	None	
PO00041PC3 - Condition Nos. 1 and 2	Rule 26 Annual fuel consumption	•Fuel consumption •Annual compliance certification	•Monthly records of fuel consumption	None	None	
PO00041PC3 – Condition No. 3	Rules 26 and 74.15 BYIS Oil Heater Emission Limits	•Biennial source test (NOx & CO) •Annual compliance certification	•Records of source tests	None	•NO_x-ARB Method 100 •CO - ARB Method 100	
PO00041PC3 – Condition No. 4	Rule 26 BYIS Oil Heater natural gas only	•Annual compliance certification	•Fuel use records	None	None	

1.c.2. Permit-Specific Conditions (Continued)

Attachment No./ Condition No.	Applicable Rule or Requirement	Monitoring	Recordkeeping	Semi-annual Reports	Test Methods	Comments
PO00041PC4 - Condition No. 1	Rule 74.9 Compressor Engine Air to Fuel Ratio Controllers	•Annual compliance certification	None	None	None	
PO00041PC4 - Condition No. 2	Rule 26 Compressor Engine Fuel Consumption	•Annual compliance certification •Amount of fuel consumed	•Fuel consumption records	None	None	
PO00041PC4 Condition No. 3	Rule 29 2500 ppm CO limit at engines	•Quarterly screening analysis •Biennial source test (CO) •Annual compliance certification	•Records of screenings and source tests	None	•CO-ARB Method 100	
PO00041PC5	Rule 26 Portable Mixing Bin Operations	•Annual compliance certification •Hourly usage	•Monthly records of hourly usage per day	None	None	
PO00041PC8	Rule 26 Use of emergency pit	•Annual certification	•Records of pit use. Records not required if certifying Out of Service	•Records of pit use. Records not required if certifying Out of Service	None	
PO00041PC9	Rule 26 Grid Power Requirements	•Annual compliance certification to ensure compressors are powered by grid electricity	None	None	None	
PO00041PC11	Rule 26 LPG Loading Facility	•Annual compliance certification to ensure proper maintenance and operation of the vapor recovery system and the nitrogen purge system	None	None	None	
PO00041PC12	Rule 26 Filter Agent Storage Silos	•Annual compliance certification to ensure proper operation and maintenance of the dust filters	•Records of any maintenance performed on the dust filters	None	None	
PO00041PC13	Rule 29 Out of Service Emissions Units	•Annual compliance certification	None	None	None	
PO00041PC14	Rules 26, 71.1, 71.4	•Monthly throughput records •Annual compliance certification to ensure compliance with Permit Conditions 2 - 6	•Monthly records	None	None	
PO00041PC15	Rule 26 Emergency / Standby / Blowdown Tanks	•Used as secondary containment emergency containment only •Remove fluids after each event •Monthly inspection •Maintain inspection log	•Maintain inspection log	None	None	
PO00041PC16	Rule 26 Water pumping at Waterflood Plant No. 1 powered by grid electricity	•Annual compliance certification	None	None	None	

1.c.3. General Applicable Requirements

The General Applicable Requirements Table includes a summary of the monitoring requirements, recordkeeping requirements, reporting requirements, and test methods associated with the attachments contained in Section No. 9 of this permit.

Attachment No./ Condition No.	Applicable Rule or Requirement	Monitoring	Recordkeeping	Semi-annual Reports	Test Methods	Comments
50	Rule 50	•Visual inspections •Annual compliance certification, including a formal survey •Opacity readings upon request •Notification required for uncorrectable visible emissions	•All occurrences of visible emissions for periods>3min in any one hour •Annual formal survey of all emissions units	None	•Opacity - EPA Method 9	
54.B.1	Rule 54.B.1	•Annual compliance certification •Follow monitoring requirements under Rule 64 •Upon request, source test for sulfur compounds at point of discharge	None	None	•Sulfur Compounds - EPA Test Method 6, 6A, 6C, 8, 15, 16A,16B, or SCAQMD Method 307-94, as appropriate	•Compliance with Rule 64 ensures compliance with this rule based on District analysis
54.B.2	Rule 54.B.2	•Annual compliance certification •Determine ground or sea level concentrations of SO_2, upon request	•Representative fuel analysis or exhaust analysis and compliance demonstration	None	•SO_2 - BAAQMD Manual of Procedures, Vol.VI, Section 1, Ground Level Monitoring for H_2S and SO_2	
55	Rule 55	•Annual compliance certification	•As applicable	None	•EPA Method 9	
57.1	Rule 57.1	•Annual compliance certification	None	None	None	•Not required based on District analysis
64.B.1	Rule 64.B.1	•Annual compliance certification •None for PUC-quality gas •Annual test for non PUC-quality gas (submit with annual compliance certification)	•Annual fuel gas analysis for non PUC-quality gas	None	•SCAQMD Method 307-94	
64.B.2	Rule 64.B.2	•Annual compliance certification •Fuel supplier's certification, or fuel test per each delivery (submit with annual compliance certification)	•Fuel supplier's certification, or fuel test per each delivery	None	•ASTM Method D4294-83 or D2622-87	
71.1.C	Rules 71.1.C and 74.10	•Annual compliance certification •Rule 74.10 inspections •Visual inspection to ensure collection system is closed •Quarterly inspection of flare to ensure proper operation	•Records of inspections of flare •Rule 74.10 records	None	None	Compliance with Rule 74.10 ensures compliance with the gas collection system's maintenance requirements

1.c.3. General Applicable Requirements (Continued)

Attachment No./ Condition No.	Applicable Rule or Requirement	Monitoring	Recordkeeping	Semi-annual Reports	Test Methods	Comments
71.4.B.1	Rule 71.4.B.1	•Annual compliance certification to ensure there are no first stage sumps	None	None	None	
71.4.B.3	Rule 71.4.B.3	•Annual compliance certification •Routine surveillance and visual inspections of well cellars	•Records of maintenance or workover activity during periods of oil storage	None	None	
74.6	Rule 74.6	•Annual compliance certification •Maintain current solvent information •Routine surveillance of solvent cleaning activities •Upon request, solvent testing	•Records of current solvent information	None	•ROC content-EPA Test Method 24 •Identity of solvent components-ASTM E168-67, ASTM E169-87, or ASTM E260-85 •Initial boiling point-ASTM 1078-78 or published source •Spray gun active/passive solvent losses-SCAQMD Method (10-3-89)	
74.10	Rule 74.10	•Annual compliance certification •Identify leaking components •Inspections every shift or 8 hours at natural gas processing plants •Daily and/or weekly inspections for specified equipment •Quarterly inspections for specified components •Pressure relief valve inspections •Annual update to Operator Management Plan •Notification of major leaks in critical components •Notification of repeat leaks	•Records of leak inspections in inspection log	None	•Gas Leaks - EPA Method 21 •ROC Concentration of Gas Streams - ASTM E168-88, ASTM E169-87, or ASTM E260-85 •Weight percentage of evaporated compounds of liquids – ASTM Method D 86-82 •API Gravity - ASTM Method D287	
74.11.1	Rule 74.11.1	•Annual compliance certification •Maintain identification records of large water heaters and small boilers	•Records of current information of large water heaters and small boilers	None	None	•Rule only applies to the installation of large water heaters and small boilers
74.22	Rule 74.22	•Annual compliance certification •Maintain furnace identification records	•Records of current furnace information	None	None	•Rule only applies to future installation of natural gas-fired, fan-type furnaces
CARB GHG Oil & GAS Standards	CARB GHG Standards for Oil and Gas Facilties	•Annual compliance certification	•Section 95672	None	None	•Not federally-enforceable

1.c.4. General Requirements for Short-Term Activities

The General Requirements for Short-Term Activities Table includes a summary of the monitoring requirements, recordkeeping requirements, reporting requirements, and test methods associated with the attachments contained in Section No. 10 of this permit.

Attachment No./ Condition No.	Applicable Rule or Requirement	Monitoring	Recordkeeping	Semi-annual Reports	Test Methods	Comments
74.1	Rule 74.1	•Annual compliance certification •Visual inspections of abrasive blasting operation •Abrasive blasting records	•Abrasive blasting records	None	•Visible emission evaluation-Section 92400 of CCR	
74.2	Rule 74.2	•Annual compliance certification •Maintain VOC records of coatings used	•Maintain VOC records of coatings used	None	•VOC content-EPA Method 24, CARB Method 432 • Acid content-ASTM Method D 1613-85, •Metal content-SCAQMD Method 311-91	
74.4.D	Rule 74.4.D	•Annual compliance certification •Test ROC content of oil sample being proposed for usage	•Records of oil analyses	None	•ASTM D402	
74.16	Rule 74.16	•Annual compliance certification to ensure grid power being used, or •Maintain cost analysis documentation as verification to grid power exemption, if applicable •Annual source tests (NO_x) or engine manufacturer certification	•Records of source tests or engine manufacturer certification •Records of cost analysis documentation	None	•NO_x-ARB Method 100	
74.26	Rule 74.26	•Annual compliance certification •Record vapor concentration and gas flow rate of control device •Record vapor concentration of tank •Vapor destruction or removal efficiency upon request •Insure subcontractor has valid permit for portable equipment, if applicable •Notification required for degassing	•Vapor concentration and gas flow rate of control device •Vapor concentration of tank being degassed	None	•Liquid mRVP-ASTM Method D 323-82 •Vapor concentration-EPA Method 21 •Vapor flow-EPA Method 2A •Vapor destruction or removal efficiency-EPA Method 25A	

1.c.4. General Requirements for Short-Term Activities (Continued)

Attachment No./ Condition No.	Applicable Rule or Requirement	Monitoring	Recordkeeping	Semi-annual Reports	Test Methods	Comments
74.28	Rule 74.28	•Annual compliance certification •Visual inspection to ensure proper vapor control during roofing kettle operation	None	None		
74.29	Rule 74.29	•Annual compliance certification •Weekly measurements of in-situ soil bioventing or bioremediation •Weekly measurements of soil aeration •Date and quantity of soil aerated •Notification required for excavation	•Weekly measurements of soil decontamination operation vapor concentration •Date and quantity of soil aerated	None	•Vapor concentration- EPA Method 21 •Wt. % of contaminant in soil-EPA Method 8015B	
40CFR.61.M	40 CFR Part 61, Subpart M	•Annual compliance certification •See 40 CFR Part 61.145 for inspection procedures	•See 40 CFR Part 61.145 for recordkeeping procedures	•See 40 CFR Part 61.145 for notification procedures	•See 40 CFR Part 61.145 for test methods	

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2. PERMITTED EQUIPMENT AND APPLICABLE REQUIREMENTS TABLE

Purpose

The purpose of this table is to list the emissions units at this stationary source that are permitted to operate pursuant to Rule 10, "Permits Required" and Rule 23, "Exemptions From Permit". The table also provides a list of requirements that are specifically applicable to these emissions units. Permit conditions that enforce these requirements are listed in Section No. 7, "Specific Applicable Requirements" and Section No. 8, "Permit Specific Conditions" of this permit.

In addition to the emission unit specific requirements in Section No. 7 and Section No. 8, there are additional general requirements that may apply to the emissions units listed in this table, or to the stationary source as a whole. Furthermore, some general requirements may apply to emissions units or short-term activities not required to be specifically listed on the permit. These general requirements are contained in the following sections of the Permit: Section No. 9, “General Applicable Requirements”; Section No. 10, “General Requirements for Short-Term Activities”; Section No. 11, “General Permit Conditions”; and Section No. 12, “Miscellaneous Federal Program Conditions”.

Equipment Description

This portion of the table provides a brief description of the permitted equipment at this stationary source. Attached to the table is a "Title V Equipment List Description Key" that contains definitions and explanations for some of the standard terminology used in the equipment description.

Applicable Requirements

The applicable requirements portion of the table is a matrix of applicability for the specific requirements that apply to the listed emissions units. The columns are labeled with APCD rule numbers or references to federal requirements. An "X" in the row corresponding to the emissions unit indicates the requirement is specifically applicable to that unit. For cases where a rule has multiple compliance options, a number appears instead of an "X". The number is a code key that corresponds to the "Title V Applicable Requirement Code Key" attached to the table. The code key table contains specific citations for the portions of the rule that are applicable. The code key is also used to identify the permit attachment in Section No. 7, "Specific Applicable Requirements", that contains the associated permit conditions. For example, code key "1" under Rule 71.1 is associated with Attachment 71.1N1 in Section No. 7.

Permit specific conditions are identified with a "PC" followed by a number in the column labeled "ADD REQ" (additional requirements). A "PC#" in the row corresponding to the emissions unit indicates that the permit specific condition is specifically applicable to that unit. For the purpose of the Annual Compliance Certification, the owner or operator can identify the conditions that

apply within the “PC#”. The “PC#” also corresponds to the permit attachment in Section No. 8, "Permit Specific Conditions", which contains the permit specific requirements.

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TABLE NO. 2

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT
Permit to Operate No. 00041
Permitted Equipment and Applicable Requirements

Equipment	71.1	71.4	71.5	74.9	74.15	ATCM Engine	RICE MACT	Additional Requirements
CENTRAL FIELD								
Plants Team								
Taylor Tank Farm								
1 - 8,000 BBL LACT Tank (VORD-T026A) VR	1							
1 - 10,500 BBL LACT Tank (VOTD-T201) VR	1							
1 - 20,000 BBL PWT / LACT Tank (T-204A), 32'H x 67'D VR	1							
Central Water Treating Plant								
1- 5000 BBL PWT Blended Water Tank (VWCP-T500) VR	1							
1- 4000 BBL PWT PRE-Wemco Tank (VWCP-T400) VR	1							
1- 3000 BBL PWT Brine Tank (VWCP-T300) VR	1							
1- 2000 BBL PWT Wemco Skim Tank (VWCP-T200) VR	1							
1- 1000 BBL PWT Overflow Tank (VWCP-T100) VR	1							
1 - 894 BBL PWT Cone Bottom 5-Cell Tank (VWCP-T401) VR	1							
1- 1000 BBL Solids Tank, COST (VWSI-T403) VR	1							PC1
1 - 435 BBL PWT Wemco #1 (VWCP-W410) VR Out of Service								PC13
1 - 435 BBL PWT Wemco #2 (VWCP-W420) VR Out of Service								PC13
Waterflood Plant No. 1								PC16
1 - 300 sqft Pit (V127) Exempt < 5 mg/l - Out of Service								PC13
Waterflood Plant No. 4								
1 - 2,000 BBL Raw Water Tank (VWP4-T101) VR	1							
1 - 3,000 BBL Filtered Water Tank (VWP4-T102) VR	1							
1 - 1,000 BBL Backwash Tank (T-103) VR	1							
1 - 7,000 CF (48' x 21.5'O.D.) Filter Agent Storage Silo w/DCE Siloair Dust Filter Model VS15KS3 (VWP4-S001)								PC1, PC12
River Bottom Production Area								
1 - 3,000 BBL LACT Tank (T-400A) VR	1							
1 - 3,000 BBL LACT Tank (T-420A) VR	1							
1 - 3,000 BBL PWT / LACT Tank (T-410A) VR	1							
1 - 3,000 BBL PWT / LACT Tank (T-430A) VR	1							
Gas Operations Team								
Compressor Plant No. 2								
1 - 292 MMBTU/Hr Kaldair Low Pressure Flare								PC1, PC2
1 - 748 BHP Rich Burn Waukesha NG EngineModel L579OGU (CP2-1) NSCR				3 (CAM)			7	PC1, PC4
1 - 748 BHP Rich Burn Waukesha NG Engine Model L579OGU (CP2-2) NSCR				3 (CAM)			7	PC1, PC4
Crude Lifting Team								
Trap Farm 13								
1 - 238 BBL Emergency / Standby / Blowdown Tank								PC15
EAST FIELD								
Plants Team								
Lloyd Tank Farm								
1 - 5000 BBL FWKO/Wash Tank (TOLD-T330A) VR	1							
1 - 5000 BBL C-Block LACT Tank (TOLD-T310A) VR	1							
1 - 5000 BBL D-Block LACT Tank (TOLD-T320A) VR	1							
1 - 5000 BBL PWT Pre-Wemco Tank / LACT Tank (TWCF-T280A) VR	1							
1 - 5000 BBL PWT Spare Pre-Wemco Tank / LACT Tank (TWCF-T280B) VR	1							
1 - Crude Oil Loading Facility BL VR Out of Service								PC13
Lloyd Water Treating Plant								
1 - 3000 BBL PWT Spare Source Water Tank (TWCF-T260B) VR	1							
1 - 3000 BBL PWT Spare Source Water Tank (TWCF-T260A) VR	1							
1 - 5000 BBL PWT New Wemco Tank (TWCF-T400) VR	1							
1 - 70,000 BBL Emergency Cement Bowl (CMTD-S70K), Out of Service								PC8
Lloyd Water Treating Plant Solids Processing System								
1 - 42.75 sqft (9.5' x 4.5') Covered Trough (Sump)		1						PC14
2 - 500 BBL Waste Fluids/Solids Storage Tanks, VR	1							PC14
1 - Brandt Centrifuge, Model HS-3400 FS, 14" x 49.5" bowl size								PC14
1 - 1000 BBL Solids Tank, COST (TWSI-T001) VR	1							PC1, PC14

TABLE NO. 2

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT
Permit to Operate No. 00041
Permitted Equipment and Applicable Requirements

Equipment	71.1	71.4	71.5	74.9	74.15	ATCM Engine	RICE MACT	Additional Requirements
Hartman Waterflood								
1 - 3000 BBL PWT Hartman A Tank (TWPM-T210A) VR	1							
1 - 3000 BBL PWT Hartman B Tank (TWPM-T210B) VR	1							
1 - 3000 BBL Hartman Filtered Water Tank (T-240A) VR	1							
1 - 830 BBL Filter Agent Silo with Baghouse Control System (TWPM-T010)								PC1
Gas Operations Team								
Gas Plant No. 2								
1 - 616 BHP Lean Burn NG Waukesha Engine Model F352 IGL (C-201)				4			7	PC1
1 - 616 BHP Lean Burn NG Waukesha Engine Model F352IGL (C-202)				4			7	PC1
Gas Plant No. 6								
1 - Tank Truck LPG Loading Facility w/ Closed Vapor Recovery System								PC1, PC11
Gas Plant No. 7								PC9
1 - 8.0 MMBTU/Hr NG BYIS Manufacturing Oil Heater, Unit No. 601A, equipped with a Bloom Engineering/Gideon Ultra Low NOx burner					1			PC1, PC3
1 - 14.25 MMBTU/Hr NG Wheco Heater Serial No.WJ-81-009, Unit No. 602, equipped with a low NOx burner, Out of Service								PC13
1 - 1050 MMBTU/Hr John Zink Hydra 8" Flare								PC1, PC2
1 - 205 MMBTU/Hr 6" Flare (includes coaxial 2 MMBTU/Hr 1.5" unit)								PC1, PC2
1 - Glycol Dehydrator System (12.3 MMSCFD/Ethylene Glycol) consisting of:								
1 - Glycol Dehydrator Vent VR			1					
1 - 1.50 MMBTU/HR Glycol Reboiler (hot oil heated)								
1 - 14 BBL Glycol Condensate Tank No. V-600 (pressure vessel)								
1 - 630 BHP Detroit Diesel Emergency Standby Engine, Model 71237305, Serial No. L16349, EPA Family Name: DDL2VA081299, I.D. No. VNFGPLT7GNGP7ELGEN1				7		2	3	
Crude Lifting Team								
Central Compressor Plant								
1 - 1108 BHP Lean Burn NG Waukesha Engine Model L7042GL (C-101) (Out of Service)								PC13
1 - 1108 BHP Lean Burn NG Waukesha Engine Model L7042GL (C-102) (Out of Service)								PC13
1 - 1108 BHP Lean Burn NG Waukesha Engine Model L7042GL (C-103) (Out of Service)								PC13
1 - Glycol Dehydrator System (16.1 MMSCFD/Triethylene Glycol) consisting of: (Out of Service)								PC13
1 - Glycol Dehydrator Vent VR								
1 - 0.865 MMBTU/HR NG Glycol Reboiler UNC								
1 - 11 BBL Glycol Condensation Tank No. V-403 (pressure vessel)								
1 - 630 BHP Detroit Diesel Emergency Standby Engine, Model 71237305, Serial No. L16330, EPA Family Name: DDL2VA081299, I.D. No. VCSECSCPGNCSGEN101 Out of Service								PC13
AWT2								
1- 500 BBL Emergency / Standby / Blowdown Tank								PC15
Miscellaneous								
For Use Throughout Leases								
856 - Oil Wells								PC1
69 - 500 BBL Portable Tanks	6							
1 - Portable Open Top Mixing Bin, 242.25 sqft								PC5
Exempt Equipment								
Remote Reservoir Cold Cleaners (Exempt - Rule 23.F.10.c)								
Solvent Wipe Cleaning (Exempt - Rule 23.F.10.a or 23.F.10.b)								PC1

TITLE V EQUIPMENT LIST DESCRIPTION KEY

For Title V permits, the Permitted Equipment and Applicable Requirements Table contains a number of terms, abbreviations, and acronyms that have been standardized for oilfield facilities. The following list describes many of the terms on an oilfield equipment list:

BHP The output of an internal combustion engine as measured in brake horsepower.

BL A crude oil loading facility that is equipped with bottom loading capabilities.

Condensate Tank A tank that is used for the purpose of storing water and hydrocarbon liquids recovered from natural gas scrubbers. This tank is assumed to operate with a variable liquid level and has an associated throughput limit.

COST A crude oil storage tank that generally operates with a variable liquid level and has an associated throughput limit. An oil shipping tank that has a truck loading rack is a COST by definition. These tanks may also be known as shipping tanks.

Cover Indicates that a petroleum sump, pit, or pond is equipped with a properly installed and maintained cover which complies with Rule 71.4.

EXEMPT A tank, pit, or sump that processes produced water with an ROC content of less than 5 milligrams per liter and is exempt from Rule 71.1 or Rule 71.4.

Gauge or Test Tank A tank that is used for the purpose of production testing a well or group of wells. This tank is assumed to operate with a variable liquid level and has an associated throughput limit.

LACT Tank A Lease Automated Custody Transfer tank that operates at a constant or near constant liquid level and does not have an associated throughput limit. This tank is generally equipped with a LACT pump for pipeline oil shipping. A shipping tank with a truck loading rack is not by definition a LACT tank, but is a COST.

Loading Facility A crude oil loading rack or loading valve used for the transfer of crude oil from a storage tank or group of tanks to a delivery vessel.

Lo-NOx Device has equipment to control the emissions of NOx and CO to meet the requirements of Rules 74.15 or 74.15.1, or best available control technology requirements.

MMBTU/Hr The heat input of an external combustion device as measured in millions of British Thermal Units per hour.

NG Indicates that the equipment is permitted to be fired on natural gas only.

NG/FO Indicates that equipment is permitted to be fired on natural gas with fuel oil or diesel as a backup fuel.

NSCR Engine that is equipped with non-selective catalytic reduction to meet its Rule 74.9 compliance requirements.

OOS Out of Service

Pit Device used to receive emergency or intermittent flows.

PSC Engine that is equipped with a pre-stratified charge to meet its Rule 74.9 compliance requirements.

PWT A produced water tank that generally operates with a constant liquid level and does not have an associated throughput limit. These tanks may also be known as free water knock out (FWKO) tanks.

Rich Burn or Lean Burn A designation associated with a gas-fired internal combustion engine that determines its Rule 74.9 compliance requirements.

SCR Engine or turbine that is equipped with selective catalytic reduction and ammonia injection to meet its Rule 74.9 or Rule 74.23 compliance requirements.

SF A crude oil loading facility that is equipped with submerged fill loading capabilities.

Sump Device used for separation, generally in constant use.

UNC Indicates that the equipment is uncontrolled. For example, a tank that is not equipped with a vapor recovery system, or an engine or heater that is not equipped with NOx controls are labeled UNC.

VR A vapor recovery system that is installed on a tank, loading rack, or loading facility, glycol dehydrator, or other piece of process equipment.

Wash Tank A tank that stores and separates oil and water that generally operates with a constant liquid level. It does not have an associated throughput limit.

TITLE V APPLICABLE REQUIREMENT CODE KEY

Rule 71.1, "Crude Oil Production and Separation"

1. Storage tanks shall be equipped with a vapor recovery system that directs all vapors to a gas gathering system or flare (71.1.B.1.a)
2. Storage tanks shall be equipped with a vapor recovery system that directs all vapors to some other control system with a minimum destruction or removal efficiency of 90% by weight (71.1.B.1.b)
3. Tank batteries installed prior to June 20, 1978 are exempt from vapor recovery when processing crude oil having a modified Reid vapor pressure of less than 0.5 psia. Solid roof and pressure-vacuum relief valve is required. (71.1.B.2/71.1.D.1.a)
4. Storage tanks are exempt from the solid roof and vapor recovery requirements if the ROC content of the liquid entering the tank is less than 5 milligrams per liter. (71.1.D.3)
5. Storage tanks are exempt from the solid roof and vapor recovery requirements if a BACT Cost Analysis indicates that maximum emission reduction has already taken place. (71.1.D.4)
6. Portable tanks shall be equipped with closed covers and pressure vacuum valves and have limited exemptions from vapor recovery requirements. (71.1.B.3/71.1.D.1.c)

Rule 71.3, "Transfer of Reactive Organic Compound Liquids"

1. Requirement for submerged fill pipe or bottom loading and exemption from vapor recovery based on low throughput. (71.3.B.1) Requirement for leak-free equipment. (71.3.B.3)
2. Requirement for bottom loaded vapor recovery system which connects to a gas pipeline recovery and distribution system with automatic primary and secondary overfill protection. (71.3.B.2.a.1 and 71.3.B.2.b.1) Requirement for leak-free equipment. (71.3.B.3)
3. Requirement for bottom loaded vapor recovery system which connects to a 90% vapor disposal system with automatic primary and secondary overfill protection. (71.3.B.2.a.2 and 71.3.B.2.b.1) Requirement for leak-free equipment. (71.3.B.3)
4. Requirement for bottom loaded vapor recovery system which connects to a gas pipeline recovery and distribution system and APCO-approved alternative primary and secondary overfill protection. (71.3.B.2.a.1 and 71.3.B.2.b.2) Requirement for leak-free equipment. (71.3.B.3)
5. Requirement for bottom loaded vapor recovery system which connects to a 90% vapor disposal system and APCO-approved alternative primary and secondary overfill protection (71.3.B.2.a.2 and 71.3.B.2.b.2) Requirement for leak-free equipment. (71.3.B.3)
6. Exemption from Rule 71.3 because the crude oil has a modified Reid vapor pressure of less than 0.5 psia. (71.3.E.1)
7. Requirement for submerged fill pipe or bottom loading and exemption from vapor recovery when transfer is from a tank exempt from the vapor recovery requirements of Rule 71.1. (71.3.B.1 and 71.3.E.2) Requirement for leak-free equipment. (71.3.B.3)

8. Requirement for submerged fill pipe or bottom loading and exemption from vapor recovery when transfer is from a tank that is located more than 1200 feet from a loading facility constructed prior to July 1, 1990. (71.3.B.1 and 71.3.E.3) Requirement for leak-free equipment. (71.3.B.3)
9. Exemption from Rule 71.3 because the crude oil is being transferred into a vacuum truck, and not into a ROC liquid delivery vessel as defined in Rule 71.B.26. (71.B.26)

Rule 71.4, "Petroleum Sumps, Pits, Ponds and Well Cellars"

1. Second and third stage sumps, pits, and ponds shall have an impermeable cover (71.4.B.2)
2. Exemption from cover requirement for emergency pits (71.4.C.1.b)
3. Exemption from cover requirement for sumps, pits, or pond if the ROC content of the liquid at the point of entry is less than 5 milligrams per liter (71.4.C.1.c)
4. Exemption from cover requirement for sumps, pits, or pond when a BACT Cost Analysis indicates that maximum emission reduction has already taken place. (71.4.C.1.d)

Rule 71.5, "Glycol Dehydrators"

1. Requirement to have a condenser or separator system which directs vapors to a fuel gas or sales gas system. (71.5.B.1.a.1) Requirement to prevent hydrocarbon liquid evaporation and control system leaks. (71.5.B.2 and 71.5.B.3)
2. Requirement to have a condenser or separator system which directs vapors to a flare, incinerator, thermal oxidizer or reboiler. (71.5.B.1.a.2) Operation requirements for flare or incinerator. (71.5.B.1.b) Requirement to prevent hydrocarbon liquid evaporation and control system leaks. (71.5.B.2 and 71.5.B.3)
3. Requirement to have a condenser or separator system which directs vapors to another 95% control system. (71.5.B.1.a.3) Requirement to prevent hydrocarbon liquid evaporation and control system leaks. (71.5.B.2 and 71.5.B.3)
4. Requirement to have any other control system with a 95% control efficiency or which meets an emission limit of 1.7 lb ROC per MMSCF of gas dehydrated. (71.5.B.1.c) Requirement to prevent hydrocarbon liquid evaporation and control system leaks. (71.5.B.2 and 71.5.B.3)
5. Exemption from the control requirements of Rule 71.5 for unit that is operated less than 200 hours per year. (71.5.C)

Rule 74.9, "Stationary Internal Combustion Engines"

1. Pre-January 1, 2002, emissions limits for rich-burn engines (increments of progress have passed)
2. Pre-January 1, 2002, emissions limits for lean-burn engines (increments of progress have passed)
3. Natural gas-fired rich-burn engines (74.9.B.1 or 74.9.B.2)
4. Natural gas-fired lean-burn engines (74.9.B.1 or 74.9.B.2) with ammonia emission limit, if applicable. (74.9.B.5)

5. Diesel engines. (74.9.B.1 or 74.9.B.2) with ammonia emission limit, if applicable. (74.9.B.5)
6. Exemption from Rule 74.9 for engines operated less than 200 hours per calendar year (74.9.D.2)
7. Exemption from Rule 74.9 for emergency standby engines operated during either an emergency or maintenance operation. (74.9.D.3)
8. Exemption from Rule 74.9 for diesel engines with a permitted capacity factor of less than or equal to 15%. (74.9.D.8)
9. Exemption from Rule 74.9 for diesel engines used to power cranes and welding equipment. (74.9.D.9)
10. Exemption from Rule 74.9 for diesel engines operated on San Nicolas Island. (74.9.D.10)

Rule 74.15, "Boilers, Steam Generators and Process Heaters"

1. NOx and CO emission limits for units with an annual heat input rate greater than or equal to 9,000 MMBTU per calendar year (74.15.B.1)
2. Tuning and fuel metering requirements for units with an annual heat input rate of less than 9,000 MMBTU per calendar year. (74.15.B.2 and 74.15.D.1)

Section 93115, Title 17, California Code of Regulations California Airborne Toxic Control Measure For Stationary Compression Ignition (CI) Engines

1. In-use emergency fire pump assembly engines
2. In-use emergency engines operated not more than 20 hours per year for maintenance and testing purposes.
3. Engines operated solely on OCS Platforms
4. In-use emergency engines – 50 hours per year
5. Emergency engines installed after January 1, 2005

40 CFR Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engine (RICE MACT)

1. Existing compression ignition and spark ignition engine compliance dates
2. Existing landfill gas engines – area source
3. Existing emergency diesel engines – area source
4. Existing non-emergency diesel engines $\leq$ 300 HP – area source
5. Existing non-emergency diesel engines 300 HP $< X \leq$ 500 HP – area source
6. Existing non-emergency diesel engines $<$ 500 HP – area source
7. Existing non-emergency spark-ignited remote engine $>$ 500 HP – area source
8. Existing non-emergency diesel engines greater than 300 HP at an area source of HAPs that qualify under the national security exemption
9. Existing emergency spark ignited engines

3. PERMITTED THROUGHPUT AND CONSUMPTION LIMIT TABLE

Purpose

The purpose of this table is to list the emissions units at this stationary source that have limitations on throughput, fuel consumption, raw material usage, hours of operation, or other parameters that limit the potential to emit of the emissions unit. In some cases, the limit on the potential to emit is expressed directly as a set of pollutants and emission limits in tons per year.

These limitations are applied pursuant to Rule 26, “New Source Review” or Rule 29, "Conditions on Permits". Two sets of limits are listed in this table. The "Throughput Permit Limit" is the enforceable limit pursuant to this permit. Permit conditions that enforce these limits are listed in Section No. 8, “Permit Specific Conditions” of this permit.

The "Calculation Throughput" is used only to calculate permitted emissions pursuant to Rule 29, “Conditions on Permits”.

Equipment Description

This portion of the table is the same as the equipment description in the "Permitted Equipment and Applicable Requirements Table".

Throughput Permit Limit

The throughput or consumption limit listed in this column of the table is an enforceable limit on the emissions unit's potential to emit. In the column labeled "District (D)/ Federal (F) Enforceable", a "D" or an "F" denotes whether the limit is only enforceable by the District or whether the limit is a federally-enforceable limit. District-enforceable limits are limits applied solely pursuant to Rule 29, “Conditions on Permits”. Limits that have been applied pursuant to Rule 26, “New Source Review” are federally enforceable.

The throughput permit limit may apply to a single emissions unit or to a set of emission units. When the limit applies to set of emissions units, the set consists of the emissions unit with which the limit is listed and the emissions units which follow that have an asterisk in the throughput permit limit column.

Pursuant to Rule 26 and Rule 29, the throughput permit limit is an annual limit which is enforceable based on a period of any twelve (12) consecutive calendar months.

Note that when the calculation throughput (discussed below) corresponds to using the emissions unit full time (8760 hours per year) at maximum rated capacity, the throughput permit limit column contains the notation “No Limit”. When District emission calculation procedures do not involve throughput or consumption data, both the throughput permit limit and the calculation throughput

column are left blank.

Calculation Throughput

The throughput or consumption limit listed in this column of the table is the throughput used in the District calculation procedures to calculate permitted emissions for the emissions unit. The calculation throughput may apply to a single emissions unit or to a set of emissions units denoted as discussed above. The calculation throughput is not an enforceable permit limit.

The "Calculation Procedure" column is reserved for future use. Emission calculations for the emissions units in this table are available in the District's permit files for this stationary source.

Abbreviations

The following abbreviations have been used in the "Permitted Throughput and Consumption Limit Table" for the "Throughput Permit Limit" column and for the "Calculation Throughput Limit" column:

BBL/Yr: barrels per year
Days/Yr: days per year
FO: fuel oil or diesel fuel
Gal/Yr: gallons per year
Hrs/Day: hours per day
Hrs/Yr: hours per year
Lbs ROC/Yr: pounds of reactive organic compounds per year
LPG: liquid petroleum gas (propane)
MBBL/Yr: thousands of barrels per year
MGal/Yr: thousands of gallons per year
MMBTU/Yr: million British Thermal Units of heat input per year
MMCF/Yr: million standard cubic feet of natural gas per year
MMGal/Yr: million gallons per year
NG: natural gas
TPY: tons per year

TABLE NO. 3

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT
Permit to Operate No. 00041
Permitted Throughput/Consumption Limits

Equipment	Throughput Permit Limit	District (D)/ Federal(F) Enforceable	Calculation Throughput Limit
CENTRAL FIELD			
Plants Team			
Taylor Tank Farm			
1 - 8,000 BBL LACT Tank (VORD-T026A) VR			
1 - 10,500 BBL LACT Tank (VOTD-T201) VR			
1 - 20,000 BBL PWT / LACT Tank (T-204A), 32'H x 67'D VR			
Central Water Treating Plant			
1- 5000 BBL PWT Blended Water Tank (VWCP-T500) VR			
1- 4000 BBL PWT PRE-Wemco Tank (VWCP-T400) VR			
1- 3000 BBL PWT Brine Tank (VWCP-T300) VR			
1- 2000 BBL PWT Wemco Skim Tank (VWCP-T200) VR			
1- 1000 BBL PWT Overflow Tank (VWCP-T100) VR			
1 - 894 BBL PWT Cone Bottom 5-Cell Tank (VWCP-T401) VR			
1- 1000 BBL Solids Tank, COST (VWSI-T403) VR	1,277.5 MBBL/Yr	F	1,277.5 MBBL/Yr
1 - 435 BBL PWT Wemco #1 (VWCP-W410) VR Out of Service			
1 - 435 BBL PWT Wemco #2 (VWCP-W420) VR Out of Service			
Waterflood Plant No. 1			
1 - 300 sqft Pit (V127) Exempt < 5 mg/l - OOS			
Waterflood Plant No. 4			
1 - 2,000 BBL Raw Water Tank (VWP4-T101) VR			
1 - 3,000 BBL Filtered Water Tank (VWP4-T102) VR			
1 - 1,000 BBL Backwash Tank (T-103) VR			
1 - 7,000 CF (48' x 21.5'O.D.) Filter Agent Storage Silo w/DCE Siloair Dust Filter Model VS15KS3 (VWP4-S001)	1,300 TPY	F	1,300 TPY
River Bottom Production Area			
1 - 3,000 BBL LACT Tank (T-400A) VR			
1 - 3,000 BBL LACT Tank (T-420A) VR			
1 - 3,000 BBL PWT / LACT Tank (T-410A) VR			
1 - 3,000 BBL PWT / LACT Tank (T-430A) VR			
Gas Operations Team			
Compressor Plant No. 2			
1 - 292 MMBTU/Hr Kaldair Low Pressure Flare	104 MMCF/Yr	F	104 MMCF/Yr
1 - 748 BHP Rich Burn Waukesha NG EngineModel L579OGU (CP2-1) NSCR	48.0 MMCF/Yr	F	24.0 MMCF/Yr
1 - 748 BHP Rich Burn Waukesha NG Engine Model L579OGU (CP2-2) NSCR	*	F	24.0 MMCF/Yr
Crude Lifting Team			
Trap Farm 13			
1 - 238 BBL Emergency / Standby / Blowdown Tank			
EAST FIELD			
Plants Team			
Lloyd Tank Farm			
1 - 5000 BBL FWKO/Wash Tank (TOLD-T330A) VR			
1 - 5000 BBL C-Block LACT Tank (TOLD-T310A) VR			
1 - 5000 BBL D-Block LACT Tank (TOLD-T320A) VR			
1 - 5000 BBL PWT Pre-Wemco Tank / LACT Tank (TWCF-T280A) VR			
1 - 5000 BBL PWT Spare Pre-Wemco Tank / LACT Tank (TWCF-T280B) VR			
1 - Crude Oil Loading Facility BL VR Out of Service	900 MBBL/Yr	D	900 MBBL/Yr
Lloyd Water Treating Plant			
1 - 3000 BBL PWT Spare Source Water Tank (TWCF-T260B) VR			
1 - 3000 BBL PWT Spare Source Water Tank (TWCF-T260A) VR			

TABLE NO. 3

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT
Permit to Operate No. 00041
Permitted Throughput/Consumption Limits

Equipment	Throughput Permit Limit	District (D)/ Federal(F) Enforceable	Calculation Throughput Limit
1 - 5000 BBL PWT New Wemco Tank (TWCF-T400) VR			
1 - 70,000 BBL Emergency Cement Bowl (CMTD-S70K) Out of Service			
Lloyd Water Treating Plant Solids Processing System			
1 - 42.75 sqft (9.5' x 4.5') Covered Trough (Sump)			
2 - 500 BBL Waste Fluids/Solids Storage Tanks, VR	1,825 MBBL/YR each	F	1,825 MBBL/YR each
1 - Brandt Centrifuge, Model HS-3400 FS, 14" x 49.5" bowl size			
1 - 1000 BBL Solids Tank, COST (TWSI-T001) VR	1,825 MBBL/YR	F	1,825 MBBL/YR
Hartman Waterflood			
1 - 3000 BBL PWT Hartman A Tank (TWPM-T210A) VR			
1 - 3000 BBL PWT Hartman B Tank (TWPM-T210B) VR			
1 - 3000 BBL Hartman Filtered Water Tank (T-240A) VR			
1 - 830 BBL Filter Agent Silo with Baghouse Control System (TWPM-T010)	867 TPY	F	867 TPY
Gas Operations Team			
Gas Plant No. 2			
1 - 616 BHP Lean Burn NG Waukesha Engine Model F352 IGL (C-201)	100.2 MMCF/Yr	F	100.2 MMCF/Yr
1 - 616 BHP Lean Burn NG Waukesha Engine Model F352IGL(C-202)	*	F	*
Gas Plant No. 6			
1 - Tank Truck LPG Loading Facility w/ Closed Vapor Recovery System	40 MMGal/Yr	F	40 MMGal/Yr
Gas Plant No. 7			
1 - 8.0 MMBTU/Hr NG BYIS Manufacturing Oil Heater, Unit No. 601A, equipped with a Bloom Engineering/Gideon Ultra Low NOx burner	71.4 MMCF/Yr	F	71.4 MMCF/Yr
1 - 14.25 MMBTU/Hr NG Wheco Heater Serial No. WJ-81-009, Unit No. 602, equipped with a low NOx burner, Out of Service	78.9 MMCF/Yr	F	78.9 MMCF/Yr
1 - 1050 MMBTU/Hr John Zink Hydra 8" Flare	86.5 MMCF/Yr	F	86.5 MMCF/Yr
1 - 205 MMBTU/Hr 6" Flare (includes coaxial 2 MMBTU/Hr 1.5" unit)	*	F	*
1 - Glycol Dehydrator System (12.3 MMSCFD/Ethylene Glycol) consisting of:			
1 - Glycol Dehydrator Vent VR	No Limit		8760 Hrs/Yr
1 - 1.50 MMBTU/HR Glycol Reboiler (hot oil heated)			
1 - 14 BBL Glycol Condensate Tank No. V-600 (pressure vessel)			
1 - 630 BHP Detroit Diesel Emergency Standby Engine, Model 71237305, Serial No. L16349, EPA Family Name: DDL2VA081299, I.D. No. VNFGPLT7GNGP7ELGEN1	20 hr/yr **	D	20 hr/yr
Crude Lifting Team			
Central Compressor Plant			
1 - 1108 BHP Lean Burn NG Waukesha Engine Model L7042GL (C-101) (Out of Service)	No Limit		227.4 MMCF/Yr
1 - 1108 BHP Lean Burn NG Waukesha Engine Model L7042GL (C-102) (Out of Service)	*		*
1 - 1108 BHP Lean Burn NG Waukesha Engine Model L7042GL (C-103) (Out of Service)	*		*
1 - Glycol Dehydrator System (16.1 MMSCFD/Triethylene Glycol) consisting of: (Out of Service)			
1 - Glycol Dehydrator Vent VR	No Limit		8760 Hrs/Yr
1 - 0.865 MMBTU/HR NG Glycol Reboiler UNC	No Limit		7.2 MMCF/Yr
1 - 11 BBL Glycol Condensation Tank No. V-403 (pressure vessel)			
1 - 630 BHP Detroit Diesel Emergency Standby Engine, Model 71237305, Serial No. L16330, EPA Family Name: DDL2VA081299, I.D. No. VCSECSCPGNCSGEN101 Out of Servie	20 hr/yr **	D	20 hr/yr
AWT2			
1 - 500 BBL Emergency / Standby / Blowdown Tank			

TABLE NO. 3

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT Permit to Operate No. 00041 Permitted Throughput/Consumption Limits			
Equipment	Throughput Permit Limit	District (D)/ Federal(F) Enforceable	Calculation Throughput Limit
For Use Throughout Leases			
856 - Oil Wells			
69 - 500 BBL Portable Tanks			
1 - Portable Open Top Mixing Bin, 242.25 sqft	12 Hrs/day & 1,440 Hrs/Yr	F	12 Hrs/day & 1,440 Hrs/Yr
Exempt Equipment			
Remote Reservoir Cold Cleaners (Exempt - Rule 23.F.10.c)			
Solvent Wipe Cleaning (Exempt - Rule 23.F.10.a or 23.F.10.b)			
* - Included in the Throughput Permit Limit Above			
** - Limit is for maintenance and testing only. Emergency use is unlimited.			

4. PERMITTED EMISSIONS TABLE

Purpose

The purpose of this table is to document the permitted emissions for this stationary source. Rule 29, "Conditions on Permits," requires permitted emissions to be included on each Permit to Operate. Rule 29 is not federally enforceable.

The permitted emissions table also characterizes the amount and type of criteria air pollutants emitted by this stationary source.

Rule 29 requires that annual permitted emissions be based on a 12 calendar month rolling period and be expressed in units of tons per year. Hourly permitted emissions are required to be expressed in units of pounds per hour. Permitted emissions for a stationary source are required to be determined by aggregating the permitted emissions for each emissions unit at the stationary source.

In general, permitted emissions are calculated based on throughput or consumption data for an emission unit, specific physical characteristics of the emission unit, and emission factors. The emission factors may be standard published emission factors, or they may be derived from source test data or specific emission limits that apply to the emissions unit. In some cases, permitted emissions are expressed directly as a set of pollutants and emission limits in tons per year without reference to any calculation method.

Section No. 3, "Permitted Throughput and Consumption Limit Table," contains information on the throughput and consumption limits that are enforceable at this stationary source. In addition, other sections of this permit contain conditions that act to enforce specific portions of the permitted emissions table.

Equipment Description

This portion of the table is the same as the equipment description in the "Permitted Equipment and Applicable Requirements Table."

Tons Per Year

This column of the table represents the permitted emissions in units of tons per year for ROC (reactive organic compounds), NOx (nitrogen oxides), PM (particulate matter), SOx (sulfur oxides), and CO (carbon monoxide). In some cases, emissions of non-criteria pollutants of interest may also be listed. Pursuant to Rule 29, annual permitted emissions shall be the annual emissions used to determine compliance for issuance of any new or revised permit issued after October 22, 1991. For emissions units for which no new or revised permit has been issued since

October 22, 1991, annual permitted emissions generally reflect actual historical emissions from the emissions unit.

The permitted emissions limit may apply to a single emissions unit or to a set of emission units. When the limit applies to set of emissions units, the set consists of the emissions unit with which the limit is listed and the emissions units which follow that have an asterisk in the pollutant columns.

Pounds Per Hour

This column of the table represents the permitted emissions in units of pounds per hour for ROC (reactive organic compounds), NOx (nitrogen oxides), PM (particulate matter), SOx (sulfur oxides), and CO (carbon monoxide). Pursuant to Rule 29, hourly permitted emissions shall be calculated based on the maximum quantity of each air pollutant which may be emitted from the emissions unit during a one-hour period, as limited by any applicable rules or permit conditions.

Hazardous Air Pollutants

This permit does not provide information that characterizes the emissions of hazardous air pollutants (HAPS) from this facility. This information can be obtained from the reissuance application or the facility's AB-2588, Air Toxics "Hot Spots," Report referenced at the bottom of the "Permitted Emissions Table." For Outer Continental Source (OCS) sources and other sources not subject to AB-2588, HAP emissions information is included in the permit reissuance application and is maintained by the stationary source.

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TABLE NO. 4

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT
Permit to Operate No. 00041
Permitted Emissions

Equipment	TONS PER YEAR					POUNDS PER HOUR				
	ROC	NOx	PM	SOx	CO	ROC	NOx	PM	SOx	CO
CENTRAL FIELD										
Plants Team										
Taylor Tank Farm										
1 - 8,000 BBL LACT Tank (VORD-T026A) VR	0.48					0.11				
1 - 10,500 BBL LACT Tank (VOTD-T201) VR	1.17					0.27				
1 - 20,000 BBL PWT / LACT Tank (T-204A), 32'H x 67'D VR	2.22					0.51				
Central Water Treating Plant										
1- 5000 BBL PWT Blended Water Tank (VWCP-T500) VR	0.09					0.02				
1- 4000 BBL PWT PRE-Wemco Tank (VWCP-T400) VR	0.07					0.02				
1- 3000 BBL PWT Brine Tank (VWCP-T300) VR	0.05					0.01				
1- 2000 BBL PWT Wemco Skim Tank (VWCP-T200) VR	0.04					0.01				
1- 1000 BBL PWT Overflow Tank (VWCP-T100) VR	0.02					<0.01				
1 - 894 BBL PWT Cone Bottom 5-Cell Tank (VWCP-T401) VR	0.04					0.01				
1- 1000 BBL Solids Tank, COST (VWSI-T403) VR	3.20					0.73				
1 - 435 BBL PWT Wemco #1 (VWCP-W410) VR Out of Service	0.01					<0.01				
1 - 435 BBL PWT Wemco #2 (VWCP-W420) VR Out of Service	0.01					<0.01				
Waterflood Plant No. 1										
1 - 300 sqft Pit (V127) Exempt < 5 mg/l - OOS	<0.01					<0.01				
Waterflood Plant No. 4										
1 - 2,000 BBL Raw Water Tank (VWP4-T101) VR	0.04					0.01				
1 - 3,000 BBL Filtered Water Tank (VWP4-T102) VR	0.05					0.01				
1 - 1,000 BBL Backwash Tank (T-103) VR	0.02					<0.01				
1 - 7,000 CF (48' x 21.5'O.D.) Filter Agent Storage Silo w/DCE Siloair Dust Filter Model VS15KS3 (VWP4-S001)			0.18					0.07		
River Bottom Production Area										
1 - 3,000 BBL LACT Tank (T-400A) VR	0.18					0.04				
1 - 3,000 BBL LACT Tank (T-420A) VR	0.18					0.04				
1 - 3,000 BBL PWT / LACT Tank (T-410A) VR	0.18					0.04				
1 - 3,000 BBL PWT / LACT Tank (T-430A) VR	0.18					0.04				
Gas Operations Team										
Compressor Plant No. 2										
1 - 292 MMBTU/Hr Kaldair Low Pressure Flare	2.83	3.71	0.27	3.71	20.20	15.88	20.85	1.53	20.85	113.44
1 - 748 BHP Rich Burn Waukesha NG EngineModel L579OGU (CP2-1) NSCR	1.61	1.16	0.12	0.01	70.68	0.95	0.69	0.07	<0.01	41.82
1 - 748 BHP Rich Burn Waukesha NG Engine Model L579OGU (CP2-2) NSCR	1.61	1.16	0.12	0.01	70.68	0.95	0.69	0.07	<0.01	41.82
Crude Lifting Team										
Trap Farm 13										
1 - 238 BBL Emergency / Standby / Blowdown Tank	0.03					0.01				
EAST FIELD										
Plants Team										
Lloyd Tank Farm										
1 - 5000 BBL FWKO/Wash Tank (TOLD-T330A) VR	0.30					0.07				
1 - 5000 BBL C-Block LACT Tank (TOLD-T310A) VR	0.30					0.07				
1 - 5000 BBL D-Block LACT Tank (TOLD-T320A) VR	0.30					0.07				
1 - 5000 BBL PWT Pre-Wemco Tank / LACT Tank (TWCF-T280A) VR	0.09					0.02				
1 - 5000 BBL PWT Spare Pre-Wemco Tank / LACT Tank (TWCF-T280B) VR	0.09					0.02				
1 - Crude Oil Loading Facility BL VR Out of Service	5.17					2.30				
Lloyd Water Treating Plant										
1 - 3000 BBL PWT Spare Source Water Tank (TWCF-T260B) VR	0.11					0.03				
1 - 3000 BBL PWT Spare Source Water Tank (TWCF-T260A) VR	0.11					0.03				
1 - 5000 BBL PWT New Wemco Tank (TWCF-T400) VR	0.19					0.04				
1 - 70,000 BBL Emergency Cement Bowl (CMTD-S70K) Out of Service	3.46					9.62				
Lloyd Water Treating Plant Solids Processing System										
1 - 42.75 sqft (9.5' x 4.5') Covered Trough (Sump)	0.08					0.02				
2 - 500 BBL Waste Fluids/Solids Storage Tanks, VR	2.25					0.51				
1 - Brandt Centrifuge, Model HS-3400 FS, 14" x 49.5" bowl size	<0.01					<0.01				
1 - 1000 BBL Solids Tank, COST (TWSI-T001) VR	2.27					0.52				
Hartman Waterflood										
1 - 3000 BBL PWT Hartman A Tank (TWPM-T210A) VR	0.11					0.03				

TABLE NO. 4

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT
Permit to Operate No. 00041
Permitted Emissions

Equipment	TONS PER YEAR					POUNDS PER HOUR				
	ROC	NOx	PM	SOx	CO	ROC	NOx	PM	SOx	CO
1 - 3000 BBL PWT Hartman B Tank (TWPM-T210B) VR	0.11					0.03				
1 - 3000 BBL Hartman Filtered Water Tank (T-240A) VR	0.05					0.01				
1 - 830 BBL Filter Agent Silo with Baghouse Control System (TWPM-T010)			0.12					3.78		
Gas Operations Team										
Gas Plant No. 2										
1 - 616 BHP Lean Burn NG Waukesha Engine Model F352 IGL (C-201)	19.86	8.71	0.50	0.03	295.09	4.64	2.03	0.12	0.01	68.91
1 - 616 BHP Lean Burn NG Waukesha Engine Model F352IGL(C-202)	*	*	*	*	*	*	*	*	*	*
Gas Plant No. 6										
1 - Tank Truck LPG Loading Facility w/ Closed Vapor Recovery System	12.00					10.80				
Gas Plant No. 7										
1 - 8.0 MMBTU/Hr NG BYIS Manufacturing Oil Heater, Unit No. 601A, equipped with a Bloom Engineering/Gideon Ultra Low NOx burner	0.20	0.55	0.27	0.02	11.09	0.04	0.12	0.06	<0.01	2.36
1 - 14.25 MMBTU/Hr NG Wheco Heater Serial No. WJ-81-009, Unit No. 602, equipped with a low NOx burner, Out of Service	0.22	1.97	0.30	0.02	12.25	0.07	0.68	0.10	0.01	4.22
1 - 1050 MMBTU/Hr John Zink Hydra 8" Flare	2.35	3.09	0.23	3.09	16.80	54.40	71.40	5.25	71.40	388.50
1 - 205 MMBTU/Hr 6" Flare (incl. coaxial 2 MMBTU/Hr 1.5" unit)	*	*	*	*	*	10.62	13.94	1.02	13.94	75.84
1 - Glycol Dehydrator System (12.3 MMSCFD/Ethylene Glycol) consisting of:										
1 - Glycol Dehydrator Vent VR	8.92					2.04				
1 - 1.50 MMBTU/HR Glycol Reboiler (hot oil heated)										
1 - 14 BBL Glycol Condensate Tank No. V-600 (pressure vessel)										
1 - 630 BHP Detroit Diesel Emergency Standby Engine, Model 71237305, Serial No. L16349, EPA Family Name: DDL2VA081299, I.D. No. VNFGPLT7GNGP7ELGEN1	0.01	0.21	0.01	<0.01	0.05	0.15	2.10	0.15	0.03	0.46
Crude Lifting Team										
Central Compressor Plant										
1 - 1108 BHP Lean Burn NG Waukesha Engine Model L7042GL (C-101) (Out of Service)	32.40	19.77	1.14	0.07	669.73	7.41	4.52	0.26	0.02	153.14
1 - 1108 BHP Lean Burn NG Waukesha Engine Model L7042GL (C-102) (Out of Service)	*	*	*	*	*	*	*	*	*	*
1 - 1108 BHP Lean Burn NG Waukesha Engine Model L7042GL (C-103) (Out of Service)	*	*	*	*	*	*	*	*	*	*
1 - Glycol Dehydrator System (16.1 MMSCFD/Triethylene Glycol) consisting of: (Out of Service)										
1 - Glycol Dehydrator Vent VR	11.50					2.63				
1 - 0.865 MMBTU/HR NG Glycol Reboiler UNC	0.02	0.36	0.03	<0.01	0.30	<0.01	0.08	0.01	<0.01	0.07
1 - 11 BBL Glycol Condensation Tank No. V-403 (pressure vessel)										
1 - 630 BHP Detroit Diesel Emergency Standby Engine, Model 71237305, Serial No. L16330, EPA Family Name: DDL2VA081299, I.D. No. VCSECSCPGNCSGEN101 Out of Service	0.01	0.21	0.01	<0.01	0.05	0.15	2.10	0.15	0.03	0.46
AWT2										
1 - 500 BBL Emergency / Standby / Blowdown Tank	0.03					0.01				
Miscellaneous										
For Use Throughout Leases										
856 - Oil Wells	312.44					71.39				
69 - 500 BBL Portable Tanks	25.53					5.83				
1 - Portable Open Top Mixing Bin, 242.25 sqft	0.04					0.05				
Exempt Equipment										
Remote Reservoir Cold Cleaners (Exempt - Rule 23.F.10.c)										
Solvent Wipe Cleaning (Exempt - Rule 23.F.10.a or 23.F.10.b)										
* - Included in Emissions Above										
Total Permitted Emissions	454.83	40.90	3.30	6.96	1166.92	203.28	119.20	12.64	106.29	891.04

HAP Emissions Ref.: AB 2588 Air Toxics Report Reporting Year: 2003 Submittal Date: 03/11/05

5. OIL WELL LIST

This permit authorizes the operation of a maximum number of wells for the production of oil or natural gas. This section of the permit contains a list of the wells currently authorized to be operated. When changes to the list are desired, the permit holder is required to submit an application to modify the Part 70 Permit.

An Authority to Construct is also required prior to adding a well that is newly drilled to the oil well list or prior to increasing the number of wells on the oil well list.

Section No. 8, "Permit Specific Conditions", includes a condition that limits the maximum number of producing wells at this stationary source. If applicable, Section No. 8 also includes a condition that requires best available control technology (BACT) on specific wells that were subject to Rule 26, "New Source Review".

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Ventura County Air Pollution Control District

OIL WELL LIST

Permit to Operate No. 00041

Total Number of Wells on Permit: 856

Taylor Lease Wells

Taylor No. 11	Taylor No. 152	Taylor No. 229	Taylor No. 313
Taylor No. 13	Taylor No. 153	Taylor No. 230	Taylor No. 315
Taylor No. 29	Taylor No. 154	Taylor No. 231	Taylor No. 317
Taylor No. 34	Taylor No. 157	Taylor No. 235	Taylor No. 319
Taylor No. 37	Taylor No. 162	Taylor No. 236	Taylor No. 320
Taylor No. 42	Taylor No. 164	Taylor No. 240	Taylor No. 324
Taylor No. 43	Taylor No. 165	Taylor No. 241	Taylor No. 325
Taylor No. 48	Taylor No. 166	Taylor No. 242	Taylor No. 326
Taylor No. 59	Taylor No. 168	Taylor No. 245	Taylor No. 329
Taylor No. 69	Taylor No. 173	Taylor No. 247	Taylor No. 330
Taylor No. 77	Taylor No. 176	Taylor No. 249	Taylor No. 331
Taylor No. 78	Taylor No. 180	Taylor No. 250	Taylor No. 333
Taylor No. 81	Taylor No. 181	Taylor No. 251	Taylor No. 335
Taylor No. 84	Taylor No. 183	Taylor No. 254	Taylor No. 339
Taylor No. 89	Taylor No. 184	Taylor No. 256	Taylor No. 344
Taylor No. 91	Taylor No. 188	Taylor No. 260	Taylor No. 345
Taylor No. 94	Taylor No. 191	Taylor No. 261	Taylor No. 346
Taylor No. 98	Taylor No. 192	Taylor No. 264	Taylor No. 347
Taylor No. 103	Taylor No. 194	Taylor No. 265	Taylor No. 348
Taylor No. 106	Taylor No. 196	Taylor No. 268	Taylor No. 351
Taylor No. 108	Taylor No. 198	Taylor No. 269	Taylor No. 352
Taylor No. 110	Taylor No. 201	Taylor No. 276	Taylor No. 353
Taylor No. 109	Taylor No. 202	Taylor No. 278	Taylor No. 354
Taylor No. 113R	Taylor No. 204	Taylor No. 286	Taylor No. 356
Taylor No. 115R	Taylor No. 205	Taylor No. 290	Taylor No. 357
Taylor No. 117	Taylor No. 208	Taylor No. 291	Taylor No. 358
Taylor No. 124	Taylor No. 212	Taylor No. 292	Taylor No. 359
Taylor No. 134	Taylor No. 213	Taylor No. 297	Taylor No. 361
Taylor No. 135	Taylor No. 214	Taylor No. 298	Taylor No. 363
Taylor No. 137	Taylor No. 216	Taylor No. 300	Taylor No. 365
Taylor No. 141	Taylor No. 218	Taylor No. 305	Taylor No. 367
Taylor No. 147	Taylor No. 219	Taylor No. 309	Taylor No. 369
Taylor No. 149	Taylor No. 226	Taylor No. 310	Taylor No. 370
Taylor No. 150	Taylor No. 227	Taylor No. 311	Taylor No. 371

No. of Wells on This Page: 136

Taylor Lease Wells (Continued)

Taylor No. 372
Taylor No. 374
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Taylor No. 628
Taylor No. 632

No. of Wells on This Page: 156

Taylor Lease Wells (Continued)

Taylor No. 634
Taylor No. 636
Taylor No. 637
Taylor No. 644
Taylor No. 645
Taylor No. 649
Taylor No. 653
Taylor No. 654
Taylor No. 657
Taylor No. 658
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Taylor No. 834
Taylor No. 835
Taylor No. 836
Taylor No. 837
Taylor No. 843

No. of Wells on This Page: 98

Lloyd Lease Wells

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LLOYD 281
LLOYD 286
LLOYD 303

No. of Wells on This Page: 145

Lloyd Corporation Lease Wells

LLOYD CORPORATION 8	LLOYD CORPORATION 36	LLOYD CORPORATION 69
LLOYD CORPORATION 12	LLOYD CORPORATION 38	LLOYD CORPORATION 70
LLOYD CORPORATION 13	LLOYD CORPORATION 40	LLOYD CORPORATION 73
LLOYD CORPORATION 17	LLOYD CORPORATION 41	LLOYD CORPORATION 75
LLOYD CORPORATION 16	LLOYD CORPORATION 47	LLOYD CORPORATION 76
LLOYD CORPORATION 18	LLOYD CORPORATION 48	LLOYD CORPORATION 83
LLOYD CORPORATION 20	LLOYD CORPORATION 49	LLOYD CORPORATION 84
LLOYD CORPORATION 21	LLOYD CORPORATION 51	LLOYD CORPORATION 85
LLOYD CORPORATION 23	LLOYD CORPORATION 52	LLOYD CORPORATION 89
LLOYD CORPORATION 26	LLOYD CORPORATION 56	LLOYD CORPORATION 91
LLOYD CORPORATION 27	LLOYD CORPORATION 57	LLOYD CORPORATION 92
LLOYD CORPORATION 29A	LLOYD CORPORATION 58	LLOYD CORPORATION 99
LLOYD CORPORATION 30	LLOYD CORPORATION 62	LLOYD CORPORATION 801
LLOYD CORPORATION 32	LLOYD CORPORATION 63	LLOYD CORPORATION SL1
LLOYD CORPORATION 33	LLOYD CORPORATION 66	LLOYD CORPORATION SL2
		LLOYD CORPORATION SL3

V.L. & W. Lease Wells

VL&W 1	VL&W 56	VL&W 95	VL&W 141
VL&W 6	VL&W 61	VL&W 96	VL&W 142
VL&W 9A	VL&W 64	VL&W 98	VL&W 143
VL&W 10	VL&W 65	VL&W 101	VL&W 144
VL&W 12	VL&W 66	VL&W 102	VL&W 146
VL&W 19	VL&W 67	VL&W 104	VL&W 147
VL&W 20	VL&W 68	VL&W 105	VL&W 159
VL&W 23	VL&W 69	VL&W 106	VL&W 161
VL&W 27	VL&W 72	VL&W 107	VL&W 162
VL&W 29	VL&W 75	VL&W 108	VL&W 163
VL&W 32	VL&W 77	VL&W 109	VL&W 164
VL&W 33	VL&W 79	VL&W 111	VL&W 165
VL&W 34	VL&W 80	VL&W 113	VL&W 166
VL&W 35	VL&W 81	VL&W 114	VL&W 167
VL&W 42	VL&W 82	VL&W 117	VL&W 169
VL&W 44	VL&W 83	VL&W 119	VL&W 174
VL&W 46	VL&W 84	VL&W 121	VL&W 176
VL&W 47	VL&W 85	VL&W 127	VL&W 180
VL&W 48	VL&W 86	VL&W 132	VL&W 181
VL&W 51	VL&W 89	VL&W 134	VL&W 182
VL&W 52	VL&W 90	VL&W 135	VL&W 183
VL&W 53	VL&W 91	VL&W 137	

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McGonigle Lease Wells

McGONIGLE 4	McGONIGLE 17	McGONIGLE 34
McGONIGLE 5	McGONIGLE 18	McGONIGLE 35
McGONIGLE 7	McGONIGLE 20	McGONIGLE 37
McGONIGLE 10	McGONIGLE 22	McGONIGLE 38
McGONIGLE 11	McGONIGLE 27	McGONIGLE 39
McGONIGLE 12	McGONIGLE 28	McGONIGLE 55
McGONIGLE 14	McGONIGLE 31	McGONIGLE 58
McGONIGLE 15	McGONIGLE 33	McGONIGLE 61

Barnard Lease Wells

Barnard No. 5A	Barnard No. 21	Barnard No. 35
Barnard No. 9	Barnard No. 26	Barnard No. 37
Barnard No. 11	Barnard No. 28	Barnard No. 38
Barnard No. 15A	Barnard No. 32	Barnard No. 39
Barnard No. 16	Barnard No. 33	Barnard No. 41
Barnard No. 19	Barnard No. 34	

Citrus Lease Wells

Citrus No. 1	Citrus No. 3	Citrus No. 5
Citrus No. 2	Citrus No. 4	Citrus No. 6

Edison Lease Wells

Edison No. 4	Edison No. 31	Edison No. 47	Edison No. 64
Edison No. 8	Edison No. 32	Edison No. 49	Edison No. 65
Edison No. 11	Edison No. 33	Edison No. 50	Edison No. 66
Edison No. 14	Edison No. 35	Edison No. 51	Edison No. 67
Edison No. 16	Edison No. 36	Edison No. 52	Edison No. 68
Edison No. 17	Edison No. 37	Edison No. 53	Edison No. 69
Edison No. 19	Edison No. 38	Edison No. 54	Edison No. 70
Edison No. 23	Edison No. 39	Edison No. 55	Edison No. 72
Edison No. 25	Edison No. 41	Edison No. 56	Edison No. 77
Edison No. 26	Edison No. 42	Edison No. 57	Edison No. 78
Edison No. 27	Edison No. 43	Edison No. 59	Edison No. 81
Edison No. 29	Edison No. 44	Edison No. 60	Edison No. 82
Edison No. 30	Edison No. 45	Edison No. 61	Edison No. 84

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Foster Lease Wells

Foster No. 3

Gosnell Lease Wells

Gosnell No. 12
Gosnell No. 24
Gosnell No. 34
Gosnell No. 35
Gosnell No. 36
Gosnell No. 39
Gosnell No. 40
Gosnell No. 41
Gosnell No. 42
Gosnell No. 45
Gosnell No. 46
Gosnell No. 47
Gosnell No. 48
Gosnell No. 50
Gosnell No. 56

Gulf Barnard Lease Wells

Gulf Barnard No. 1

Orton Lease Wells

Orton No. 4
Orton No. 5
Orton No. 9
Orton No. 10
Orton No. 11

Willett Lease Wells

Willett No. 2

No. of Wells on This Page: 23

Hartman Lease Wells

HARTMAN 4 (HTM4)
HARTMAN 5 (HTM5)
HARTMAN 8 (HTM8)
HARTMAN 16 (HTM16
HARTMAN 17 (HTM17)
HARTMAN 21 (HTM21)
HARTMAN 22 (HTM22)
HARTMAN 23 (HTM23)
HARTMAN 25 (HTM25)
HARTMAN 26 (HTM26)
HARTMAN 27 (HTM27)
HARTMAN 28 (HTM28)
HARTMAN 30 (HTM30)
HARTMAN 33 (HTM33)
HARTMAN 34 (HTM34)
HARTMAN 36 (HTM36)
HARTMAN 40 (HTM40)
HARTMAN 41 (HTM41)
HARTMAN 42 (HTM42)
HARTMAN 43 (HTM43)
HARTMAN 44 (HTM44)
HARTMAN 45 (HTM45)
HARTMAN 46 (HTM46)
HARTMAN 47 (HTM47)
HARTMAN 52 (HTM52)
HARTMAN 53 (HTM53)
HARTMAN 56 (HTM56)
HARTMAN 63 (HTM63)
HARTMAN 65 (HTM65)
HARTMAN 66 (HTM66)
HARTMAN 68 (HTM68)
HARTMAN 71 (HTM71)
HARTMAN 73 (HTM73)
HARTMAN 76 (HTM76)
HARTMAN 78 (HTM78)
HARTMAN 80 (HTM80)
HARTMAN 82 (HTM82)
HARTMAN 84 (HTM84)
HARTMAN 85 (HTM85)
HARTMAN 86 (HTM86)
HARTMAN 87 (HTM87)

Hartman-Barnard-Hartman Lease Wells

Hartman-Barnard No. 1 (HBU1)
Hartman-Barnard No. 2 (HBU2)
Hartman-Barnard No. 3 (HBU3)
Hartman-Barnard No. 4 (HBU4)
Hartman No. 3 (RBH3)
Hartman No. 6 (RBH6)
Hartman No. 8 (HAR8)
Hartman No. 12 (HAR12)
Hartman No. 14 (HAR14)
Hartman No. 15 (HAR15)
Hartman No. 18 (HAR18)
Hartman No. 22 (HAR22)
Hartman No. 24 (RBH24)
Hartman No. 28 (HAR28)
Hartman No. 31 (HAR31)
Hartman No. 32 (HAR32)
Hartman No. 34 (HAR34)

Hartman Ranch Lease Wells

Hartman No. 5 (HRT5)
Hartman No. 6 (HRT6)
Hartman No. 7 (HRT7)
Hartman No. 12 (HRT12)
Hartman No. 16 (HRT16)
Hartman No. 17 (HRT17)
Hartman No. 19 (HRT19)
Hartman No. 20 (HRT20)

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6. EXEMPT EQUIPMENT LIST

Rule 33.2.A.3 (Part 70 Permits - Application Contents) requires the applicant to provide a list of all emissions units located at the stationary source that are exempt pursuant to Rule 23 based on size or production rate. Pursuant to Rule 33.2.A.3, emissions from insignificant activities do not need to be included in the permit application.

This section of the permit contains a table entitled "Insignificant Activities (Exempt Equipment)". This table is a list of insignificant activities (exempt equipment) at the facility that are exempt from permit based on a size or production rate exemption in Rule 23, "Exemptions From Permit". Insignificant Activity is defined in Rule 33.1 (Part 70 Permits – Definitions). The permittee shall provide calculations, usage records, emission records, and/or operational data as necessary to substantiate an activity as insignificant.

This table is presented for informational purposes only. Any changes to this list are not considered to be permit modifications, nor is the list considered to be enforceable. As detailed in Rule 33.2.A.3, this list is required to be submitted with an application for permit reissuance. The general requirements listed in Section No. 9 of this permit may apply to these insignificant activities.

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INSIGNIFICANT ACTIVITIES (EXEMPT EMISSION UNITS)	BASIS FOR EXEMPTION (Size/Production Rate)	RULE 23 CITATION
2 – Gasoline-Driven Pumps, 5.5 BHP	Max. design rating < 50 BHP	23.D.6
1 – Gasoline-Driven Pump, 8 BHP	Max. design rating < 50 BHP	23.D.6
1 – Gasoline-Driven Pump, 13 BHP	Max. design rating < 50 BHP	23.D.6
1 – Gasoline-Driven Pump, 18 BHP	Max. design rating < 50 BHP	23.D.6
1 – Gasoline-Driven Air Compressor, 12.5 BHP	Max. design rating < 50 BHP	23.D.6
2 – Gasoline-Driven Air Compressors, 13 BHP	Max. design rating < 50 BHP	23.D.6
1 – Gasoline-Driven Air Compressor, 18 BHP	Max. design rating < 50 BHP	23.D.6
2 – Gasoline-Driven Air Compressors, 21 BHP	Max. design rating < 50 BHP	23.D.6
1 – Gasoline-Driven Generator, 8 BHP	Max. design rating < 50 BHP	23.D.6
1 – Gasoline-Driven Generator, 9 BHP	Max. design rating < 50 BHP	23.D.6
1 – Gasoline-Driven Generator, 11 BHP	Max. design rating < 50 BHP	23.D.6
1 – Gasoline-Driven Generator, 13 BHP	Max. design rating < 50 BHP	23.D.6
1 – Gasoline-Driven Pressure Washer, 6 BHP	Max. design rating < 50 BHP	23.D.6
1 – Gasoline-Driven Pressure Washer, 7 BHP	Max. design rating < 50 BHP	23.D.6
1 – Gasoline-Driven Pressure Washer, 13 BHP	Max. design rating < 50 BHP	23.D.6
2 – Gasoline-Driven Pressure Washers, 16 BHP	Max. design rating < 50 BHP	23.D.6
1 – Gasoline-Driven Pressure Washer, 20 BHP	Max. design rating < 50 BHP	23.D.6
2 – Natural Gas-Driven Compressors, 49 BHP	Max. design rating < 50 BHP	23.D.6
1 – Gasoline-Driven Welding Machine, 22 BHP	Max. design rating < 50 BHP	23.D.6

INSIGNIFICANT ACTIVITIES (EXEMPT EMISSION UNITS)	BASIS FOR EXEMPTION (Size/Production Rate)	RULE 23 CITATION
1 – Gasoline-Driven Lube Oil Pump, 13 BHP	Max. design rating < 50 BHP	23.D.6
1 – Gasoline-Driven Chainsaw, 3 BHP	Max. design rating < 50 BHP	23.D.6
4 – Diesel-Fired Steam Cleaners	Steam Cleaning Equipment < 1 MMBTU/hr	23.C.2
1 – Natural Gas Heater, 0.060 MMBTU/hr	Heat Transfer Equipment < 1 MMBTU/hr	23.C.1
1 – Natural Gas Heater, 0.080 MMBTU/hr	Heat Transfer Equipment < 1 MMBTU/hr	23.C.1
2 – Natural Gas Heaters, 0.106 MMBTU/hr	Heat Transfer Equipment < 1 MMBTU/hr	23.C.1
2 – Natural Gas Heaters, 0.110 MMBTU/hr	Heat Transfer Equipment < 1 MMBTU/hr	23.C.1
1 – Natural Gas Heater, 0.125 MMBTU/hr	Heat Transfer Equipment < 1 MMBTU/hr	23.C.1
2 – Natural Gas Heaters, 0.250 MMBTU/hr	Heat Transfer Equipment < 1 MMBTU/hr	23.C.1
3 – Natural Gas Water Heaters, 0.040 MMBTU/hr	Heat Transfer Equipment < 1 MMBTU/hr	23.C.1
Solvent Wipe Cleaning	Certified SCAQMD Clean Air Solvent or solvent with ROC content < 25 mg/l	23.F.10.a or 23.F.10.b
1 – Safety Kleen Stand, rental	Non-convey. Degreaser using solvent w/BP > 302°F & liq surface area < 1 m^2, and < 1000 lb ROC emitted during 12 month period	23.F.10.c
Various Chemical Tanks	Tank Capacity < 5000 gal	23.F.21 (71.2A)

7. SPECIFIC APPLICABLE REQUIREMENTS (ATTACHMENTS)

As discussed in Section No. 2, “Permitted Equipment and Applicable Requirements Table”, the emissions units at this stationary source listed in the table have requirements that are specifically applicable to them. The applicable requirements are based on the District's prohibitory rules, federal NSPS (40 CFR Part 60), federal NESHAPS (40 CFR Part 61), and federal NESHAPS/MACT (40 CFR Part 63).

In this section of the permit, the permit conditions that are associated with each specific applicable requirement are listed in an individual attachment. The attachment is identified with the label “Attachment (APCD Rule No. or CFR No.) #” in the lower left corner. Each attachment has an applicability section that describes how and why this attachment applies to the specific emissions unit. The attachment may apply to one or more of the emissions units listed in the Permitted Equipment and Applicable Requirements Table in Section No. 2.

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Ventura County Air Pollution Control District
Rule 71.1.B.1.a Applicable Requirements
Tanks Equipped with Vapor Recovery

Rule 71.1, "Crude Oil Production and Separation"
Adopted 06/16/92, Federally-Enforceable

Rule 74.10, "Components at Crude Oil and Natural Gas Production and Processing Facilities"
Adopted 03/10/98, Federally-Enforceable

Applicability:

This attachment applies to tanks at this stationary source equipped with a vapor recovery system which directs all vapors to a fuel gas system, a sales gas system, or to a flare. Specifically, this attachment applies to all storage tanks in a tank battery including wash tanks, produced water tanks, and wastewater separators, that are used in the production, gathering, storage, processing, and separation of crude oil and natural gas from any petroleum production permit unit prior to custody transfer. This attachment does not apply to portable tanks or other tanks not equipped with vapor recovery.

A tank is defined as a container, constructed primarily of non-earthen materials, used for the purpose of storing or holding petroleum material, or for the purpose of separating water and/or gas from petroleum material. A tank battery is defined as any tank or aggregation of tanks. An aggregation of tanks is considered a tank battery only if the tanks are located so that no one tank is more than 150 feet from any other tank, edge to edge.

The tank's hatches and other inlet and outlet liquid and gas piping connections are considered to be components subject to the leak requirements of APCD Rule 74.10, "Components at Crude Oil and Natural Gas Production and Processing Facilities".

Conditions:

1. Pursuant to Rule 71.1.B.1.a, all tanks shall be equipped with a properly installed, maintained and operated vapor recovery system. The vapor disposal portion of the vapor recovery system shall consist of either a system which directs all vapors to a fuel gas system, a sales gas system, or to a flare that combusts reactive organic compounds.

2. Pursuant to Rule 71.1.D.2, the vapor recovery provisions of Rule 71.1.B.1.a shall not apply during maintenance operations on vapor recovery systems or tank batteries, including wash tanks, produced water tanks and wastewater separators, if the Air Pollution Control District is notified verbally at least 24 hours prior to the maintenance operation and if the maintenance operation will take no more than 24 hours to complete.

3. The tank's hatches and other inlet and outlet gas and liquid piping connections are components subject to the leak requirements of Rule 74.10, "Components at Crude Oil and Natural Gas Production and Processing Facilities".

4. On a quarterly basis, permittee shall monitor the storage tank vapor recovery system to ensure that compliance with Rule 71.1.B.1.a is being maintained. This shall include an inspection of the following components, as applicable, for proper operation: gas compressor, hatches, relief valves, pressure regulators, flare. Permittee shall keep dated records of the quarterly inspections and tank maintenance activities. These records shall be maintained at the facility and submitted to the District upon request.

5. On an annual basis, permittee shall certify that storage tanks at the facility are complying with Rule 71.1.B.1.a. This annual compliance certification shall include verifying that the tanks are equipped with a vapor recovery system.

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Ventura County Air Pollution Control District
Rule 71.1.B.3 Applicable Requirements
Portable Tank Requirements

Rule 71.1, "Crude Oil Production and Separation"
Adopted 06/16/92, Federally-Enforceable

Rule 74.10, "Components at Crude Oil and Natural Gas Production and Processing Facilities"
Adopted 03/10/98, Federally-Enforceable

Applicability:

This attachment applies to tanks designated on the Permit to Operate as portable, and used in the production, gathering, storage, processing, and separation of crude oil and natural gas from any petroleum production permit unit prior to custody transfer. A portable tank is defined as a tank that can be moved from one location to another by attachment to a motor vehicle without having to be dismantled. A tank is further defined as a container, constructed primarily of nonearthen materials, used for the purpose of storing or holding petroleum material, or for the purpose of separating water and/or gas from petroleum material. A tank battery is defined as any tank or aggregation of tanks. An aggregation of tanks is considered a tank battery only if the tanks are located so that no one tank is more than 150 feet from any other tank, edge to edge.

The tank's hatches and other inlet and outlet liquid and gas piping connections are considered to be components subject to the leak requirements of APCD Rule 74.10, "Components at Crude Oil and Natural Gas Production and Processing Facilities".

Conditions:

1. Pursuant to Rule 71.1.B.3, portable tanks used to store or hold crude oil shall be equipped with both a closed cover that is impermeable to ROC vapors and a pressure-vacuum valve set by the manufacturer or according to the manufacturer's recommendations. A portable tank shall be defined as a tank that can be moved from one location to another by attachment to a motor vehicle without having to be dismantled.

2. Pursuant to Rule 71.1.D.1.c, the vapor recovery provisions of Rule 71.1.B.1 shall not apply to portable tanks if all of the following conditions are met:

    a. The portable tank is not used to increase the storage capacity of an existing tank battery.

b. The portable tank is not located within 150 feet of a tank battery that is subject to the vapor recovery provisions of Rule 71.1.B.1.

c. The portable tank is being used during maintenance activity at a tank battery or well and has not held or stored crude oil for more than 60 days.

3. The tank's hatches and other inlet and outlet gas and liquid piping connections are components subject to the leak requirements of Rule 74.10, "Components at Crude Oil and Natural Gas Production and Processing Facilities".

4. On an annual basis, permittee shall certify that portable tanks at the facility are complying with Rule 71.1.B.3. This compliance certification shall include verifying the integrity of the roof and pressure-vacuum relief valve.

   For portable tanks that are not permanently located at the facility, permittee shall maintain records to show that the integrity of the roof and pressure-vacuum relief valve were verified when the tank was brought to the facility.

5. Pursuant to Rule 71.1.E.3, any person claiming the exemption of Rule 71.1.D.1.c for any portable tank shall maintain records indicating the number of days the tank has stored or held crude oil during the maintenance operation. In addition, the location of the portable tank relative to a tank battery, and whether the tank was connected to vapor recovery shall be indicated. These records shall be submitted to the District upon request.

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Ventura County Air Pollution Control District
Rule 71.4.B.2 Applicable Requirements
Sumps, Pits, and Ponds With Covers

Rule 71.4, "Petroleum Sumps, Pits, Ponds, and Well Cellars"
Adopted 06/08/93, Federally-Enforceable

Rule 74.10, "Components at Crude Oil and Natural Gas Production and Processing Facilities"
Adopted 03/10/98, Federally-Enforceable

Applicability:

This attachment applies to second or third stage sumps, pits, and ponds at facilities where crude oil or petroleum material is produced, gathered, separated, processed, or stored. The cover's sealing mechanism and other inlet and outlet piping connections are considered to be components subject to the leak requirements of APCD Rule 74.10, "Components at Crude Oil and Natural Gas Production and Processing Facilities".

A sump, pit, or pond is a receptacle, formed primarily of earthen materials, although it may be lined with artificial materials. A sump is further defined as "in continuous use for separating oil, water, sand or other material in petroleum production operations". A pit is further defined as "used to receive intermittent flows of petroleum material or crude oil. Neither a sample box of less than two (2) square feet in horizontal surface area nor a containment berm shall be considered a pit". A pond is further defined as "used to contain produced water from petroleum production processes for disposal or re-use. Ponds are not used for oil/water separation or evaporation".

Conditions:

1. Pursuant to Rule 71.4.B.2, no person shall use a second or third stage sump, pit, or pond unless it is equipped with a properly installed and maintained cover which does not leak, which is impermeable to ROC vapors, and which covers at least 90 percent of the liquid surface area of the sump, pit, or pond. All covers shall be closed at all times except during sampling or attended maintenance operations.

2. Pursuant to Rule 71.4.C.2, the cover requirements of Rule 71.4.B.2 shall not apply during maintenance operations on sumps or pits if the Air Pollution Control District is notified verbally at least 24 hours prior to the maintenance operation, and if the maintenance operation will take no more than 24 hours to complete. Pursuant to Rule 71.4.D.3, any person claiming an exemption from the cover requirements of Rule 71.4.B.2, based on Rule 71.4.C.2, shall maintain records of maintenance to justify the exemption and submit these records to the District upon request.

3. The cover's sealing mechanism and other inlet and outlet piping connections are components subject to the leak requirements of Rule 74.10, "Components at Crude Oil and Natural Gas Production and Processing Facilities". Compliance with Rule 74.10 at sumps, pits, and ponds ensures compliance with the maintenance and leak-free requirements of Rule 71.4.B.2.

4. On an annual basis, permittee shall certify that sumps, pits, and ponds at the facility are complying with Rule 71.4.B.2. This annual compliance certification shall include verifying the integrity of the cover.

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Ventura County Air Pollution Control District
Rule 71.5.B.1.a.1 Applicable Requirements
Glycol Dehydrators
Closed Pipe Control System to Fuel Gas or Sales Gas System

Rule 71, "Crude Oil and Reactive Organic Compound Liquids"
Federally Enforceable Version Adopted 12/13/94
District Enforceable Version Adopted 05/11/21
This permit attachment lists the requirements of the May 11, 2021 version of Rule 71. Compliance with this attachment will ensure compliance with both versions of Rule 71. The permit conditions below, therefore, are federally enforceable. The District-enforceable version of this rule will become federally enforceable when approved by the EPA as part of the SIP.

Rule 71.1, "Crude Oil Production and Separation"
Adopted 06/16/92, Federally-Enforceable

Rule 71.5, "Glycol Dehydrators"
Adopted 12/13/94, Federally-Enforceable

Rule 74.10, "Components at Crude Oil and Natural Gas Production and Processing Facilities"
Adopted 03/10/98, Federally-Enforceable

Applicability:

This attachment applies to all glycol dehydrators, regardless of size, anywhere natural gas is dehydrated. The glycol contacts and absorbs the water vapor in the gas and becomes rich glycol. This glycol is then regenerated by distilling the water. The distilled or lean glycol is then recycled back to the absorber. The glycol regenerator vent exhausts the water vapor, aromatic hydrocarbons and other reactive organic compounds (ROC) from the rich glycol distillation.

More specifically, this attachment applies to glycol dehydrators with regenerator vents that are controlled with a condenser/vapor disposal system. This attachment applies to control systems that use a closed pipe collection system that condenses ROC emissions and directs all vapors to a fuel gas system or sales gas system.

In addition to being subject to APCD Rule 71.5, "Glycol Dehydrators", the glycol reboiler portion of the glycol dehydrator is also subject to APCD Rule 74.15.1, "Boilers, Steam Generators, and Process Heaters", if it utilizes a natural gas-fired reboiler with a heat input rating of 1.00 MMBTU per hour, or greater; or to APCD Rule 74.15, "Boilers, Steam Generators, and Process Heaters", if it utilizes a natural gas-fired reboiler with a heat input rating of 5.00 MMBTU per hour, or greater.

Conditions:

1. Pursuant to Rule 71.5.B.1.a.1, no person shall operate a gas dehydration system unless the reactive organic compound (ROC) emissions from the glycol regenerator vents are controlled by a condenser/vapor disposal system that collects and condenses ROC emissions and directs all uncondensed ROC emissions to a vapor recovery/disposal system. The vapor disposal portion of the system shall consist of a system that directs all vapors to a fuel gas system or a sales gas system.

2. Pursuant to Rule 71.5.B.2, the condensed hydrocarbon liquid stream from the glycol dehydration vents shall be stored and handled in a manner that will not cause or allow the evaporation of ROC into the atmosphere, except as allowed by Section D, "Exemptions", of APCD Rule 71.1, "Crude Oil Production and Separation".

3. Pursuant to Rule 71.5.B.3, the emission control system shall be maintained in a leak-free condition.

   As detailed in Rule 71.B.15, on or before December 31, 2022, a “gas leak” exists when a reading in excess of 10,000 ppm, as methane, above background, is obtained using an appropriate portable hydrocarbon analyzer and when sampling is performed according to the procedures specified in EPA Method 21 - Appendix A of 40 CFR Section 3.2.1. On or before December 31, 2022, a “liquid leak” exists when the dripping of liquid containing reactive organic compounds at a rate of more than three (3) drops per minute is observed. On or after January 1, 2023, “leak” means major gas leak, minor gas leak, major liquid leak, and minor liquid leak; as defined in Rule 71 Sections B.18, B.20, B.19, and B.21.

4. The glycol dehydrator emission control system’s inlet and outlet gas and liquid piping connections are components subject to the leak requirements of Rule 74.10, “Components at Crude Oil and Natural Gas Production and Processing Facilities”. Compliance with Rule 74.10 at the glycol dehydrator ensures compliance with the leak-free condition requirement of Rule 71.5.B.3.

5. Pursuant to Rule 71.5.D.1, the operator of any glycol unit subject to Rule 71.5 shall maintain a current file of the information necessary to assist with rule compliance and shall submit this information to the District upon request. This information, at a minimum, shall include the following:

   a. Facility name, APCD permit number
   b. Location, size of glycol dehydrator reboiler (MMBTU/hr), amount of gas dehydrated (MMSCFD) and type of glycol used
   c. Description of any installed ROC control system
   d. Flow diagram of dehydrator and any ROC controls

e. Maintenance records of the ROC control system

6. Permittee shall annually certify the glycol dehydrator emission control system to ensure that compliance with Rules 71.5.B.1.a.1, 71.5.B.2, and 71.5.B.3 is being maintained. This annual certification shall include a visual inspection assuring that the glycol dehydrator emission control system is a closed system, that the tank storing the condensed hydrocarbon liquid is a closed tank, and that the glycol unit is leak free.

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Ventura County Air Pollution Control District
Rules 74.9.B.1 and 74.9.B.2 Applicable Requirements
Stationary Natural Gas-Fired Rich-Burn Internal Combustion Engines

Rule 74.9, "Stationary Internal Combustion Engines"
Adopted 11/08/05, Federally-Enforceable

40 CFR Part 64, "Compliance Assurance Monitoring"
Federally-Enforceable

Applicability:

This attachment applies to stationary natural gas-fired rich-burn internal combustion engines rated at 50 or more horsepower, and not subject to the provisions of APCD Rule 74.16, "Oilfield Drilling Operations". A rich-burn engine is defined by Rule 74.9 to be a two or four-stroke spark-ignited engine where the manufacturer's original recommended operating air/fuel ratio divided by the stoichiometric air/fuel ratio is less than or equal to 1.1.

The emissions of nitrogen oxides (NOx) from these engines are also subject to the monitoring requirements of 40 CFR Part 64, "Compliance Assurance Monitoring" (CAM). In addition to the quarterly screening analyses and biennial source tests required by Rule 74.9, daily monitoring is required by 40 CFR Part 64. This attachment requires that a portable emissions analyzer be used to monitor NOx emissions on a daily basis. The portable emissions analyzer shall be an indicator of compliance and a reading outside the compliance range will be an excursion as defined in 40 CFR Part 64.

Conditions:

1. Pursuant to Rules 74.9.B.1 and 74.9.B.2, emissions from an applicable engine shall not exceed the following limits:

    a. Oxides of Nitrogen (NOx expressed as NO_2), Either:

        1. 25 ppmvd referenced at 15% oxygen; or
        2. A 96% reduction by volume, as measured concurrently across an emission control device.

    b. Reactive Organic Compounds (ROC): 250 ppmvd referenced at 15% oxygen, expressed as methane

    c. Carbon Monoxide (CO): 4500 ppmvd referenced at 15% oxygen. Note that as stated in Condition No. 3 of Attachment PO00041PC4, the natural gas engines at

the Ventura Avenue Field are subject to a CO limit of 2,500 pppmvd (at 15% oxygen) which is more stringent than the CO limit of Rule 74.9.

Compliance with this condition shall be verified by a biennial source test, conducted in accordance with Condition No. 2.

2. Pursuant to Rule 74.9.B.4, the permittee shall perform a biennial source test on an applicable engine utilizing the following methods as detailed in Rule 74.9.G:

a.	NOx	ARB Method 100
b.	CO	ARB Method 100
c.	ROC	EPA Method 25 or EPA Method 18
d.	Oxygen Content	ARB Method 100

Source test data point intervals for ARB Method 100 tests shall be no greater than 5 minutes and data points shall be averaged over 15 consecutive minutes. A source test shall consist of the average of three (3) runs. Prior to conducting a biennial emissions test, the permittee shall notify the District Compliance Division. Written notification shall be received no less than 15 calendar days prior to the test. The emissions test report and results shall be submitted to the District Compliance Division within 45 days after the test.

3. Pursuant to Rule 74.9.B.5, the permittee shall perform a screening analysis of NOx and CO emissions on a quarterly basis unless:

a. The biennial source test specified above is required, or
b. The engine operated less than 32 hours in each of the three months of the applicable quarter, as measured by a non-resettable elapsed operating hour meter.

The permittee shall notify the District Compliance Division by telephone 24 hours prior to any quarterly screening analysis.

4. Pursuant to Rule 74.9.C, the permittee shall maintain a District approved Engine Operator Inspection Plan. The plan shall include a specific emission inspection procedure to assure that the engine is operated in continual compliance with the provisions of Rule 74.9. The procedure shall include an inspection schedule. At a minimum, inspections shall be conducted quarterly unless the engine operated less than 32 hours in each of the three months of the applicable quarter, as measured by a non-resettable elapsed operating hour meter.

The plan shall be updated after any change in operation. For new engines or modifications to existing engines, the plan shall be submitted to and approved by the District prior to issuance of the Permit to Operate.

5. Pursuant to Rule 74.9.E, Recordkeeping Requirements, the operator shall maintain an inspection log for each engine containing, at a minimum, the following data:

   a. Identification and location of each engine subject to Rule 74.9;
   b. Date and results of each screening analysis and inspection,
   c. A summary of any emissions corrective maintenance taken, and
   d. Any additional information required in the Engine Operator Inspection Plan.

   For each engine exempt from quarterly screening analysis and quarterly inspection for operation less than 32 hours in each of the three months of the applicable quarter, the permittee shall record total hours of operation each month.

6. Pursuant to Rule 74.9.F, Reporting Requirements, the Annual Compliance Certification shall include the following information:

   a. Engine manufacturer, model number, operator identification number, and location.
   b. A summary of maintenance reports during the renewal period, including quarterly screening data if applicable.

7. In addition to the above source testing and engine inspection requirements, the permittee shall comply with the monitoring requirements of 40 CFR Part 64, "Compliance Assurance Monitoring", as follows:

   a. The exhaust stack of each engine shall be equipped with a sampling port or other sampling location to allow the placement of a sampling probe downstream of the non-selective catalytic reduction system.

   b. On a daily basis, the permittee shall measure and record the concentration of nitrogen oxides and oxygen in the exhaust of each engine using a portable emissions analyzer. The concentration of nitrogen oxides, expressed as nitrogen dioxide, shall be measured in parts per million by volume on a dry basis (ppmvd) corrected to 15% oxygen. The portable analyzer may also be installed at a fixed location near the engines' exhausts in order to provide the required daily readings. The manufacturer and model of the portable emissions analyzer shall be subject to District approval.

   c. A nitrogen oxides concentration of greater than 25 ppmvd at 15% oxygen as measured by the portable emissions analyzer shall be considered an excursion as defined in 40 CFR Part 64. An excursion is defined as "a departure from an indicator range established for monitoring" in 40 CFR Part 64. Upon detecting such an excursion, the permittee shall inspect the engine and non-selective

catalytic reduction system, make repairs or adjustments as necessary, and restore the engine exhaust emissions to less than 25 ppmvd at 15% oxygen as expeditiously as practicable in accordance with good air pollution control practices.

d. The portable emissions analyzer shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's specifications and recommendations. On a biennial basis (once every two years) for each engine, the measured concentrations of nitrogen oxides of the portable analyzer shall be compared to the concentrations of nitrogen oxides as measured by ARB Method 100 as described in Condition No. 2 above. If this biennial ARB Method 100 testing indicates that an engine is exceeding the nitrogen oxide limits of Condition No. 1.a (Rule 74.9.B.1 and Rule 74.9.B.2) above when the portable emissions analyzer does not indicate an excursion, the permittee shall promptly notify the District and report this situation as a deviation from a Part 70 permit requirement.

e. In addition to the records required by Condition No. 4 (Rule 74.9.E) above, the permittee shall maintain records of portable emissions analyzer readings for each engine including the date, time, nitrogen oxides concentration in ppmvd corrected to 15% oxygen, and for excursions as defined above, a summary of any corrective actions taken.

f. In addition to the reports required by Condition No. 5 (Rule 74.9.F) above, the permittee shall submit a written report to the District Compliance Division that includes the number and duration of excursions, the cause of the excursion (including unknown if applicable), and the corrective action taken.

Ventura County Air Pollution Control District
Rules 74.9.B.1 and 74.9.B.2 Applicable Requirements
Stationary Natural Gas-Fired Lean-Burn Internal Combustion Engines

Rule 74.9, "Stationary Internal Combustion Engines"
Adopted 11/08/05, Federally-Enforceable

Applicability:

This attachment applies to stationary natural gas-fired lean-burn internal combustion engines rated at 50 or more horsepower, and not subject to the provisions of APCD Rule 74.16, "Oilfield Drilling Operations". A lean-burn engine is defined by Rule 74.9 to be a two or four-stroke spark-ignited engine where the manufacturer's original recommended operating air/fuel ratio divided by the stoichiometric air/fuel ratio is greater than 1.1.

Conditions:

1. Pursuant to Rules 74.9.B.1 and 74.9.B.2, emissions from an applicable engine shall not exceed the following limits:

   a. Oxides of Nitrogen (NOx expressed as NO_2), Either:

      1. 45 ppmvd referenced at 15% oxygen; or
      2. A 94% reduction by volume, as measured concurrently across an emission control device.

   b. Reactive Organic Compounds (ROC): 750 ppmvd referenced at 15% oxygen, expressed as methane

   c. Carbon Monoxide (CO): 4500 ppmvd referenced at 15% oxygen

   Compliance with this condition shall be verified by a biennial source test conducted in accordance with Condition No. 3.

2. Pursuant to Rule 74.9.B.5, ammonia (NH3) emissions from an engine that is equipped with an emission control device shall not exceed 20 ppmvd referenced at 15% oxygen. Compliance with this condition shall be verified by a biennial source test. BAAQMD Method ST-1B (01/20/82) shall be used. Prior to conducting a biennial emissions test, the permittee shall notify the District Compliance Division. Written notification shall be received no less than 15 calendar days prior to the test. The emissions test report and results shall be submitted to the District Compliance Division within 45 days after the test.

3. Pursuant to Rule 74.9.B.4, the permittee shall perform a biennial source test on an applicable engine utilizing the following methods as detailed in Rule 74.9.G:

a.	NOx	ARB Method 100
b.	CO	ARB Method 100
c.	ROC	EPA Method 25 or EPA Method 18
d.	Oxygen Content	ARB Method 100
e.	Gaseous Fuel Heating Value	ASTM Methods D1826-77, D1945, D3588

Source test data point intervals for ARB Method 100 tests shall be no greater than 5 minutes and data points shall be averaged over 15 consecutive minutes. A source test shall consist of the average of three (3) runs. Prior to conducting a biennial emissions test, the permittee shall notify the District Compliance Division. Written notification shall be received no less than 15 calendar days prior to the test. The emissions test report and results shall be submitted to the District Compliance Division within 45 days after the test.

4. Pursuant to Rule 74.9.B.5, the permittee shall perform a screening analysis of NOx and CO emissions on a quarterly basis unless:

a. The biennial source test specified above is required, or
b. The engine operated less than 32 hours in each of the three months of the applicable quarter, as measured by a non-resettable elapsed operating hour meter.

The permittee shall notify the District Compliance Division by telephone 24 hours prior to any quarterly screening analysis.

5. Pursuant to Rule 74.9.C, the permittee shall maintain a District approved Engine Operator Inspection Plan. The plan shall include a specific emission inspection procedure to assure that the engine is operated in continual compliance with the provisions of Rule 74.9. The procedure shall include an inspection schedule. At a minimum, inspections shall be conducted quarterly unless the engine operated less than 32 hours in each of the three months of the applicable quarter, as measured by a non-resettable elapsed operating hour meter.

The plan shall be updated after any change in operation. For new engines or modifications to existing engines, the plan shall be submitted to and approved by the District prior to issuance of the Permit to Operate.

6. Pursuant to Rule 74.9.E, Recordkeeping Requirements, the operator shall maintain an inspection log for each engine containing, at a minimum, the following data:

a. Identification and location of each engine subject to Rule 74.9;

b. Date and results of each screening analysis and inspection,
c. A summary of any emissions corrective maintenance taken, and
d. Any additional information required in the Engine Operator Inspection Plan.

For each engine exempt from quarterly screening analysis and quarterly inspection for operation less than 32 hours in each of the three months of the applicable quarter, the permittee shall record total hours of operation each month.

7. Pursuant to Rule 74.9.F, Reporting Requirements, the Annual Compliance Certification shall include the following information:

a. Engine manufacturer, model number, operator identification number, and location.
b. A summary of maintenance reports during the renewal period, including quarterly screening data if applicable.

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Ventura County Air Pollution Control District
Rule 74.9.D.3 Applicable Requirements
Emergency Standby Stationary Internal Combustion Engines
Operated During Either an Emergency or Maintenance Operation

Rule 74.9, "Stationary Internal Combustion Engines"
Adopted 11/08/05, Federally-Enforceable

Applicability:

This attachment applies to emergency standby stationary internal combustion engines rated at 50 or more horsepower, not subject to the provisions of APCD Rule 74.16, "Oilfield Drilling Operations", and operated during an emergency or maintenance operation. Maintenance operation is limited to 50 hours per calendar year. Pursuant to Rule 74.9.D.3, emergency standby stationary internal combustion engines operated during an emergency or during maintenance operation of no more than 50 hours per calendar year are exempt from all provisions of Rule 74.9.

As detailed in Rule 74.9.I.2 an emergency standby engine is defined as an internal combustion engine used only when normal power line or natural gas service fails, or for the emergency pumping of water for either fire protection or flood relief. An emergency standby engine may not be operated to supplement a primary power source when the load capacity or rating of the primary power source has been either reached or exceeded.

Conditions:

1. Pursuant to Section D.3 of Rule 74.9, an applicable emergency standby stationary internal combustion engine shall only be operated during an emergency or during maintenance operation of not more than 50 hours per calendar year.

   Pursuant to Section I.5 of Rule 74.9, a maintenance operation is defined as the use of an emergency standby engine and fuel system during testing, repair and routine maintenance to verify its readiness for emergency standby use.

2. Pursuant to Section D.3 of Rule 74.9, each emergency standby engine shall be equipped with an operating, non-resettable, elapsed hour meter.

3. Pursuant to Section F.1 of Rule 74.9, the Annual Compliance Certification shall include the following records for each emergency standby engine: Engine manufacturer, model number, operator identification number, and location.

4. Pursuant to Section F.2 of Rule 74.9, the annual engine hours of maintenance operation shall be reported annually. A report shall be provided to the District after every calendar year by February 15.

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Ventura County Air Pollution Control District
Rule 74.15.B.1 Applicable Requirements
Boilers, Heater Treaters, Steam Generators, and Process Heaters
NOx and CO Emission Limits
Annual Heat Input ≥ 9,000 MMBTU
Unit Installed and Operating prior to January 1, 2021

Rule 74.15, "Boilers, Steam Generators, and Process Heaters"
Federally Enforceable Version Adopted 11/08/94
District Enforceable Version Adopted 11/10/20

This permit attachment lists the requirements of the November 10, 2020 version of the rule. Compliance with this attachment will ensure compliance with both versions of Rule 74.15. The permit conditions below, therefore, are federally enforceable. The District-enforceable version of this rule will become federally enforceable when approved by the EPA as part of the SIP.

Applicability:

This attachment applies to portable or stationary boilers, heater treaters, steam generators and process heaters with a maximum heat input rating of greater than or equal to 5 MMBTU/Hr that have operated with an annual heat input rate of greater than or equal to 9,000 MMBTU during any twelve (12) calendar month rolling period. This attachment also applies to any unit operated with an annual heat input rate of less than 9,000 MMBTU that is equipped with low NOx burners or other such equipment to comply with the NOx and CO requirements of Rule 74.15.B.1. Such units are required to comply with the emission limits of Rule 74.15.B.2 no later than January 1, 2027, or upon resuming operation after the unit is modified, whichever comes first. A heat input of 9,000 MMBTU is equivalent to 90,000 therms and equivalent to 8.57 million cubic feet of natural gas at a higher heating value of 1,050 BTU/cf.

A boiler, steam generator or process heater is any external combustion equipment fired with liquid and/or gaseous fuel. A boiler or a steam generator is further defined as any external combustion equipment used to produce steam or transfers heat from combustion gases to water. Boiler or steam generator does not include any unfired waste heat recovery boiler that is used to recover sensible heat from the exhaust of any combustion equipment. A process heater is further defined as equipment that transfers heat from combustion gases to water or process streams. Process heater does not include any kiln, oven, open heated tank, dehydrator, dryer, crematory, incinerator, calciner, cooker, roaster, duct burner, or furnace; unfired waste heat recovery heater that is used to recover sensible heat from the exhaust of any combustion equipment; fuel-fired degreasing or metal finishing equipment including parts washers and metal heat treating or metal furnaces; afterburner, vapor incinerator, or thermal or catalytic oxidizers used as an emission control device; glass melting furnace. Annual heat input is defined as the actual amount of heat released by fuels burned in a unit during a twelve (12) calendar month rolling period, based on

the higher heating value of the fuel. The annual heat input shall be calculated as the sum of the previous 12 monthly fuel use rates multiplied by the higher heating value of the fuel.

Conditions:

1. Pursuant to Rule 74.15.B.1, emissions from an applicable emission unit shall not exceed the following limits:

   a. Oxides of Nitrogen (NOx expressed as NO_2): 40 ppmvd
   b. Carbon Monoxide (CO): 400 ppmvd

   These limits shall be referenced at three (3) percent volume stack gas oxygen on a dry basis averaged over 15 consecutive minutes. Compliance with this condition shall be verified every 24 months by source testing.

   Applicable emissions unit shall comply with the emissions limits of Rule 74.15.B.2 no later than January 1, 2027, or upon resuming operation after the unit is modified, whichever comes first; and demonstrate compliance within 6 months.

2. Pursuant to Rule 74.15.B.1, an applicable emission unit shall be source tested not less than once every 24 months (biennially) utilizing the following methods as detailed in Rule 74.15.E:

a.	NOx	ARB Method 100
b.	CO	ARB Method 100
c.	Stack Gas Oxygen	ARB Method 100

   Pursuant to Rule 74.15.E.4, emission tests shall be conducted on units in "as-found" operating condition. However, no emission test for Rule 74.15 shall be conducted during start-up, shutdown or under breakdown conditions. Prior to conducting a biennial emissions compliance test, permittee shall notify the District Compliance Division. Written notification, and a source test protocol subject to District approval, shall be received no less than 15 calendar days prior to the test. The emission compliance test report shall include the information listed in Rule 74.15.E.3 and shall be submitted to the District Compliance Division within 45 days after the test.

3. Pursuant to Rule 74.15.C.2, the emission limits of Rule 74.15.B.1 and B.2 shall not apply to any unit that operates on alternate fuel under the following conditions:

   a. Alternate fuel is required due to the curtailment of natural gas service to the individual unit by the natural gas supplier. Alternate fuel use in this case shall not exceed the period of natural gas curtailment.

b. Alternate fuel use is required to maintain the alternate fuel system. Alternate fuel use in this case shall not exceed fifty (50) hours per year.

4. Pursuant to Rule 74.15.C.4, the emission limits of Rule 74.15.B.1 and B.2 shall not apply during the cold startup of an applicable unit. For units with a rated heat input capacity of equal to, or greater than, one hundred (100) million BTUs per hour, the duration of this exemption shall not exceed three (3) hours. For units with a rated heat input capacity of less than one hundred (100) million BTUs per hour, the duration of this exemption shall not exceed one (1) hour.

5. Permittee shall record and maintain the following information:

   a. Daily records of alternate fuel consumption as required by Rule 74.15.D.3. Each record shall include the type of fuel, the quantity of fuel, and the duration of the occurrence; and

   b. The biennial source test report.

   This information shall be submitted to the District upon request.

6. If the emission unit is equipped with an external flue gas recirculation (FGR) system for the control of nitrogen oxides, permittee shall also comply with the FGR monitoring and recordkeeping requirements in the Permit Specific Conditions (Attachments) presented in Section No. 7 of this permit.

Ventura County Air Pollution Control District
California Airborne Toxic Control Measure For
Stationary Compression Ignition Engines
In-Use Emergency Engines

Section 93115, Title 17, California Code of Regulations, Airborne Toxic Control Measure For Stationary Compression Ignition (CI) Engines
Effective 05/19/11

The District is required to implement and enforce the state ATCM. The ATCM is not federally-enforceable.

Applicability:

This attachment describes the requirements of California Airborne Toxic Control Measure (ATCM) For Stationary Compression Ignition (CI) Engines that apply to in-use emergency standby stationary diesel-fueled CI engines. An "in-use" engine is an engine that was installed at a facility prior to January 1, 2005. Pursuant to Section 93115.4(a)(30) "Emergency use" means providing electrical power during the failure or loss of all or part of normal electrical power service or normal natural gas supply to the facility: (1) which is caused by any reason other than the enforcement of a contractual obligation the owner or operator has with a third party or any other party; and (2) which is demonstrated by the owner or operator to the District satisfaction to have been beyond the reasonable control of the owner or operator. Pursuant to Section 93115.4(a)(8) CARB Diesel Fuel means any diesel fuel that meets the specifications of vehicular diesel fuel, as defined in title 13, CCR, sections 2281 and 2282. The Verification Procedure is defined in Section 93115.4(a)(78).

Conditions:

1. Pursuant to subsection 93115.5(a), as of January 1, 2006, the permittee shall not fuel the engine with any fuel unless the fuel is one of the following:

    a. CARB Diesel Fuel, or
    b. An alternative diesel fuel that is:
        1) biodiesel;
        2) a biodiesel blend that does not meet the definition of CARB diesel Fuel
        3) a Fischer-Tropsch fuel; or
        4) an emulsion of water in diesel fuel; or
    c. any alternative diesel fuel that is not identified in section 93115.5(a)(2) and meets the requirements of the Verification Procedure; or
    d. an alternative fuel; or
    e. CARB Diesel Fuel used with fuel additives that meets the requirements of the Verification Procedure; or

f. any combination of the above.

2. Pursuant to Section 93115.6(b)(3), as of January 1, 2006, annual hours of operation for maintenance and testing of the emergency engine(s) shall not exceed 20 hours per year. This limit does not include emergency operation as defined in the ATCM. When not being operated for maintenance or testing, the emergency engine(s) shall only be used for "emergency use" as defined in the ATCM.

   In order to comply with this condition, the engine(s) shall be equipped with a non-resettable hour meter and the permittee shall maintain a log that differentiates operation during maintenance and testing from emergency use. These records shall be compiled into a monthly total. The monthly operating hour records shall be summed for the previous 12 months.

3. Pursuant to subsection 93115.10(f)(1), the permittee shall keep records and prepare a monthly summary that shall list and document the nature of use for each of the following:

   a. Emergency use hours of operation;
   b. Maintenance and testing hours of operation;
   c. Type of fuel use in the engines. For engines operated exclusively on CARB Diesel Fuel, the owner or operator shall document the use of CARB Diesel Fuel through the retention of fuel purchase records indicating that the only fuel purchased for supply to an emergency standby engine was CARB Diesel Fuel; or for engines operated on any fuel other than CARB Diesel Fuel, the fuel records demonstrating that the only fuel purchased and added to an emergency standby engine or engines, or to any fuel tank directly attached to an emergency standby engine or engines, meets the requirements of section 93115.5(b).

Ventura County Air Pollution Control District
National Emission Standards for Hazardous Air Pollutants
For Stationary Reciprocating Internal Combustion Engines
Existing Emergency Diesel Engines at an Area Source of HAPs

40 CFR Part 63, Subpart ZZZZ, "National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines" (RICE MACT)
RICE MACT Last Revised 01/30/13

Applicability:

The NESHAP for Stationary Reciprocating Internal Combustion Engines is applicable to all stationary reciprocating internal combustion engines (RICE) at both major and area sources of hazardous air pollutants. The NESHAP is applicable to both compression ignition (CI – diesel) engines and spark ignition (SI – natural gas, landfill gas, gasoline, propane, etc.) engines. The specific conditions below are for existing emergency diesel engines at an area source. An engine is defined as "existing" if it was constructed before June 12, 2006. A stationary source is defined as an "area source" if it is not a major source of HAP (Hazardous Air Pollutants) emissions; meaning the stationary source does not emit or have the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year.

Pursuant to Section 63.6640(f) and Section 63.6675, an "emergency engine" is any engine whose operation is limited to emergency situations and required testing and maintenance. An emergency can be the loss of grid power or the stationary source's own power production. An emergency engine may also participate in an emergency demand response program under limited circumstances. Stationary RICE used for peak shaving or as part of a financial arrangement to supply power into the grid, or as a part of a non-emergency demand response program are not considered emergency stationary RICE.

For more up-to-date information regarding RICE NESHAP standards, please refer to the following link: https://www.epa.gov/stationary-engines/national-emission-standards-hazardous-air-pollutants-reciprocating-internal-0

Conditions:

1. Pursuant to Section 63.6603(a), Table 2d, the permittee shall comply with the following operating requirements:

    a. Change oil and filter every 500 hours of operation or annually, whichever comes first. An oil analysis program as described in Section 63.6625(i) can be utilized in order to extend the specified oil change requirement.

    b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes

first, and replace as necessary.

c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

Pursuant to Table 2d, if an emergency RICE is operating during an emergency and it is not possible to perform the above maintenance or if performing the maintenance would otherwise pose an unacceptable risk under federal, state, or local law, the maintenance can be delayed and should be performed as soon as practicable after the emergency has ended or the unacceptable risk has abated. All such maintenance delays shall be reported to the APCD Compliance Division.

2. Pursuant to Section 63.6625(e) and 63.6640(a), Table 6, the permittee shall operate and maintain the stationary RICE according to the manufacturer's emission-related written instructions or develop your own plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

3. Pursuant to Section 63.6625(f), the RICE shall be equipped with a non-resettable hour meter.

4. Pursuant to Section 63.6625(h), the permittee shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

5. Pursuant to Sections 63.6640(f) and 63.6675, the permittee shall operate the emergency RICE in compliance with the following requirements:

   a. There is no time limit on the use of emergency stationary RICE in emergency situations. An emergency can be the loss of grid power or the stationary source's own power production.

   b. The use of the engine is limited to 100 hours per calendar year for maintenance checks and readiness testing, emergency demand response, 5% or greater voltage or frequency deviation situations, and up to 50 hours per year for non-emergency situations as detailed in Section 63.6640(f)(4). The 50 hours are to be counted in the 100 hours limit.

   c. The emergency stationary RICE may be operated up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided above. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-

emergency demand response to generate income for a facility. The 50 hours per year for non-emergency situations can be used to supply power as part of a financial agreement with another entity if all of the requirements of Section 63.6640(f)(4)(ii)(A–E) are met. The 50 hours per year limit is to be counted towards the 100 hours per year limit.

6. Pursuant to Sections 63.6655(e) and 63.6655(f), the permittee shall maintain the following records:

   a. Records of maintenance conducted on the stationary emergency RICE.

   b. Records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The permittee must document how many hours are spent for emergency operation, including what classified the operation as emergency, and how many hours are spent for non-emergency operation.

7. If the engine is contractually obligated to be available for more than 15 hours per year for emergency demand response, 5% or greater voltage or frequency deviation situations, or for non-emergency situations as detailed in Section 63.6640(f)(4)(ii) the engine must use a diesel fuel that meets the requirements in 40 CFR 80.510(b) for non-road diesel fuel. This fuel is commonly known as ultra low sulfur diesel or ULSD. Any diesel fuel purchased (or otherwise obtained) prior to January 1, 2015 may be used until depleted. (Section 63.6604(b))

8. If the engine is contractually obligated to be available for more than 15 hours per year for emergency demand response, 5% or greater voltage or frequency deviation situations, or for non-emergency situations as detailed in Section 63.6640(f)(4)(ii) the permittee is required to compile and submit a report as required by Section 63.6650(h). This report includes, but is not limited to, location information, engine information, hours of operation, and fuel requirement deviations. The first annual report must cover calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year. As required by Section 63.6650(h)(3), the annual report must be submitted electronically via EPA's Central Data Exchange (CDX). (Section 63.6650(h))

9. On an annual basis, the permittee shall certify that all engines at this stationary source are operating in compliance with 40 CFR Part 63, Subpart ZZZZ, "National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Engines" (RICE MACT).

Ventura County Air Pollution Control District
National Emission Standards for Hazardous Air Pollutants
for Stationary Reciprocating Internal Combustion Engines
Existing Non-Emergency Spark-Ignited Engines > 500 HP
at a REMOTE Area Source of HAPs

40 CFR Part 63, Subpart ZZZZ, "National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines" (RICE MACT)
RICE MACT Last Revised 01/30/13

Applicability:

The NESHAP for Stationary Reciprocating Internal Combustion Engines is applicable to all stationary reciprocating internal combustion engines (RICE) at both major and area sources of hazardous air pollutants. The NESHAP is applicable to both compression ignition (CI – diesel) engines and spark ignition (SI – natural gas, landfill gas, gasoline, propane, etc.) engines. The specific conditions below are for existing non-emergency spark ignited "remote" engines greater than 500 horsepower at an area source.

An engine is defined as "existing" if it was constructed before June 12, 2006. A stationary source is defined as an "area source" if it is not a major source of HAP (Hazardous Air Pollutants) emissions; meaning the stationary source does not emit or have the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year. To qualify as a "remote" engine, there shall be no more than 5 buildings intended for human occupancy within a 0.25 mile radius around the engine and no buildings with four or more stories within a 0.25 mile radius around the engine. A stationary engine located on an offshore oil platform in the the Outer Continental Shelf (OCS) is also defined as a "remote" stationary engine.

Pursuant to Section 63.6595(a)(1), the permittee must comply with the applicable operating requirements no later than October 19, 2013.

For more up-to-date information regarding RICE NESHAP standards, please refer to the following link: https://www.epa.gov/stationary-engines/national-emission-standards-hazardous-air-pollutants-reciprocating-internal-0

Conditions:

1. Pursuant to Section 63.6603(a), Table 2d, the permittee shall comply with the following operating requirements:

    a. Change oil and filter every 2,160 hours of operation or annually, whichever comes first. An oil analysis program as described in Section 63.6625(i) can be

utilized in order to extend the specified oil change requirement.

b. Inspect spark plugs every 2,160 hours of operation or annually, whichever comes first, and replace as necessary.

c. Inspect all hoses and belts every 2,160 hours of operation or annually, whichever comes first, and replace as necessary.

2. Pursuant to Section 63.6640(a), Table 6, the permittee shall operate and maintain the stationary RICE according to the manufacturer's emission-related written instructions or develop your own plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

3. Pursuant to Section 63.6625(h), the permittee shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

4. Pursuant to Section 63.6655, the permittee shall keep records of RICE engine maintenance (oil, spark plugs, hoses and belts) required by the engine operation and maintenance plan.

5. On an annual basis, the permittee shall certify that all engines at this stationary source are operating in compliance with 40 CFR Part 63, Subpart ZZZZ, "National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Engines" (RICE MACT).

8. PERMIT SPECIFIC CONDITIONS (ATTACHMENTS)

As discussed in Section No. 2, “Permitted Equipment and Applicable Requirements Table”, the emissions units at this stationary source listed in the table have requirements that are specifically applicable to them. The applicable requirements are primarily based on Rule 26, “New Source Review” requirements (e.g., BACT and offset requirements), or Rule 29, “Conditions on Permits” requirements (e.g., throughput recordkeeping requirements, specific requirements that limit emissions, etc.). These requirements are in addition to the specific applicable requirements listed in Section No. 7.

In this section of the permit, the permit conditions that are associated with each specific applicable requirement are listed in an individual attachment. The attachment is identified with the label “Attachment PO (Title V Permit No.) PC#” in the lower left corner. Each attachment has an applicability section that describes how and why this attachment applies to the specific emissions unit. The attachment may apply to one or more of the emissions units listed in the Permitted Equipment and Applicable Requirements Table in Section No. 2.

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Ventura County Air Pollution Control District
Additional Permit Requirements
Ventura Avenue Field

Rule 26, "New Source Review"

Rule 29, "Conditions on Permits"

Conditions applied pursuant to Rule 26 are federally enforceable and conditions applied pursuant to Rule 29 are District enforceable only.

Applicability:

This attachment applies to the Ventura Avenue Field. These requirements are in addition to any other specific or general requirements referenced in this permit.

Conditions:

1. In order to comply with the throughput and consumption limits of this permit, the permittee shall maintain monthly records of throughput and consumption as detailed in Section No. 3, "Permitted Throughput and Consumption Limit Table", of this permit. The monthly records shall be summed for the previous 12 months. Throughput or consumption totals for any of these 12 calendar month rolling periods in excess of the specified limit shall be considered a violation of this permit. This is a general throughput and consumption recordkeeping condition and applies unless another throughput and consumption recordkeeping condition appears in this section of the permit. (Rules 26 and 29)

2. Combustion equipment listed in the Section No. 2 "Permitted Equipment and Applicable Requirements Table" and the Section No. 3 "Permitted Throughput and Consumption Limit Table" as being fired on natural gas shall only burn natural gas and are not permitted to burn any other fuel. (Rule 26)

3. The permitted emissions authorized by this permit are based in part on the fugitive emissions from 856 oil wells. An Authority to Construct is required to be obtained from the District prior to drilling a new oil well. Emission offsets must also be provided with the submittal of any application to increase the number of wells beyond 856 wells. (Rule 29)

4. The following wells shall be free flowing or operated with electric motor driven artificial lift equipment:

Taylor Lease Well Nos. 113R, 204, 278, 291, 350, 352, 364, 421, 487, 529, 555, 565, 605, 665, 667, 674, 676, 678, 680, 681, 688, 690, 691, 692, 693, 694, 696, 698, 699, 701, 711, 714, 716, 741, 742, 743, 744, 745, 746, 748, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 772, 779, 780, 781, 783, 784, 789, 790, 794, 795, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 831, 832, 834, 835, 836, 837, and 843

Lloyd Nos. 235, 248, 249, 251, 252, 253, 258, 259, 260, 261, 264, 265, 266, 267, 268, 269, 273, 274, 275, 276, 281, and 286

Lloyd Corporation Lease No. 38, 99

V.L. & W Lease Nos. 132, 169, 167, 174, 176, 180, 181, 182, 183

McGonigle Lease Nos. 27, 33, 55, 58, and 61

Barnard Lease Nos. 38, 39, 41

Edison Lease Nos. 8, 81, 82, 84

Gosnell Lease Well Nos. 47, 48, 49, 50, and 56

Hartman Lease Nos. 76, 78, 80, 82, 84, 85, 86, 87

Hartman-Barnard-Hartman Lease Well No. 28, 31, 32, 34

Hartman Ranch Lease Well Nos. 5 (HRT5), 16 (HRT16), 17 (HRT17), 19 (HRT19), 20 (HRT20)

This condition is applied as Best Available Control Technology. (Rule 26)

5. Pursuant to Rule 23.F.7, the use of solvents, in addition to the use of coatings, adhesives, lubricants, and sealants, for facility and building maintenance and repair is exempt from permit. However, the use of such materials by contractors for the maintenance and repair of process and industrial equipment is not exempt from permit pursuant to Rule 23.F.7, unless the material is exempted under another specific section of Rule 23. Pursuant to Rule 23.F.6, the use of non-refillable aerosol cans is exempt from permit. Pursuant to Rule 23.F.10, the use of cleaning agents certified by the SCAQMD as Clean Air Solvents (Rule 23.F.10.a) and the use of cleaning agents that contain no more than 25 grams per liter of ROC as used or applied, and no more than 5 percent by weight combined of methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, and chloroform (Rule 23.F.10.b), is also exempt from permit. This permit does not limit the usage of acetone. Acetone is exempt from permit and record keeping requirements, as it is

not defined as a reactive organic compound.

In order to substantiate the solvent use exemptions listed above, the permittee shall maintain a list of all exempt solvents used at the stationary source and a reference to the specific permit exemption status. (Rule 29)

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Ventura County Air Pollution Control District
Additional Permit Requirements
Ventura Avenue Field Waste Gas Flares

Rule 26, "New Source Review"

Conditions applied pursuant to Rule 26 are federally enforceable.

Rule 71.1, "Crude Oil Production and Separation"
Adopted 06/16/92, Federally Enforceable

Rule 71.3, "Transfer of Reactive Organic Compound Liquids"
Adopted 06/16/92, Federally-Enforceable

Applicability:

This attachment applies to the following Ventura Avenue Field flares:

a) 292 MMBTU/Hr Kaldair low pressure gas flare located on the Taylor Lease at Compressor Plant No. 2
b) 1050 MMBTU/Hr John Zink Hydra 8" flare located on the Lloyd Lease at Gas Plant No. 7
c) 205 MMBTU/Hr flare (includes coaxial 2 MMBTU/Hr 1.5" flare) located on the Lloyd Lease at Gas Plant No. 7

These requirements are in addition to any other specific or general requirements referenced in this permit.

Conditions:

1. Each flare shall have an individual fuel meter installed to record the amount of natural gas consumed. (Rule 26)

2. Gas consumption for the flares shall not exceed the limits listed in Table 3 of this permit for any planned flaring events. There is no limit for emergency use. Emergency use is defined as the disposal of process gases in the event of unavoidable and unforeseen process upsets, including operational problems such as emergency breakdowns, process upsets, power outages, and equipment breakdowns. A planned flaring event includes, but is not limited to, routine flaring to comply with Rule 71.1; or flaring due to planned maintenance performed on wells, equipment, or pipelines by the operator or performed by another operating accepting the produced gas. If a process upset (emergency use) cannot be rectified in a reasonable amount of time, the use of the flare may be determined to be a planned flaring event.

   In order to demonstrate compliance with this condition, the permittee shall maintain

monthly records of flare gas consumption. The permittee shall maintain monthly records which differentiate between emergency use and planned flaring events. The monthly records shall be summed for the previous 12 months. Flare gas combustion totals for planned flaring events for any of these 12 month rolling periods in excess of the specified limit shall be considered a violation of this permit. (Rule 29)

3. Each flare shall be equipped and maintained with a continuous pilot or autoignition system to ensure combustion disposal of all excess produced or recovered gases. (Rules 71.1 and 71.3)

4. Permittee shall test the flare's ignition system monthly and shall maintain a monthly record of the flare's ignition system tests and maintenance activities, including the test date and operator's initials. (Rules 71.1 and 71.3)

5. The permittee shall maintain a monthly record of the total volume (MMcf) of gas combusted in the flares. Monthly and twelve month rolling records shall be maintained for total flare usage and for planned flaring events (non-emergency use). Emergency usage and planned flaring are defined above. The permittee shall maintain records which differentiate between emergency usage and planned flaring events. (Rule 29)

Ventura County Air Pollution Control District
Additional Permit Requirements
Gas Plant No. 7 Oil Heaters

Rule 74.15, "Boilers, Steam Generators, and Process Heaters"
Federally Enforceable Version Adopted 11/08/94
District Enforceable Version Adopted 11/10/20

This permit attachment lists the requirements of the November 10, 2020 version of the rule. Compliance with this attachment will ensure compliance with both versions of Rule 74.15. The permit conditions below, therefore, are federally enforceable. The District-enforceable version of this rule will become federally enforceable when approved by the EPA as part of the SIP.

Rule 26, "New Source Review"

Conditions applied pursuant to Rule 26 are federally enforceable.

Applicability:

This attachment applies to the 8.0 MMBTU/Hr BYIS Manufacturing Oil Heater (Unit No. 601A) and to the 14.25 MMBTU/Hr Wheco Oil Heater (Unit No. 602) located at the Ventura Avenue Field Gas Plant No. 7. These requirements are in addition to any other specific or general requirements referenced in this permit**.**

Conditions:

1. Annual natural gas consumption at the 8.0 MMBTU/hr BYIS Manufacturing Oil Heater (Unit No. 601A) shall not exceed 71.4 million cubic feet.

   In order to comply with this condition, the permittee shall maintain monthly records of fuel consumption. Monthly consumption levels shall be summed for the previous 12 months. Natural gas consumption for any of these 12-month periods in excess of the specified limit shall be considered a violation of this condition. (Rule 26)

2. This permit condition is not applicable as the unit is designated as Out of Service. Annual natural gas consumption at the 14.25 MMBTU/hr Wheco Oil Heater (Unit No. 602) shall not exceed 78.9 million cubic feet.

   In order to comply with this condition, the permittee shall maintain monthly records of fuel consumption. Monthly consumption levels shall be summed for the previous 12 months. Natural gas consumption for any of these 12-month periods in excess of the specified limit shall be considered a violation of this condition. (Rule 26)

3. 8.0 MMBTU/Hr BYIS Manufacturing Oil Heater (Unit No. 601A) Emission Limitations and source testing requirements:

   a) Oxides of nitrogen (NOx measured as NO2) emissions from the BYIS Manufacturing Oil Heater (No. 601A) shall not exceed 12 ppmvd, corrected to 3% oxygen. This limitation is more stringent than Rule 74.15 (until January 2, 2027) and has been applied as BACT (Best Available Control Technology) compliance. (Rule 26)

   b) Carbon monoxide (CO) emissions from the BYIS Manufacturing Oil Heater (No. 601A) shall not exceed 400 ppmvd, corrected to 3% oxygen. This limitation is applied for Rule 74.15 compliance. (Rule 74.15)

   In order to comply with this condition, the permittee shall have the unit's emissions tested no less than once every 24 months. The test report shall indicate the emissions of NOx and CO in parts per million by volume (corrected to 3% oxygen on a dry basis), pounds per hour and pounds per million BTU; the amount of excess oxygen in percent by volume; and the fuel and exhaust flow rates in standard cubic feet per minute. The test report shall be submitted to the District Compliance Division. (Rule 26 and Rule 74.15)

4. The 8.0 MMBTU/hr BYIS Manufacturing Oil Heater (Unit No. 601A) shall be fired on natural gas only. Records shall be maintained to substantiate that this is the type of fuel used. This condition is applied as BACT. (Rule 26)

5. This permit condition is not applicable as the unit is designated as Out of Service. The automatic oxygen control systems on the 14.25 MMBTU/Hr Wheco Oil Heater (Unit No. 602) shall be operated whenever the heater is operating and shall be maintained according to manufacturer's recommendations. The PLC set points (x) on the oxygen controller shall remain within the following range:

   $$2.3 \leq x \leq 6.3 \text{ \% oxygen}$$

   The oxygen concentration shall be measured and recorded on a daily basis using the fixed stack oxygen analyzer for the control system. The PLC set point shall also be recorded on a daily basis. The daily recorded oxygen concentrations shall be reviewed every 30 days to determine that the oxygen concentration is not continually outside the above specified set point ranges. If the stack oxygen concentrations are determined to be continually outside the set point range, the permittee shall re-tune the control system to bring the concentrations into the specified range. Re-tuning the control system is defined as adjusting the individual burner air plenum, the box draft pressure, and flue gas damper, as required to bring the oxygen concentration back to within the above specified range. The permittee shall keep records of any re-tunings of the control system.

Any record of the PLC set points outside the above specified range shall be considered a violation of this condition, unless the permittee can demonstrate compliance with the NOx emission limitations of Rule 74.15.B.1, by emission testing pursuant to Rule 74.15. Any record of stack gas oxygen concentrations continually outside the set point range without re-tuning the system to within the set points is considered a violation of this condition, unless the permittee can demonstrate compliance with the NOx emission limitations of Rule 74.15.B.1, by emission testing pursuant to Rule 74.15. (Rule 74.15)

6. This permit condition is not applicable as the unit is designated as Out of Service. The permittee shall have the emissions of the 14.25 MMBTU/Hr Wheco Oil Heater (Unit No. 602) measured no less than once every 24 months and shall maintain and operate the oxygen trim system according to the parameters specified in Permit Condition No. 5 above. (Rule 74.15)

7. Additional emission limits, monitoring, recordkeeping, reporting, and test method requirements for these heaters are included in Attachment 74.15N1 in Section No. 7 of this permit. (Rule 74.15)

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Ventura County Air Pollution Control District
Additional Permit Requirements
Natural Gas Engines

Rule 74.9, "Stationary Internal Combustion Engines"
Adopted 11/08/05, Federally Enforceable

Rule 26, "New Source Review"

Conditions applied pursuant to Rule 26 are federally enforceable.

Rule 29, "Conditions On Permits"

Conditions applied pursuant to Rule 29 and not federally enforceable.

Applicability:

This attachment applies to the natural gas engines located at the Ventura Avenue Field. These requirements are in addition to any other specific or general requirements referenced in this permit.

Conditions:

1. The Waukesha engines CP2-1 and CP2-2 at the Compressor Plant No. 2 shall have automatic air to fuel ratio controllers. Permittee shall confirm compliance with this condition during engine inspection as detailed in the stationary source's District-approved Rule 74.9 Engine Operator Inspection Plan. (Rule 74.9)

2. The Waukesha Engines CP2-1 and CP2-2 shall have individual fuel meters to record the amount of fuel consumed. (Rule 26)

3. Carbon monoxide (CO) emissions from the natural gas internal combustion engines listed below shall not exceed 2,500 ppmvd at 15% oxygen.

    - 748 BHP Rich Burn Waukesha NG Engine (CP2-1)
    - 748 BHP Rich Burn Waukesha NG Engine (CP2-2)
    - 616 BHP Lean Burn Waukesha NG Engine (C-201)
    - 616 BHP Lean Burn Waukesha NG Engine (C-202)
    - 1108 BHP Lean Burn Waukesha NG Engine (C-101)
    - 1108 BHP Lean Burn Waukesha NG Engine (C-102)
    - 1108 BHP Lean Burn Waukesha NG Engine (C-103)

This limit is more stringent than the Rule 74.9 CO emission limit. Compliance shall be demonstrated by biennial source testing and quarterly emissions screening as required by the Rule 74.9 attachments in this permit. (Rule 29)

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Ventura County Air Pollution Control District
Additional Permit Requirements
Portable Open Top Mixing Bin

Rule 26, "New Source Review"

Conditions applied pursuant to Rule 26 are federally enforceable.

Applicability:

This attachment applies to the portable open top mixing bin located at the Ventura Avenue Field oil and gas processing facility. These requirements are in addition to any other specific or general requirements referenced in this permit.

Conditions:

1. The portable mixing bin shall not be used for more than 12 hours per day and 1,440 hours per year. The mixing bin shall not be used to store reactive organic compound (ROC)-containing materials. The bin shall only be used to mix oilfield sludge materials with soil or dirt for transport to recycling facilities or other uses which are permitted by rules and regulations. The mixing bin may be used to handle materials resulting from normal operation of crude oil and natural gas production including, but not limited to, sediments from facility cleaning operations (including oil spill cleanups) and materials from well repair/reconditioning work. The bin shall only be used when the Slurry Injection System at the Central Water Treatment Plant is unable to provide for the disposal of the oilfield sludge materials. The bin shall be kept clean and dry when mixing operations are not taking place.

2. Permittee shall maintain daily records of the hours of use of the mixing bin and the type of materials being processed in the bin. The daily records shall be compiled into a monthly report. Permittee shall maintain monthly records at the facility and submit these records to the District upon request. The monthly records shall be summed for the previous 12 months. Total hourly usage for any of these 12 calendar month rolling periods in excess of the specified limit shall be considered a violation of this permit.

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Ventura County Air Pollution Control District
Additional Permit Requirements
Lloyd Water Treating Plant Emergency Wastewater Pit (Emergency Bowl)

Rule 26, "New Source Review"

Conditions applied pursuant to Rule 26 are federally enforceable.

Applicability:

This attachment applies to the 70,000 barrel Emergency Cement Bowl (emergency wastewater pit) located on the Lloyd Lease at the Ventura Avenue Field oil and gas processing facility. These requirements are in addition to any other specific or general requirements referenced in this permit.

Conditions:

1. Use of the emergency wastewater pit shall be limited to 20 days per year on an emergency basis. Material stored in the wastewater pit shall be limited to processed water. The permittee shall visually confirm compliance with the above requirements during each use of the wastewater pit. The pit shall be cleaned no more than fifteen calendar days after cessation of the emergency condition which necessitated the use of the wastewater pit. This limit has been applied based on Emission Reduction Credit Application No. 0020-000 (December 18, 1981) which resulted in ERC Certificate No. 1047. (Rule 26)

2. Every six months the permittee shall submit a report of the wastewater pit usage to the District. If the pit has been used, the report shall specify the nature of the emergency condition which necessitated the use of the wastewater pit, the date and time the emergency condition began, the date and time the wastewater pit was cleaned, and the nature of material stored in the wastewater pit. (Rule 26)

3. The emergency wastewater pit is currently designated as "Out of Service." Therefore, the emergency wastewater pit shall be shut down and shall not contain any liquids. Compliance with the conditions above is not required while the unit is "Out of Service." The permittee shall annually certify that the emergency wastewater pit is shut down and has not contained any liquids.

Ventura County Air Pollution Control District
Additional Permit Requirements
Gas Plant No. 7 Grid Power Requirements

Rule 26, "New Source Review"

Conditions applied pursuant to Rule 26 are federally enforceable.

Applicability:

This attachment applies to two compressors, Nos. M902A and M902B, at Gas Plant No. 7. These requirements are in addition to any other specific or general requirements referenced in this permit.

Conditions:

1. Southern California Edison has received Emission Reduction Credits (ERCs) for the conversion of two (2) I.C. engines to electric motors at Gas Plant No. 7 (Application No. 0020-251). Compressor Nos. M902A and M902B shall be powered by grid power or removed from service.

2. In order to ensure compliance with this condition, the permittee shall annually certify that Compressor Nos. M902A and M902B are powered by grid electricity when they are in service.

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Ventura County Air Pollution Control District
Additional Permit Requirements
Gas Plant No. 6 Tank Truck LPG Loading Facility

Rule 26, "New Source Review"

Conditions applied pursuant to Rule 26 are Federally enforceable.

Applicability:

This attachment applies to the Tank Truck LPG Loading Facility located at Gas Plant No. 6, 3051 North Ventura Avenue, Ventura. These requirements are based on a BACT requirement of Authority to Construct No. 0041-600 and are in addition to any other specific or general requirements referenced in this permit.

Conditions:

1. The LPG loading facility shall be equipped with a vapor recovery system which shall be properly maintained and operated.

2. The loading flex hose shall include a nitrogen purge system capable of removing petroleum liquids after each use.

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Ventura County Air Pollution Control District
Additional Permit Requirements
Filter Agent Storage Silo Requirements

Rule 26, "New Source Review"

Conditions applied pursuant to Rule 26 are federally enforceable.

Applicability:

This attachment applies to the Filter Agent Storage Silo at Waterflood Plant No. 4. These requirements are in addition to any other specific or general requirements referenced in this permit.

Conditions:

1. The Filter Agent Silo shall be equipped with a dust filter that shall be in operation whenever the storage silo is being used. The dust filter control equipment shall be operated and maintained pursuant to manufacturer's specifications.

2. In order to ensure compliance with this condition, permittee shall maintain records of any maintenance performed on the dust filter and shall annually certify that the dust filter is being operated and maintained properly.

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Ventura County Air Pollution Control District
Additional Permit Requirements
Out of Service Emissions Units

Rule 29, "Conditions on Permits"

Conditions applied pursuant to Rule 29 are District enforceable only.

Applicability:

This attachment applies to any emissions unit on permit at the Ventura Avenue Oilfield that is currently designated as "Out of Service" in Tables 2, 3, and 4 of this permit.

Conditions:

1. Any tank designated as "Out of Service" in Tables 2, 3, and 4 of this permit is shut down, shall not be operated, and shall not contain any liquids.

2. Any combustion unit designated as "Out of Service" in Tables 2, 3, and 4 of this permit is shut down, shall not be operated, and shall not be connected to a fuel source.

3. In order to ensure that compliance with this condition is being maintained, the permittee shall annually certify that an emissions unit designated as "Out of Service" is shut down and not being operated.

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Ventura County Air Pollution Control District
Additional Permit Requirements
Lloyd Water Treating Plant Solids Processing System

Rule 26, "New Source Review"

Conditions applied pursuant to Rule 26 are federally enforceable.

Rule 71.1, "Crude Oil Production and Separation"
Adopted 06/16/92, Federally-Enforceable

Rule 71.4, "Petroleum Sumps, Pits, Ponds, and Well Cellars"
Adopted 06/08/93, Federally-Enforceable

Applicability:

This attachment applies to the Solids Processing System at the Lloyd Water Treating Plant. The process begins with emptying a load of liquids and solids over a shaker to remove heavy solids. The remaining liquids/solids fall into a covered 42.75 square foot trough and then are pumped into two 500 bbl tanks that are equipped with vapor recovery. The material from the tanks is then processed in a centrifuge for further solids removal. The remaining liquid is piped to a 1,000 bbl solids tank (TWSI-T001). Solids are collected in disposal bin(s) and hauled off- site. This system was expanded pursuant to Authority to Construct No. 00041-996 (issued February 25, 2008).

Conditions:

1. The 1,000 bbl solids tank (TWSI-T001) and the two 500 bbl waste fluids/solids tanks are each limited to 1,825,000 barrels per year of waste fluids / solids.

   In order to comply with this condition, the permittee shall maintain monthly records of monthly barrels fluid processed in the solids processing system. Monthly throughput levels shall be summed for the previous 12 months. Throughput totals for any of these 12-month periods in excess of the specified limit shall be considered a violation of this condition.

2. The vapor recovery system shall be properly maintained and operated pursuant to Rule 71.1.B.1. All gas shall be routed to a fuel gas system, a sales gas system, or a flare. Any flare shall be equipped with a continuous pilot.

3. Tank hatches shall be closed at all times except during sampling or attended maintenance operations. This condition is applied for BACT (Best Available Control Technology) compliance.

4. The 42.75 sqft trough (sump) cover shall be maintained in good condition and shall remain closed at all times that fluid is being stored in the trough, except during attended maintenance operations. This condition is applied for Rule 71.4, "Petroleum, Pits, Ponds, and Well Cellars", compliance.

5. The centrifuge shall be remain closed with no openings to the atmosphere whenever it contains waste fluids or solids. The unit shall be operated pursuant to manufacturer's specifications. This condition is applied for BACT (Best Available Control Technology) compliance.

6. Disposal bins used for storage of process solids (after being processed through the shaker or being dewatered in the centrifuge) shall be covered with a tarp, heavy duty plastic (4 mil or greater), or other cover. The bins shall be kept covered when activity has stopped and the centrifuge has completed processing of the fluids dumped that day. No more than one bin shall be uncovered at any one time.

7. The permittee shall maintain monthly and rolling twelve month records of barrels of fluid processed in the solids processing system. These records shall be maintained for a period of five (5) years and shall be made available to APCD personnel upon request.

8. The permittee shall annually certify compliance with Condition Nos. 2 through 6 above.

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Ventura County Air Pollution Control District
Additional Permit Requirements
Emergency / Standby / Blowdown Tanks

Rule 26, "New Source Review"

Conditions applied pursuant to Rule 26 are federally enforceable.

Applicability:

This attachment applies to the tanks listed on the permit as Emergency / Standby / Blowdown Tanks. The tanks are regulated as "covered pits". Permitted emissions for these tanks are calculated as covered pits. These tanks are not required to be equipped with vapor recovery.

Conditions:

1. The emergency / standby / blowdown tanks shall only be used as secondary containment to capture crude oil or ROC liquids from emergency and/or safety relief events.

   In order to comply with this condition, the permittee shall remove all ROC liquids from the tanks as required by Condition No. 2; and shall inspect the tanks and maintain a record log as required by Condition No. 3.

2. Accumulated ROC liquids shall be removed in a timely manner after each blowdown event.

3. The emergency / standby / blowdown tanks shall be inspected at a minimum frequency of once per month. An up-to-date log shall be maintained showing the date of each inspection. The amount of liquid removed and the date of removal shall also be recorded in the log. This log shall be made available to APCD personnel upon request.

4. The permittee shall annually certify compliance with the conditions of this attachment.

Ventura County Air Pollution Control District
Additional Permit Requirements
Waterflood Plant No. 1 Grid Power Requirements

Rule 26, "New Source Review"

Conditions applied pursuant to Rule 26 are federally enforceable.

Applicability:

This attachment applies to water pumping activities at Waterflood Plant No. 1. These requirements are in addition to any other specific or general requirements referenced in this permit.

Conditions:

1. Emission Reduction Credits (ERCs) have been obtained for the replacement of two natural gas engines (625 BHP White, Model 8G825, (WF1-1 and WF1-2), rich burn, equipped with NSCR) with electric water pumps at Waterflood Plant No. 1 (Application No. 00041-1701). Water pumping activities conducted at Waterflood Plant No. 1 shall be powered by grid electricity.

2. In order to ensure compliance with this condition, the permittee shall annually certify that water pumping activities conducted at Waterflood Plant No. 1 are powered by grid electricity.

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9. GENERAL APPLICABLE REQUIREMENTS (ATTACHMENTS)

The general applicable requirements are broadly applicable requirements that apply and are enforced in the same manner for all subject emissions units or activities. These requirements can normally be adequately addressed in the permit application with minimal or no reference to any specific emissions unit or activity, provided that the scope of the requirement and the manner of its enforcement are clear. Examples of such requirements include those that apply identically to all emissions units at a facility (e.g., source-wide opacity limits), general housekeeping requirements, and requirements that apply identical emissions limits to small units (e.g., process weight requirements).

As detailed in the Title V Permit Reissuance Application, general applicable requirements that apply to this facility were determined. The permit conditions associated with each generally applicable requirement are listed in an individual attachment. The attachment is identified with the label "Attachment (APCD Rule No.) ____" in the lower left corner of each attachment. Each attachment has an applicability section that describes the emissions units to which the attachment applies. Each attachment may apply to one or more of the emissions units listed in the Applicable Requirements Table of Section No. 2. Note that these general applicable requirements may also apply to emissions units not required to be listed in the permit, such as those that are short-term.

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Ventura County Air Pollution Control District
Rule 50 Applicable Requirements
Opacity

Rule 50, "Opacity"
Adopted 04/13/04, Federally-Enforceable

Applicability:

This attachment applies to all emissions units at this stationary source.

Conditions:

1. Pursuant to Rule 50.A, permittee shall not discharge into the atmosphere from any single source whatsoever any air contaminants for a period or periods aggregating more than three (3) minutes in any one (1) hour which are as dark or darker in shade as that designated as No. 1 on the Ringelmann Chart, or equivalent to 20% opacity and greater, unless specifically exempted by Rule 50.

2. Permittee shall perform periodic visual inspections to ensure that compliance with Rule 50 is being maintained. A record shall be kept of any occurrence of visible emissions other than uncombined water greater than zero percent for a period or periods aggregating more than three (3) minutes in any one (1) hour. These records shall include the date, time, and identity of emissions unit. If the visible emissions problem cannot be corrected within 24 hours, permittee shall provide verbal notification to the District within the subsequent 24 hours. These visible emissions records shall be maintained at the facility and submitted to the District upon request. Records of zero percent visual emissions are not required.

3. On an annual basis, permittee shall certify that all emissions units at the facility are complying with Rule 50. This annual compliance certification shall include a formal survey identifying the date, time, emissions unit, and verification that there are no visible emissions other than uncombined water greater than zero percent for a period or periods aggregating more than three (3) minutes in any one (1) hour. As an alternative, the annual compliance certification shall include a formal survey identifying the date, time, emissions unit, and verification that there are no visible emissions for a period or periods aggregating more than three (3) minutes in any one (1) hour which are as dark or darker in shade as that designated as No. 1 on the Ringelmann Chart, or equivalent to 20% opacity and greater, as determined by a person certified in reading smoke using EPA Method 9, or any other appropriate test method as approved in writing by the District, the California Air Resources Board, and the U.S. Environmental Protection Agency.

4. Upon District request, opacity shall be determined by a person certified in reading smoke using EPA Method 9 or a certified, calibrated monitoring system.

Ventura County Air Pollution Control District
Rule 54 Applicable Requirements
Sulfur Compounds - Sulfur Emissions from
Combustion Operations at Point of Discharge

Rule 54, "Sulfur Compounds"
Adopted 01/14/14, Federally Enforceable

Rule 64, "Sulfur Content of Fuels"
Adopted 04/13/99, Federally-Enforceable

Applicability:

This attachment applies to all combustion emissions units at this stationary source that combust gaseous or liquid fuels. This attachment addresses the requirements of Rule 54 for sulfur emissions at the point of discharge. It can be demonstrated that compliance with the fuel sulfur content limits of Rule 64 ensures compliance with the sulfur emission limits of Rule 54.

Conditions:

1. Pursuant to Rule 54.B.1.a, no person shall discharge sulfur compounds from any combustion operation, which would exist as a liquid or gas at standard conditions, in excess of the following limit at the point of discharge:

300 ppm by vol, on a dry basis, as sulfur dioxide (SO_2), at 3% oxygen	For sources subject to: Rule 74.11, "Natural Gas-Fired Water Heaters" Rule 74.11.1, "Large Water Heaters and Small Boilers" Rule 74.15, "Boilers, Steam Generators, and Process Heaters" Rule 74.15.1, "Boilers, Steam Generators, and Process Heaters" (1 to 5 MMBTUs)
300 ppm by vol, on a dry basis, as sulfur dioxide (SO_2), at 15% O_2	For sources subject to: Rule 74.9, "Stationary Internal Combustion Engines" Rule 74.23, "Stationary Gas Turbines" Flares and all other combustion operations

2. In order to comply with Rule 54, permittee shall comply with the fuel sulfur content limits of Rule 64. No additional periodic monitoring requirements for Rule 54 are required beyond the periodic monitoring requirements of Rule 64.

3. Upon District request, sulfur compounds at the point of discharge shall be determined by source testing using EPA Test Method 6, 6A, 6C, 8, 15, 16A, 16B, or South Coast AQMD Test Method 307-91 (Determination of Sulfur in a Gaseous Matrix), as appropriate.

Ventura County Air Pollution Control District
Rule 54 Applicable Requirements
Sulfur Compounds - Sulfur Dioxide Concentration at Ground Level

Rule 54, "Sulfur Compounds"
Adopted 01/14/14, Federally Enforceable

Applicability:

This attachment applies to all emissions units at this stationary source that emit sulfur compounds. This attachment addresses the requirements of Rule 54 for sulfur emissions at ground or sea level at or beyond the property line of the stationary source.

Conditions:

1. Pursuant to Rule 54, no person shall discharge sulfur compounds, which would exist as a liquid or gas at standard conditions, as sulfur dioxide which results in average ground or sea level concentrations at any point at or beyond the property line in excess of 0.25 ppmv averaged over any one hour period, or 0.04 ppmv averaged over any 24 hour period.

2. Pursuant to Rule 54.B.2.a, no person shall discharge sulfur compounds, which would exist as a liquid or gas at standard conditions, as sulfur dioxide which results in ground or sea level concentrations at any point at or beyond the property line such that the 1-hour average design value exceeds 0.075 ppm (Vol).

    a) For purposes of Subsection B.2.a, the design value is derived from the 3-year average of annual 99th percentile daily maximum 1-hour values. At the District's discretion, compliance with the ground or sea level concentration limit in Subsection B.2.a of this rule may be demonstrated using EPA-approved dispersion models or ambient air monitoring. If the District requires ambient air monitoring, the test method(s) listed in Subsection D.2 of this rule must be employed.

    b) To demonstrate compliance using dispersion modeling, the annual 99^{th} percentile daily maximum at each receptor is determined from model results as follows: for each year of meteorological data modeled, select from each day the maximum hourly modeled SO_2 concentration value and sort all these daily maximum hourly values by descending value. The 99^{th} percentile is the 4^{th} highest value for each modeled year. Calculate the average of the 99^{th} percentile values for three consecutive years of modeling data for each receptor. Compliance is demonstrated if this average value is less than or equal to the design value concentration limit in Subsection B.2.a of this Rule at each receptor.

    c) Compliance with the limit in subsection B.2.a may also be demonstrated using EPA-approved screen models. Compliance is demonstrated if the 1-hour SO_2

ground or sea level concentration does not exceed 0.075 ppm (Vol) at or beyond the property line.

d) If ambient air monitoring data is used to demonstrate compliance, the design value must be calculated in accordance with 40 CFR Part 50 Appendix T – Interpretation of the Primary National Ambient Air Quality Standards for Oxides of Sulfur (Sulfur Dioxide).

3. Permittee shall maintain a representative fuel analysis or exhaust analysis, along with modeling data or other demonstration to ensure that compliance with Rule 54 is being maintained. This analysis and compliance demonstration shall be provided to the District upon request.

4. Upon District request, ground or sea level concentrations of SO_2 shall be determined by Bay Area Air Quality Management District Manual of Procedures, Volume VI, Section 1, Ground Level Monitoring for Hydrogen Sulfide and Sulfur Dioxide (July 20, 1994) with the following amendments:

   a. The wind direction shall be continuously measured and recorded to within 5 degrees of arc, and wind speed shall be continuously measured and recorded to within 0.25 miles per hour (mph) at wind speeds less than 25 mph and with a threshold no greater than 0.2 mph.

   b. The meteorological instruments and siting requirements shall comply with the guidelines in "Quality Assurance Handbook for Air Pollution Measurements Systems, Volume IV, Meteorological Measurements Version 2.0," EPA-454/B-08-002, March 2008.

   c. The gas standards shall be restandardized against the reference wet chemical method at a minimum of once every 12 months, or be standardized using National Institute of Standards and Technology (NIST) standard gases.

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Ventura County Air Pollution Control District
Rule 55 Applicable Requirements
Fugitive Dust

Rule 55, "Fugitive Dust"
Adopted 06/10/08, District-Enforceable

This permit attachment will become federally enforceable when Rule 55 is approved by EPA as part of the SIP.

Applicability:

This attachment applies to any operation, disturbed surface area, or man-made condition at this stationary source that is capable of generating dust. These operations may include bulk material handling, earth-moving, construction, demolition, storage piles, unpaved roads, track-out, or off-field agricultural operations.

All definitions listed in Section H of Rule 55 are applicable to this attachment. The Rule 55 definition section includes the following definitions: "disturbed surface area", "bulk material", "earth moving activities", "construction/demolition activities", "storage piles", "paved road", "track-out", and "off-field agricultural operations". All exemptions listed in Section D of Rule 55 are applicable to this attachment.

Conditions:

1. Pursuant to Rule 55.B.1, the permittee shall not cause or allow the emissions of fugitive dust from any applicable source such that the dust remains visible beyond the midpoint (width) of a public street or road adjacent to the property line of the emission source or beyond 50 feet from the property line if there is not an adjacent public street or road.

2. Pursuant to Rule 55.B.2, the Permittee shall not cause or allow the emissions of fugitive dust from any applicable source such that the dust causes 20 percent opacity or greater during each observation and the total duration of such observations (not necessarily consecutive) is a cumulative 3 minutes or more in any one (1) hour. Only opacity readings from a single source shall be included in the cumulative total used to determine compliance. Compliance with the opacity limit shall be determined by using EPA Method 9 with the modifications listed in Section F of Rule 55.

3. Pursuant to Rule 55.B.3, the permittee shall not allow track-out to extend 25 feet or more in length unless at least one of the following three control measures is utilized: track-out area improvement, track-out prevention, or track-out removal. These control measures are detailed in Rule 55.B.3.a.

4. Pursuant to Rule 55.B.3.b, notwithstanding other track-out requirements, all track-out shall be removed at the conclusion of each workday or evening shift subject to the conditions listed in Section 55.B.3.b.

5. Pursuant to Rule 55.C, the permittee shall comply with the specific activity requirements detailed in Section C of Rule 55, for earth-moving, bulk material handling, and truck hauling activities, as applicable.

6. The permittee shall comply with the specific recordkeeping requirements listed in Section E of Rule 55, as applicable.

7. On an annual basis, the permittee shall certify that all applicable sources of dust at this stationary source are operating in compliance with Rule 55. The permittee may also certify annually that there are no operations, disturbed surface areas, or man-made conditions at this stationary source that are subject to Rule 55.

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Ventura County Air Pollution Control District
Rule 57.1 Applicable Requirements
Particulate Matter Emissions from Fuel Burning Equipment

Rule 57.1, "Particulate Matter Emissions from Fuel Burning Equipment"
Adopted 01/11/05, Federally Enforceable

Applicability:

This attachment applies to fuel burning equipment such as boilers, steam generators, process heaters, water heaters, space heaters, flares, and gas turbines. This attachment does not apply to internal combustion engines, jet engine test stands and rocket engine test stands, and rocket propellant testing devices and rocket fuel testing devices. This attachment also does not apply to exhaust gas streams containing particulate matter that was not generated by the combustion of fuel; such exhaust gas streams are subject to Rule 52 and Rule 53.

Conditions:

1. Pursuant to Section B of Rule 57.1, emissions of particulate matter shall not exceed 0.12 pounds per million BTU of fuel input.

   Particulate matter is defined as any material, except uncombined water, that exists in a finely divided form as a liquid or solid at standard conditions. Standard conditions are: a gas temperature of 68 degrees Fahrenheit (20 degrees Celsius) and a gas pressure of 14.7 pounds per square inch (760 mm. Hg) absolute.

2. Upon request of the District Compliance Division, compliance shall be determined by independent source test using CARB Method 5. The total particulate catch shall include the filter catch, probe catch, impinger catch, and the solvent extract, as specified in CARB Method 5. Any other appropriate test method may be used with prior written approval by the District, the California Air Resources Board, and the U.S. Environmental Protection Agency.

3. Periodic monitoring is not necessary to certify compliance with Rule 57.1. To certify compliance, a reference to the Rule 57.B District analysis dated December 3, 1997 is sufficient.

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Ventura County Air Pollution Control District
Rule 64 Applicable Requirements
Sulfur Content of Fuels - Gaseous Fuel Requirements

Rule 64, "Sulfur Content of Fuels"
Adopted 04/13/99, Federally Enforceable

Applicability:

This attachment applies to all combustion emissions units at this stationary source while the emissions units are combusting gaseous fuels. Rule 64 shall not apply to any flare gas combustion, where no useful energy is produced, and which is subject to Rule 54, "Sulfur Compounds."

Conditions:

1. Pursuant to Rule 64, no person shall burn at any time gaseous fuel containing sulfur compounds in excess of 50 grains per 100 cubic feet of gaseous fuel (788 ppmv), calculated as hydrogen sulfide at standard conditions, unless specifically exempted by Rule 64.

2. If only Public Utilities Commission-regulated natural gas, propane, or butane is combusted at this facility, it will be assumed that the permittee is complying with Rule 64 without additional periodic monitoring requirements. Any person claiming this exemption shall maintain records sufficient to substantiate the use of these fuels.

3. If other than Public Utilities Commission-regulated natural gas, propane, or butane is being combusted, the permittee shall analyze the sulfur content of the fuel on an annual basis using South Coast AQMD Method 307-94 - Determination of Sulfur in a Gaseous Matrix or by ASTM D1072-90 (1994), Standard Test Method for Total Sulfur in Fuel Gases.

   Alternatively, when measuring the sulfur content of landfill or oilfield gaseous fuel, permittee may use the colorimetric method ASTM D 4810-88 (Reapproved 1994) or the ASTM D4084-94 (Lead Acetate Reaction Rate Method) and may assume that the hydrogen sulfide content of the fuel gas adequately represents the total sulfur content. However, if the sulfur content as measured by ASTM D4810-88 or ASTM D4084-94 equals or exceeds 200 ppmv, then only South Coast AQMD Method 307-94 or ASTM D1072-90 (1994) shall be used to determine compliance.

   The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis may be used subject to the verification of the dilution ratio.

Permittee may use the colorimetric method ASTM D 4810-88 (Reapproved 1994) for the measurement of the sulfur content of gaseous fuels other than landfill or oilfield gas only if written approval has been granted by the District and by US EPA.

4. Monitoring of the sulfur content of landfill or oilfield gaseous fuel by the permittee shall be at least quarterly if any of the following conditions apply:

   a. Any sulfur measurement exceeds 394 ppmv, calculated as hydrogen sulfide at standard conditions.

   b. A stationary source is new.

   c. The permittee has not reported historical measurements of hydrogen sulfide of the landfill or oilfield gaseous fuel performed within the previous three years in writing to the District for a stationary source.

   An operator may have the sulfur content of landfill or oilfield gaseous fuel monitored annually only, instead of quarterly, by satisfying the following provisions:

   a. During four consecutive calendar quarters, each sulfur content measurement shall not exceed 394 ppmv, calculated as hydrogen sulfide at standard conditions, and

   b. Submit a written request to the District for a reduction in monitoring frequency. This request shall contain backup documentation including monitoring reports that document the above provision. Requests for a reduction in monitoring frequency are not effective until written approval by the District is received by the operator.

   This annual fuel analysis, and the quarterly analyses if applicable, shall be maintained at the facility and a copy of the annual analysis shall be provided to the District with the annual compliance certification.

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Ventura County Air Pollution Control District
Rule 64 Applicable Requirements
Sulfur Content of Fuels - Liquid Fuel Requirements

Rule 64, "Sulfur Content of Fuels"
Adopted 04/13/99, Federally Enforceable

Applicability:

This attachment applies to all combustion emissions units at this stationary source while the emissions units are combusting liquid fuels. This attachment does not apply to any combustion emission unit with sulfur emission controls.

Conditions:

1. Pursuant to Rule 64, no person shall burn any liquid fuels with a sulfur content in excess of 0.5 percent, by weight, unless specifically exempted by Rule 64.

2. If only ARB-quality reformulated gasoline or ARB-certified diesel fuel is combusted at this facility, it will be assumed that the permittee is complying with Rule 64 without additional periodic monitoring requirements. Any person claiming this exemption shall maintain records sufficient to substantiate the use of these fuels.

3. If other than ARB-quality reformulated gasoline or ARB-certified diesel fuel is being combusted, for each liquid fuel delivery permittee shall either obtain the fuel supplier's certification, or shall test the sulfur content of the fuel using ASTM Method D4294-98 or D2622-98, to ensure that compliance with Rule 64 is being maintained. For liquid fuels, operators of electric power generation units may use the sampling and analysis methods prescribed in Code of Federal Regulations 40CFR Part 75 Appendix D.2.2. The fuel supplier's certification may be provided once for each purchase lot, if records are kept of the purchase lot number of each delivery.

   The fuel sulfur content by weight data shall be maintained at the facility and shall be provided with the annual compliance certification.

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Ventura County Air Pollution Control District
Rule 71.1.C Applicable Requirements
Crude Oil Production and Separation - Produced Gas

Rule 71.1, "Crude Oil Production and Separation"
Adopted 06/16/92, Federally-Enforceable

Rule 74.10, "Components at Crude Oil and Natural Gas Production and Processing Facilities"
Adopted 03/10/98, Federally-Enforceable

Applicability:

This attachment applies to the emissions of produced gas from equipment used in the production, gathering, storage, processing, and separation of crude oil and natural gas from any petroleum production unit prior to custody transfer. Specifically, this attachment applies to gas collection systems that are hard-piped and closed systems that direct all produced gas to a fuel or sales gas system or to a flare.

Conditions:

1. Pursuant to Rule 71.1.C.1, the emissions of produced gas shall be controlled at all times using a properly maintained and operated closed system that directs all gas, except gas used in a tank battery vapor recovery system, to one of the following:

    a. A fuel or sales gas system
    b. A flare that combusts reactive organic compounds

2. Pursuant to Rule 71.1.C.2, the provisions of Rule 71.1.C.1 shall not apply to wells which are undergoing routine maintenance, or to exploratory wells (during the first two weeks of production) if the composition of the produced gas is unknown (i.e., new reservoir) and there are no existing gas handling systems within 150 feet of the well.

3. Permittee shall annually certify the produced gas collection system to ensure that compliance with Rules 71.1.C.1 is being maintained. This annual certification shall include a visual inspection assuring that the produced gas collection system is a closed system.

4. If a flare is used to control the produced gas, permittee shall inspect the flare on a quarterly basis to ensure that it is operating properly. A record of these inspections shall be maintained at the facility and shall be submitted to the District upon request.

5. The gas collection system's gas and liquid piping connections are components subject to the leak requirements of Rule 74.10, "Components at Crude Oil and Natural Gas Production and Processing Facilities". Compliance with Rule 74.10 at the gas collection system ensures compliance with the maintenance requirements of Rule 71.1.C.1.

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Ventura County Air Pollution Control District
Rule 71.4.B.1 Applicable Requirements
First Stage Sump Prohibition

Rule 71.4, "Petroleum Sumps, Pits, Ponds, and Well Cellars"
Adopted 06/08/93, Federally-Enforceable

Applicability:

This attachment applies to any first stage production sump at this stationary source. A first stage production sump is a sump that receives a stream of petroleum material directly from wells or a field gathering system. A sump is a receptacle, formed primarily of earthen materials, although it may be lined with artificial materials. A sump is further defined as "in continuous use for separating oil, water, sand, or other material in petroleum production operations".

Conditions:

1. Pursuant to Rule 71.4.B.1, no person shall install, maintain, or operate a first stage production sump. A first stage production sump is a sump that receives a stream of petroleum material directly from wells or a field gathering system.

2. In order to ensure that compliance with Rule 71.4.B.1 is being maintained, permittee shall annually certify that there are no first stage production sumps at the facility.

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Ventura County Air Pollution Control District
Rule 71.4.B.3 Applicable Requirements
Well Cellar Storage Prohibition

Rule 71.4, "Petroleum Sumps, Pits, Ponds and Well Cellars"
Adopted 06/08/93, Federally Enforceable

Applicability:

This attachment applies to any well cellar at this stationary source. This attachment addresses the requirements of Rule 71.4.B.3 which prohibits the storage of crude oil or petroleum material in a well cellar. Rule 71.4 applies to well cellars at facilities where crude oil or petroleum material is produced, gathered, separated, processed, or stored.

A well cellar is a lined or unlined area around one or more oil wells, allowing access to the wellhead components for servicing and/or installation of blowout prevention equipment.

Conditions:

1. Pursuant to Rule 71.4.B.3, no person shall store crude oil or petroleum material in a well cellar except during periods of equipment maintenance or well workover. In no case shall storage occur for more than five (5) calendar days.

2. Pursuant to Rule 71.4.C, the provisions of Rule 71.4 shall not apply to well cellars used in an emergency, if clean-up procedures are implemented within 24 hours after each emergency occurrence and if clean-up procedures are completed within fifteen (15) calendar days.

3. Pursuant to Rule 71.4.D.2, any person storing crude oil in a well cellar during periods of equipment maintenance or well workover shall maintain records, which may include but are not limited to, workover invoice documents, indicating the date(s) the material was stored in the well cellar or the date(s) of workover activity. These records shall be submitted to the District upon request.

4. Pursuant to Rule 71.4.D.3, any person claiming exemption to this rule pursuant to emergency use (Condition No. 2 above), shall maintain records to justify the exemption.

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Ventura County Air Pollution Control District
Rule 74.6 Applicable Requirements
Surface Cleaning and Degreasing

Rule 74.6, "Surface Cleaning and Degreasing"
Federally Enforceable Version Adopted 11/11/03
District Enforceable Version Adopted 11/10/20

This permit attachment lists the requirements of the November 10, 2020, version of the rule. Compliance with this attachment will ensure compliance with both versions of Rule 74.6. The permit conditions below, therefore, are federally enforceable. The District-enforceable version of this rule will become federally enforceable when approved by the EPA as part of the SIP.

Applicability:

This attachment applies to all solvent cleaning activities at this stationary source, except those activities listed in Condition No. 11 that are exempt pursuant to Section E of Rule 74.6. This attachment does not apply to substrate surface preparation regulated by other APCD surface coating, adhesive, ink, resin, and solvent rules. "Solvent" is defined as any ROC-containing liquid used to perform solvent cleaning. "Solvent cleaning" is defined as the use of organic solvent to remove loosely held uncured adhesives, uncured inks, uncured coatings, uncured resins, and other contaminants which include, but are not limited to, dirt, soil, lubricants, coolant, moisture, grease, and fingerprints, from parts, tools, machinery, equipment, and general work areas.

This attachment also contains requirements, pursuant to Rule 74.6, for cold cleaners. A cold cleaner is defined in Rule 74.6 as any batch operated equipment designed to contain liquid solvent that is operated below the solvent's boiling point to carry out solvent cleaning operations. A specific type of cold cleaner is a "remote reservoir cold cleaner" which is a device in which solvent is moved through a sink-like work area for cleaning parts and drains immediately, without forming a pool, through a single drain hole less than 100 square centimeters (15.5 square inches) in area into an enclosed container that is not accessible for soaking parts. The freeboard height for remote reservoir cold cleaners is the distance from the top of the solvent drain to the top of the tank.

This attachment does not apply to solvent cleaning where an emission control system is used pursuant to Rule 74.6.B.5 or where an alternative cleaning system is used pursuant to Rule 74.6.B.6. Pursuant to APCD Rule 23.F.7, solvents used by the permittee for facility, ground, and building maintenance and repair are exempt from the requirement to have a permit. However, unless exempted by Rule 74.6.E, such solvents are required to comply with Rule 74.6.

Conditions:

1. Pursuant to Rule 74.6.B.1, no person shall perform solvent cleaning using solvent that exceeds the following limits:

    a. On or before December 31, 2021, Solvents used for application equipment cleanup, and all other cleanup of uncured coatings, adhesives, inks, or resins, shall not exceed an ROC content of 900 grams per liter and an ROC composite partial pressure of 33 mmHg at 20^{o}C, as applied.

    b. On or before December 31, 2021, Solvents used for cleaning of electronic components, electrical apparatus components, medical devices, or aerospace components shall not exceed an ROC content of 900 grams per liter and an ROC composite partial pressure of 33 mmHg at 20^{o}C, as applied.

    c. On or after January 1, 2022, Solvents used for application equipment cleanup, and all other cleanup of uncured coatings, adhesives, inks, or resins, shall not exceed an ROC content of 25 grams per liter, as applied.

    d. On or after January 1, 2022, Solvents used for cleaning of electronic components, electrical apparatus, or aerospace components conducted in a degreaser shall not exceed an ROC content of 100 grams per liter, as applied.

    e. On or after January 1, 2022, Solvents used for cleaning of medical devices and pharmaceuticals, including repair and maintenance of tools, equipment and machinery shall not exceed an ROC content of 800 grams per liter, as applied.

    f. On or after January 1, 2022, Solvents used for the general work surface cleaning of medical devices and pharmaceuticals shall not exceed an ROC content of 600 grams per liter, as applied.

    g. Solvents used for cleaning for purposes other than those listed in (a) through (f) above shall not exceed an ROC content of 25 grams per liter, as applied.

2. Pursuant to Rule 74.6.B.2, no person shall perform solvent cleaning using a solvent with an ROC content greater than 25 grams per liter unless one of the following cleaning devices or methods is used:

    a. Wipe cleaning where solvent is dispensed to wipe cleaning materials from containers that are kept closed to prevent evaporation, except while dispensing solvent or replenishing the solvent supply;

    b. Non-atomized solvent flow, dip, or flush method where pooling on surfaces being cleaned is prevented or drained, and all solvent runoff is collected in a manner that enables solvent recovery or disposal. The collection system shall be kept

closed to prevent evaporation except while collecting solvent runoff or emptying the collection system;

If the cleaning method has a solvent capacity more than one gallon, a cold cleaner or remote reservoir cold cleaner meeting the equipment and operating requirements of Condition Nos. 8, 9, and 10 of this attachment (Sections C and D of Rule 74.6) shall be used to comply with this requirement.

c. Application of solvent from a handheld spray bottle, squirt bottle or other closed container with a capacity of one liter or less;

d. A properly used enclosed gun washer or low emission spray gun cleaner.

3. Pursuant to Rule 74.6.B.3.a, no person shall allow liquid cleaning solvent to leak from any equipment or container.

4. Pursuant to Rule 74.6.B.3.b, no person shall specify, solicit, supply, or require any cleaning solvent or solvent cleaning equipment intended for uses governed by Rule 74.6 if such use would violate Rule 74.6. This prohibition applies to all written and oral contracts under which solvent cleaning operations subject to Rule 74.6 are to be conducted at any location in Ventura County.

5. Pursuant to Rule 74.6.B.3.c, no person shall use more than one gallon per week of solvents containing methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, or chloroform, or any combination of these solvents, in a total concentration greater than 5 percent by weight, for cold cleaning except in a cold cleaner operated in accordance with National Emission Standards for Halogenated Solvent Cleaning, 40 CFR Parts 9 and 63, Subpart T, Sections 63.460 through 63.469 (Degreasing MACT Standards). Any person that uses the above solvent in quantities less than one gallon per week shall maintain records of the volume and formulation of such solvent on an as-used basis (recording use each day such material is used). Records shall be saved for at least five (5) years from the date of each record and shall be made available to District personnel upon request.

6. Pursuant to Rule 74.6.B.4.a, all ROC-containing solvents shall be stored in non-absorbent, non-leaking containers that shall be kept closed at all times except when filling or emptying.

7. Pursuant to Rule 74.6.B.4.b, waste solvent and waste solvent residues shall be disposed properly. Spent cleanup solvents may be classified as hazardous waste. The owner or operator shall obtain approval from applicable local, state, or federal water pollution control agency prior to disposing of spent solvents into the sewer or storm drain systems.

8. Pursuant to Rule 74.6.C.1, all cold cleaners, except remote reservoir cold cleaners, shall

be equipped with the following devices:

a. A drying rack suspended above the solvent, or other facility for draining cleaned parts such that the drained solvent is returned to the cleaner.

b. A cover that prevents the solvent from evaporating when not processing work in the cleaner. If high volatility solvent is used, the cover must be a sliding, rolling, or guillotine (bi-parting) type that is designed to easily open and close, or it must be designed to be easily operated with one hand. A high volatility solvent is an unheated solvent with an ROC composite partial pressure of greater than 2 mmHg @ 20^{o}C.

c. A freeboard height of at least 6 inches (15.2 centimeters), if low volatility solvent is used. A low volatility solvent is an unheated solvent with an ROC composite partial pressure of 2 mmHg or less @ 20^{o}C.

d. At least one of the following control devices, if high volatility solvent is used:

1. A freeboard height such that the freeboard ratio is at least 0.75.
2. A water cover if the solvent is insoluble in and heavier than water.

e. A permanent conspicuous mark locating the maximum allowable solvent level that conforms with the applicable freeboard height requirement in Condition No. 8.c or 8.d.1.

f. A permanent conspicuous label or sign summarizing the applicable operating requirements appropriate for cold cleaning operations.

9. Pursuant to Rule 74.6.C.2, remote reservoir cold cleaners shall be equipped with the following devices:

a. A permanent conspicuous label or sign summarizing the applicable operating requirements appropriate for cold cleaning operations.

b. A sink-like work area that is sloped sufficiently towards the drain to preclude pooling of solvent.

c. A single drain hole, less than 100 square centimeters (15.5 square inches) in area, for the solvent to flow from the sink into the enclosed reservoir.

d. A freeboard height of at least 6 inches (15.2 centimeters).

e. A cover for the drain when no work is being processed in the cleaner and high volatility solvent is used. If low volatility solvent is used, a cover is not required.

10. Pursuant to Rule 74.6.D, any person who operates a cold cleaner shall conform to the

following operating requirements:

a. The operator shall drain cleaned parts of all solvent until dripping ceases to ensure that the drained solvent is returned to the cleaner.

b. Solvent agitation, where necessary, shall be achieved using pump recirculation, a mixer, or ultrasonics. Air agitation shall not be used.

c. If a solvent flow is utilized, only a solid fluid stream (not a fine, atomized, or shower type spray) shall be used.

d. The pressure of the solvent flow system shall be such that liquid solvent does not splash outside the container.

e. No person shall remove or open any required device designed to cover the solvent unless work is being processed in the cleaner or maintenance is being performed on the cleaner.

f. The cleaning equipment and emission control equipment shall be operated and maintained in proper working order.

g. The cleaning of porous or absorbent materials such as cloth, leather, wood, or rope is prohibited. This provision shall not apply to paper gaskets or paper filters.

11. Pursuant to Rule 74.6.E.1, Rule 74.6 (all requirements of this permit attachment) shall not apply to:

a. Cleaning activities using Clean Air Solvent, or a solvent with an ROC-content no more than 25 grams per liter as applied. A "Clean Air Solvent" is a solvent certified by the South Coast Air Quality Management District as a Clean Air Solvent.

b. The use of up to 160 fluid ounces of non-refillable aerosol cleaning products per day, per facility.

c. Janitorial cleaning including graffiti removal.

d. Cleaning carried out in vapor degreasers or motion picture film cleaning equipment.

e. Cleaning operations subject to any of the following rules:

Rule 74.3, Paper, Fabric and Film Coating Operations
Rule 74.5.1, Petroleum Solvent Dry Cleaning
Rule 74.5.2, Synthetic Solvent Dry Cleaning
Rule 74.19, Graphic Arts Operations

Rule 74.19.1, Screen Printing Operations
Rule 74.21, Semiconductor Manufacturing

f. Stripping of cured coating (e.g.; stripping), cured adhesive (e.g.; debonding, ungluing), cured ink, or cured resin.

g. The use of solvent for purposes other than solvent cleaning activities.

12. Pursuant to Rule 74.6.E.2, Rule 74.6.B.1 (Condition No. 1 of this attachment) shall not apply to:

a. Cleaning operations required to comply with any ROC content and/or composite vapor pressure limit in any of the following rules:

Rule 74.12, Surface Coating of Metal Parts and Products
Rule 74.13, Aerospace Assembly and Component Manufacturing Operations
Rule 74.14, Polyester Resin Material Operations
Rule 74.18, Motor Vehicle and Mobile Equipment Coating Operations
Rule 74.20, Adhesives and Sealants
Rule 74.24, Marine Coating Operations
Rule 74.24.1, Pleasure Craft Coating Operations
Rule 74.30, Wood Products Coatings

b. Cleaning of ultraviolet lamps used to cure ultraviolet inks coatings, adhesives or resins.

c. Cleaning of solar cells, laser hardware, scientific instruments, or high-precision optics.

d. Cleaning conducted in laboratory tests and analyses including quality assurance/quality control applications, or bench scale or short-term (less than 2 years) research and development programs.

e. Removal of elemental sodium from the inside of pipes and lines.

f. Cleaning of mold release compounds from molds.

g. Cleaning of tools used to cut or abrade cured magnetic oxide coatings.

h. Cleaning of aerospace assembly and subassembly surfaces that are exposed to strong oxidizers or reducers such as nitrogen tetroxide, liquid oxygen or hydrazine.

i. Cleaning of paper gaskets.

j. Cleaning of clutch assemblies where rubber is bonded to metal by means of an adhesive.

k. Cleaning of hydraulic actuating fluid from filters and filter housings.

l. Removal of explosive materials and constituents from equipment associated with manufacturing, testing or developing explosives.

m. Facility wide use of less than 1 gallon per week of non-compliant solvent where compliant solvents are not available. Any person claiming this exemption shall maintain records of the volume and formulation of non-compliant solvent used on an as-used basis (recording use each day such material is used). Records shall be saved for at least five (5) years from the date of each record and shall be made available to District personnel upon request.

13. Pursuant to Rule 74.6.E.3, Rule 74.6 Sections B.1 and B.2 (Condition Nos. 1 and 2 of this attachment) shall not apply to aircraft engine gas path cleaning or stationary gas turbine gas path cleaning using solvent with an ROC content of 200 g/l or less, as applied.

14. Pursuant to Rule 74.6.F, the permittee shall maintain a current material list showing each ROC containing material used in solvent cleaning activities. The list shall summarize the following information:

a. Solvent name and manufacturer's description.

b. All intended uses of the solvent at the facility, classified as follows:

1. Cleanup, including application equipment cleaning, or
2. Cleaning of electronic components, electrical apparatus components, medical devices, or aerospace components, or
3. Solvent used pursuant to an exemption in Rule 74.6.E (specify the exemption claimed).

c. The ROC content in units of grams per liter of material (and ROC composite partial pressure in units of mm Hg @ 20C, if applicable) of the solvent.

d. If the solvent is a mix of materials blended by the operator, a record of the mix ratio.

This information shall be made available to District personnel upon request.

15. Permittee shall maintain the above records and conduct periodic facility inspections, and an annual compliance certification to ensure that compliance with Rule 74.6 is being

maintained. Upon request of the District, compliance with Rule 74.6 shall be determined using the following methods:

a. Pursuant to Rule 74.6.G.1, the ROC content of materials shall be determined by EPA Test Method 24 (40 CFR Part 60, Appendix A). The ROC content of materials containing 50 g/l of ROC or less shall be determined by the most recent version of South Coast Air Quality Management District (SCAQMD) Method 313 (Determination of Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry) or any other alternative test methods approved by the U.S. EPA, CARB, and the District.

b. Pursuant to Rule 74.6.G.4, the identity of components in solvents shall be determined using manufacturer's formulation data or by using ASTM E168-67, ASTM E169-87, or ASTM E260-85.

c. Rule 74.6.G.5, on or before December 31, 2021, ROC composite partial pressure of a solvent shall be calculated using a widely accepted published source such as: Boublik, T., V. Fried and E. Hala, "The Vapor Pressure of Pure Substances," Elsevier Scientific Publishing Co., New York (1973), Perry's Chemical Engineers Handbook, McGraw-Hill Book Company, CRC Handbook of Chemistry and Physics, Chemical Rubber Publishing Company (1986-1987), and Lange's Handbook of Chemistry, John A. Dean, editor, McGraw-Hill Book Company (1985). The true vapor pressure of a component in a solvent mix may be determined by ASTM Method D2879-86. The ROC composite partial pressure of a solvent mix consisting entirely of ROC may be determined by ASTM Method D2879-86.

d. Pursuant to Rule 74.6.G.6, the active and passive solvent losses from spray gun cleaning systems shall be determined using South Coast Air Quality Management District's "General Test Method for Determining Solvent Losses from Spray Gun Cleaning Systems" dated October 3, 1989. The test solvent for this determination shall be any lacquer thinner with a minimum vapor pressure of 105 mm Hg at 20°C. The minimum test temperature shall be 15°C.

e. Pursuant to Rule 74.6.G.7, initial boiling point of solvent shall be determined by ASTM 1078-78 or by using a published source such as listed in Rule 74.6.G.5.

Ventura County Air Pollution Control District
Rule 74.10 Applicable Requirements
Components at Crude Oil and Natural Gas Production and Processing Facilities

Rule 74.10, "Components at Crude Oil and Natural Gas Production and Processing Facilities"
Adopted 03/10/98, Federally Enforceable

Applicability:

This attachment applies to the crude oil and gas production facilities, pipeline transfer stations, and to natural gas processing facilities, at this stationary source. This attachment summarizes the fugitive leak and leak inspection requirements of Rule 74.10.

A crude oil and gas production facility is defined as an onshore or offshore facility at which crude petroleum and natural gas production and handling are conducted, as defined in the SIC Code as Industry No. 1311, Crude Petroleum and Natural Gas. A pipeline transfer station is defined as a facility that handles the transfer or storage of crude oil in pipelines. A natural gas processing facility is defined as a facility engaged in the separation of natural gas liquids from field gas and/or fractionation of the liquids into natural gas products, such as ethane, propane, butane, and natural gasoline. Excluded from the definition are compressor stations, dehydration units, sweetening units, field treatment, underground storage facilities, liquefied natural gas units, and field gas gathering systems unless these facilities are located at a natural gas processing plant. This attachment does not apply to petroleum refineries.

Conditions:

1. Pursuant to Rule 74.10.B, the operator shall identify all leaking components that cannot be immediately repaired. This identification shall consist of readily visible labels, tags, or other such system approved by the APCO, in writing, that enables the District and the operator to locate and identify each leaking component. Identification tags and labels shall remain visible for at least one year from the date attached.

   As detailed in Rule 74.10.K.14, a leak is defined as any major gas leak, minor gas leak, major liquid leak or minor liquid leak. A leak is not a gaseous emission from a pneumatic control valve if it occurs when the valve is in the act of opening or closing. As detailed in Rule 74.10.K.3, a component is defined as any valve, stuffing box, dump lever arm, open ended line, fitting, pump seal, compressor seal, pressure relief valve, diaphragm, hatch, sight glass or meter. As detailed in Rule 74.10.K.16, a leak repair is any corrective action taken for the purposes of reducing a component leak to the lowest achievable level or at least below 1,000 ppmv for gas leaks and three drops per minute for liquid leaks using the best modern practices.

2. Pursuant to Rule 74.10.C.1, hatches shall be closed at all times except during sampling, adding of process material through the hatch, or attended maintenance operations.

3. Pursuant to Rule 74.10.C.2, no person shall use a component that emits a major gas leak, major liquid leak or minor liquid leak and the applicable maximum leak threshold for that component category, as listed in Attachment 1 of Rule 74.10, has been exceeded at the facility in any calendar quarter. The provisions of Rule 74.10.C.2 shall not apply to components that are tagged and repaired in accordance with Rules 74.10.D and 74.10.F.

   For the purpose of complying with the operating requirements in Rule 74.10.C.2, any fugitive emissions leak originating at a tank seam, broken pipe or any other nondesigned opening in a process unit shall be considered an "other component" leak for the purpose of Attachment 1 of Rule 74.10.

   A major gas leak, major liquid leak, and minor liquid leak are defined in Subsections K.17, K.18, and K.20 of Rule 74.10, respectively.

4. Pursuant to Rule 74.10.D.1, at natural gas processing plants, operators shall inspect with or without instrumentation all accessible operating pump seals, compressor seals, and pressure relief valves in service for leaks or indications of leaks once during every operating shift or every eight-hour period, whichever is greater.

5. Pursuant to Rule 74.10.D.2, at oil and gas production facilities and pipeline transfer stations, operators shall inspect with or without instrumentation all operating pump seals, compressor seals, pressure relief valves in service, and polished rod stuffing boxes for leaks or indications of leaks as follows:

   a. Inspection frequency at manned facilities shall be at least once per day except when operators do not report to work at a facility at any time during that day.

   b. Inspection frequency at unmanned facilities shall be at least once per week.

6. Pursuant to Rule 74.10.D.3, any gaseous leaks or indications of gaseous leaks discovered by inspection, that cannot be immediately repaired, shall be measured using EPA Method 21. The operator shall perform this leak measurement as follows:

   a. For leaks detected during normal business hours, the leak measurement shall be performed as soon as feasible but no later than 24 hours after detection. If this 24 hour deadline occurs on a weekend or holiday, then the deadline is shifted to the end of the next normal business day.

   b. For leaks detected during holidays, weekends or after business hours, the leak measurement shall be performed as soon as feasible but no later than the end of

the next normal business day.

7. Pursuant to Rule 74.10.D.4, immediately after being placed into service, an operator shall inspect all new, replaced or repaired fittings, including flanges and threaded connections, for leaks using EPA Method 21.

8. Pursuant to Rule 74.10.D.5, operators shall inspect all components, except for the following, at least every calendar quarter for gaseous leaks using EPA Method 21.

   a. Inaccessible components or unsafe to monitor components shall be inspected for leaks by the operator at least annually using EPA Method 21.

   b. Threaded connections and flanges shall be inspected for leaks by the operator using EPA Method 21 annually, unless the operator has designated them in the Operator Management Plan as exempt from all inspection requirements and subject to a zero leak threshold.

9. Pursuant to Rule 74.10.D.6, a pressure relief valve shall be inspected using EPA Method 21 within 3 calendar days after every known pressure release.

10. Pursuant to Rule 74.10.D.7, upon detection, operators shall affix a visible, weatherproof tag to all leaking components awaiting repair. The tag shall remain affixed until the component is repaired free of leaks as shown by re-inspection.

    If the leak is gaseous, the operator shall include the following on the tag: date and time of leak detection, date and time of leak measurement; and the concentration (ppmv) measured using EPA Method 21.

    If the leak is liquid, the operator shall include the following on the tag: date and time of leak detection; and whether leak is minor or major.

    A tag may also be some other system approved in writing by the APCO that demonstrates to District personnel that the operator has detected a component leak awaiting repair and contains all of the information required to be on tags by Rule 74.10.D.7.

11. Pursuant to Rule 74.10.D.8, notwithstanding the requirements of Rule 74.10.D.5, operators may inspect components annually instead of quarterly at a facility by satisfying all the following provisions, except that compressor seals, pressure relief valves, polished rod stuffing boxes, and pump seals shall not be eligible for this reduction in inspection frequency:

    a. During 4 consecutive calendar quarters, successfully operate and maintain all components at the facility so that no more than 0.5 percent of the total

components inspected, excluding polished rod stuffing boxes, have liquid leaks or major gas leaks that have not been immediately repaired.

b. A Notice of Violation from the District for a violation of Rule 74.10.C.2 was not received by the operator for the facility during the previous twelve months.

c. Submit a written request to the District for a reduction in inspection frequency. This request shall contain backup documentation including inspection reports that demonstrates that the above performance level in Rule 74.10.D.8.a has been achieved. Requests for a reduction in inspection frequency are not effective until written approval by the APCO is received by the operator.

12. Pursuant to Rule 74.10.D.9, an annual inspection frequency approved in Rule 74.10.D.8 shall revert to the inspection frequency specified in Rule 74.10.D.5 should the sum of liquid leaks and major gas leaks, not including leaks from polished rod stuffing boxes, exceed 0.5 percent of the total components inspected per inspection period or should the operator receive a Notice of Violation from the District for violation of Rule 74.10.C.2 for that facility.

13. Pursuant to Rule 74.10.E.1, each operator shall submit an Operator Management Plan to the APCO for approval. If the APCO fails to respond to the Plan in writing within 90 days after it has been received, then it shall be deemed approved. No provision in the Plan, approved or not, shall conflict with or take precedence over any provision of this rule. The Plan shall identify any component exempt from this rule or part of this rule, and describe the procedures which the operator intends to use to comply with the requirements of this rule. The Plan shall include:

a. Establishment of a data base of every leaking component that cannot be immediately repaired. The following parameters shall be included:

1) Identification number, name or code.

2) Component type, process unit and location.

3) Dates found leaking and repair description for each leak found.

This identification provision is for inspection, repair, replacement and recordkeeping purposes.

b. Identification of critical process units.

c. Identification of components for which exemption from Rule 74.10 is being claimed under Rule 74.10.G.1. Gaseous streams and liquid streams, exempted by

Rule 74.10, Subsections G.1.a, G.1.b, G.1.c, or G.1.e shall be verified by analysis of the ROC concentrations, and the results of such analyses shall be included.

d. Identification of liquid streams or components for which exemption is being claimed from the operator inspection requirements under Rule 74.10.G.3. The results of any testing used to qualify a stream for exemption shall be included.

e. Whether flanges or threaded fittings are exempt from all inspection requirements and subject to a zero leak threshold or whether flanges or threaded fittings are subject to annual inspection requirements and a one percent leak threshold as specified in Attachment 1 of Rule 74.10.

f. The inspection schedule to be followed.

g. Identification and description of any known hazard which may affect the safety of APCD personnel.

h. Identification of unmanned production facilities, if applicable.

14. Pursuant to Rule 74.10.E.2, the operator shall be required, upon written request by the APCO, to re-qualify, by analysis, the exemption(s) from the rule or part of the rule (Rule 74.10.G.1 and 74.10.G.3) if the exemption(s) may no longer be valid based on the changed composition of the process stream. The results of that analysis and any modification to the Plan shall be submitted to the District within 90 calendar days after receipt of the District request.

15. Pursuant to Rule 74.10.E.3, if the exempt status of a component is affected by a revision to Rule 74.10, then the Plan shall be modified accordingly by June 10, 1998.

16. Pursuant to Rule 74.10.E.4, existing operator management plans shall be updated no later than September 10, 1998, to include any provision that is needed to show compliance with Rule 74.10.

17. Pursuant to Rule 74.10.E.5, beginning September 10, 1998, each operator shall submit to the APCO, for approval in writing, an annual report to update the Operator Management Plan by no later than January 30 of each year. This report shall include any changes to exemptions, inspection schedule, or any other changes to the inspection and maintenance program. If no changes to the Plan have occurred over the past 12 months, then the operator shall indicate this in the annual report.

If the APCO fails to respond to the Plan update in writing within 90 days after it has been received, then it shall be deemed approved. No provision in the Plan, approved or not, shall conflict with or take precedence over any provision of Rule 74.10.

18. Pursuant to Rule 74.10.F.1, the operator shall minimize all component leaks immediately if feasible but no later than 1 hour following detection during normal business hours. Component leaks detected during holidays, weekends and after business hours shall be immediately minimized if feasible but not later than the next normal business day.

19. Pursuant to Rule 74.10.F.2, any noncritical component found leaking shall be replaced or repaired to a leak free condition, within the time periods in Table 1 of Rule 74.10. For gaseous leaks, the repair period shall start at the time of leak measurement. For liquid leaks, the repair period shall start at the time of leak detection. If the Table 1 deadline for repairing any major gas leak or any liquid leak falls on a Saturday, Sunday or holiday, then the deadline shall be shifted to the next normal business day.

20. Pursuant to Rule 74.10.F.3, the operator shall re-inspect repaired or replaced components for leaks as soon as practicable using EPA Method 21, but not later than one calendar month after the date on which the component is repaired.

21. Pursuant to Rule 74.10.F.4, any component leak identified by District personnel shall be repaired and inspected as required by Rule 74.10.F.

22. Pursuant to Rule 74.10.F.5, any open-ended line found to be leaking shall be sealed with a blind flange, cap, plug, or a second closed valve at all times except during operations requiring process fluid flow through the open-ended line or valve. If a second closed valve is used, the process side valve shall be closed first, after the completion of any operations requiring flow through the open-ended valve.

23. Pursuant to Rule 74.10.F.6, for major gas leaks (>50,000 ppm) or major liquid leaks from any critical compressor seal, pump seal, pressure relief valve or valve that cannot be repaired within the repair periods set forth in Table 1 of Rule 74.10, the operator shall replace or retrofit the leaking component with Best Available Control Technology (BACT) equipment, as approved by the APCO in writing, within one year from the date of leak detection, or during the next critical process unit shutdown, whichever occurs first.

    For gas leaks less than or equal to 50,000 ppm or minor liquid leaks from critical components, or for leaks from critical components other than compressor seals, pump seals, pressure relief valves or valves, the owner or operator shall successfully repair or replace all leaking components within one year from leak detection or during the next critical process unit shutdown, whichever occurs first.

    The operator shall notify the District in writing within 3 months after detecting a major gas leak (> 50,000 ppm) or major liquid leak from a critical compressor seal, pump seal, pressure relief valve, or valve if such leak cannot be repaired within the repair periods set

forth in Table 1 of Rule 74.10.

24. Pursuant to Rule 74.10.F.7, for a compressor seal, pump seal, pressure relief valve or valve that emits a total of 5 major leaks within a continuous 12 month period, the operator shall replace or retrofit the leaking component with BACT equipment, as approved by the APCO in writing, within one year from date of leak detection. The operator shall notify the District in writing within 3 months after a compressor, pump, pressure relief valve, or valve has had 5 major leaks in the previous 12 months.

25. Pursuant to Rule 74.10.G.1, the requirements of Rule 74.10 shall not apply to the following components that are verified in the Operator Management Plan:

    a. Components, not at natural gas processing plants, with gaseous streams with ROC concentrations of 10 percent, by weight or less.

    b. Components at natural gas processing plants with gaseous streams with ROC concentrations of one percent, by weight or less.

    c. Components, not at natural gas processing plants, in liquid service, with ROC concentrations of 10 percent, by weight or less.

    d. Underground components.

    e. Components exclusively handling fluids if the fluid weight evaporated is 10 percent or less at 150 degrees Celsius.

26. Pursuant to Rule 74.10.G.2, the operator inspection requirements of Rule 74.10.D shall not apply to the following components. All other requirements of this rule shall still apply.

    a. Pump seals, compressor seals, and pressure relief valves that are equipped with a closed-vent system to a vapor recovery system. The vapor disposal portion of the vapor recovery system shall consist of one of the following:

        1) A system which directs all vapors to a fuel gas system, a sales gas system, or a flare that combusts ROC.

        2) Any other system that processes all vapors and has a ROC vapor destruction or removal efficiency of at least 90 percent, by weight.

    b. One-half inch and smaller stainless steel tube fittings that have been determined to be leak-free.

c. Components in vacuum service.

d. Flanges or threaded connections that are designated in the Operator Management Plan as subject to the zero leak threshold specified in Attachment 1 of Rule 74.10.

27. Pursuant to Rule 74.10.G.3, the operator inspection requirements of Rule 74.10, Subsections D.1, D.2, D.4 and D.5 shall not apply to components that are inspected with or without instrumentation on a quarterly basis and are at oil and gas production facilities or pipeline transfer stations that handle liquids with the following properties and specified vapor recovery systems:

a. Liquid having an API gravity of 20 degrees or less after the point of primary separation;

b. Liquid having an API gravity between 20 and 30 degrees which are located either:

1) Downstream of a wellhead equipped with a casing vapor recovery system, provided that the vapor recovery system is operated at a pressure of less than 10 psig; or

2) After the point of primary separation of oil and gas, provided the separation vessel is equipped with a vapor recovery system and is operated at a pressure of less than 25 psig.

28. Pursuant to Rule 74.10.G.4, an owner or operator may petition the APCO for exemption from the replacement or retrofit requirements in Rules 74.10.F.6 and 74.10.F.7 by submitting a cost evaluation for retrofitting or replacing a compressor, pump, pressure relief valve, or valve. Each petition shall include:

a. A cost-effectiveness evaluation conducted in accordance with "BACT Cost-Effectiveness Procedures and Screening Levels for Costs," adopted by the Air Pollution Control Board on December 20, 1988. The cost analysis shall be based on the retrofit cost of the component if a retrofit is feasible. If the component cannot be retrofitted, then the following control option with the lower cost shall be used in the cost analysis:

1) Component replacement with the lowest feasible cost BACT option.

2) Enclosing the component seal and venting to a vapor recovery system.

b. Evidence of costs with written bids from vendors, published price lists, or other verifiable cost information. The potential emission reduction from the component retrofit/replacement shall be based on the ROC emissions over the previous 12

months. ROC emissions from a critical process unit shutdown shall be included if those emissions are associated with a critical leaking component. APCO-approved emission factors or source tests shall be used to quantify emissions.

29. Pursuant to Rule 74.10.H.1, any person subject to Rule 74.10 shall maintain an inspection log. The inspection log shall contain at least the following:

    a. Location, type, description, and name or code of each leaking component inspected that cannot be immediately repaired, and name of associated operating unit.

    b. For liquid leaks that cannot be immediately repaired: Date and time of leak detection and whether leak is major or minor.

    c. For gaseous leaks that cannot be immediately repaired: Date and time of leak detection, date and time of leak measurement, analyzer reading (ppmv) of the leak, and whether the leak is major or minor.

    d. Date that leak referenced in Rule 74.10.H.1.b or Rule 74.10.H.1.c is repaired to a leak-free condition, description of repair action, and date and emission level of re-check.

    e. Identification of leak as critical if the component is critical.

    f. Maintenance and calibration records of appropriate analyzer used in the EPA Method 21 measurements.

30. Pursuant to Rule 74.10.H.2, where a functional pressure relief has been detected, the operator shall record:

    a. Location, operating unit identification, and date of detection.

    b. Date of inspection of the pressure relief device after it was detected, and analyzer reading from EPA Method 21.

31. Pursuant to Rules 74.10.H.3 and 74.10.H.4, the inspection log shall be retained by the operator and shall be made available upon request to District personnel.

32. Pursuant to Rule 74.10.I.1, gaseous leaks from components shall be inspected or determined by EPA Method 21 by using an appropriate analyzer calibrated with methane. The calibration, maintenance, and operation of the appropriate analyzer shall follow the manufacturer's recommendations.

33. Pursuant to Rule 74.10.I.2, the ROC concentration, by weight, of process streams shall be measured by ASTM E168-88 (General Techniques of Infrared Qualitative Analysis), ASTM E169-87 (General Techniques of Ultraviolet Quantitative Analysis), or ASTM E260-85 (Gas Chromatography), or updated versions of these methods approved by EPA and published in the 40 CFR Part 60.

34. Pursuant to Rule 74.10.I.3, weight percentage of evaporated compounds of liquids shall be determined using ASTM Method D 86-82.

35. Pursuant to Rule 74.10.I.4, the API gravity of crude oil shall be determined using ASTM Method D287.

36. Pursuant to Rule 74.10.J, the failure of a person to meet any requirements of Rule 74.10 shall constitute a violation of Rule 74.10. Each leak exceeding the applicable maximum leak threshold in Attachment 1 of Rule 74.10 discovered by District personnel will be considered to be a violation.

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Ventura County Air Pollution Control District
Rule 74.11.1 Applicable Requirements
Rule 74.11.1, Large Water Heaters and Small Boilers

Rule 74.11.1, "Large Water Heaters and Small Boilers"
Adopted 09/11/12, Federally Enforceable

Applicability:

This attachment applies to all natural gas-fired water heaters, boilers, steam generators or process heaters (units) with a rated heat input capacity greater than or equal to 75,000 BTU/hr and less than 1,000,000 BTU/hr at this stationary source installed after January 1, 2013 and to the future installation of any such unit at this stationary source. Note that units rated less than 1,000,000 BTU/hr are exempt from District permit requirements pursuant to Rule 23.C.1.

Conditions:

1. Pursuant to Rule 74.11.1.B.2, no person shall sell, offer for sale, or install in Ventura County any new unit with a rated heat input capacity of greater than or equal to 75,000 BTU/hr and less than or equal to 400,000 BTU/hr that does not meet the following criteria:

    a. Oxides of nitrogen emissions shall not exceed 14 nanograms per joule of heat output (32.5 pounds per billion BTU), or 20 parts per million, and

    b. The unit is certified in accordance with Rule 74.11.1.C.

    The oxides of nitrogen emission standard required above (Condition No. 1.a) does not apply to units specifically designed to heat swimming pools, hot tubs, or spas. For such units, oxides of nitrogen emissions shall not exceed 40 nanograms per joule of heat output (93 pounds per billion BTU), or 55 parts per million.

2. Pursuant to Rule 74.11.1.B.4, no person shall sell, offer for sale, or install in Ventura County any new unit with a rated heat input capacity of greater than 400,000 BTU/hr and less than 1,000,000 BTU/hr that does not meet the following criteria:

    a. Oxides of nitrogen emissions shall not exceed 20 parts per million and carbon monoxide emissions shall not exceed 400 parts per million, and

    b. The unit is certified in accordance with Rule 74.11.1.C.

3. The permittee shall maintain a listing of manufacturer, brand name, model number, heat input rating, and installation date for each water heater, boiler, steam generator and

process heater, with a rated heat input capacity greater than or equal to 75,000 BTU/hr and less than 1,000,000 BTU/hr, at this stationary source. Permittee shall submit these identification records for all of these units to the District upon request.

4. On an annual basis, the permittee shall certify that all water heaters, boilers, steam generators and process heaters, with a rated heat input capacity greater than or equal to 75,000 BTU/hr and less than 1,000,000 BTU/hr, at this stationary source are complying with Rule 74.11.1. This annual certification shall include a formal survey identifying each unit and documentation of certification status (pursuant to Rule 74.11.1.C), as required.

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Ventura County Air Pollution Control District
Rule 74.22 Applicable Requirements
Rule 74.22, Natural Gas-Fired Fan-Type Central Furnaces

Rule 74.22, "Natural Gas-Fired Fan-Type Central Furnaces"
Adopted 11/09/93, Federally Enforceable

Applicability:

This attachment applies to all natural gas-fired, fan-type central furnaces at this stationary source installed after May 31, 1994 and to the future installation of any natural gas-fired, fan-type central furnaces at this stationary source. A fan-type central furnace is a self contained space heater providing for circulation of heated air at pressures other than atmospheric through ducts of more than 10 inches in length that has a rated heat input capacity of less than 175,000 BTU per hour and, for combination heating and cooling units, a rated cooling capacity of less than 65,000 BTU per hour. Natural gas-fired, fan-type central furnaces installed in manufactured housing (mobile homes) are exempt from Rule 74.22.

Conditions:

1. Pursuant to Rule 74.22.B, no person shall install, after May 31, 1994, any natural gas-fired fan-type central furnace:

    a. with NOx (oxides of nitrogen) emissions in excess of 40 nanograms per joule of heat output. (74.22.B.1)

    b. unless it is certified and identified in accordance with Section C of Rule 74.22. (74.22.B.2)

2. Permittee shall maintain a listing of manufacturer, brand name, model number, and heat input rating for each natural gas-fired fan-type central furnace at this stationary source. Permittee shall submit these identification records for all of these furnaces to the District upon request.

3. On an annual basis, permittee shall certify that all natural gas-fired fan-type central furnaces at this stationary source are complying with Rule 74.22. This annual certification shall include a formal survey identifying each natural gas-fired fan-type central furnace; whether it was installed before or after May 31, 1994; and for those furnaces installed after May 31, 1994, information indicating that the certification is contained on the furnace nameplate, or that the furnace is included on a District-provided list of certified furnaces.

Ventura County Air Pollution Control District
California Air Resources Board
Greenhouse Gas Emission Standards for Crude Oil and Natural Gas Facilities

California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 10 Climate Change, Article 4, Subarticle 13:

Greenhouse Gas Emission Standards for Crude Oil and Natural Gas Facilities, Effective date October 1, 2017

District enforceable only. The Ventura County APCD (VCAPCD) signed a Memorandum of Understanding (MOU) with the California ARB on June 12, 2018 to implement and enforce this regulation. Prior to June 12, 2018, this regulation was implemented and enforced only by California Air Resources Board (CARB). The regulation is not federally-enforceable.

Applicability:

This regulation applies to owners or operators of equipment and components listed in Section 95668 located within California, including California waters, that are associated with facilities in the sectors listed below, regardless of emissions level:

(1) Onshore and offshore crude oil or natural gas production; and,
(2) Crude oil, condensate, and produced water separation and storage; and,
(3) Natural gas underground storage; and,
(4) Natural gas gathering and boosting stations; and,
(5) Natural gas processing plants; and,
(6) Natural gas transmission compressor stations.

This regulation does not apply to the OCS Offshore Oil Platforms that the VCAPCD regulates because they are not in state territorial waters.

VCAPCD enforces this regulation through its existing permit system. As required below, facilities are required to register equipment with the California ARB on an initial and annual basis.

Conditions:

1. The facility shall be operated in compliance with all applicable requirements of Sections 95665 to 95677, Title 17, Division 3, Chapter 1, Subchapter 10 Climate Change, Article 4, Subarticle 13 California Code of Regulations, "Greenhouse Gas Emission Standards for Crude Oil and Natural Gas Facilities". This includes, but is not limited to, the following requirements.

2. Separator and tank systems shall comply with Section 95668(a). Note that the GHG Regulation defines a separator as a tank or pressure vessel for separating oil, water, condensate, and natural gas. In VCAPCD terminology, a "Wash Tank" is a "Separator" in the GHG Regulation. VCAPCD LACT Tanks, COST Tanks, and Produced / Waste Water Tanks are "Tanks" in the GHG Regulation. Note that VCAPCD Rule 71.1, "Crude Oil Production and Separation" is far more stringent than the GHG Regulation in terms of requiring vapor recovery systems for Separator and Tank Systems. Flash testing is not required for new and existing tanks equipped with vapor recovery systems required by Rule 71.1.

3. Circulation tanks for well stimulation treatments shall comply with Section 95668(b).

4. Reciprocating natural gas compressors shall comply with Section 95668(c).

5. Centrifugal natural gas compressors shall comply with Section 95668(d).

6. Natural gas powered pneumatic devices and pumps shall comply with Section 95668(e).

7. Liquid unloading of natural gas wells shall comply with Section 95668(f).

8. Well casing vents shall comply with Section 95668(g).

9. Natural gas underground storage facilities shall comply with the monitoring requirements of Section 95668(h).

10. The facility shall comply with the leak detection and repair requirements of Section 95669. Critical components at critical process units shall comply with Section 95670.

11. Vapor collection systems and vapor control devices shall comply with Section 95671. These requirements do <u>not</u> apply to existing vapor collection systems and vapor control devices that are required by VCAPCD Rule 71.1, Section B for storage tanks and Rule 71.1, Section C for produced gas.

    The GHG Regulation defines "fuel gas system" and the VCAPCD considers it to be on-site combustion of natural gas in engines, boilers, heater treaters, steam generators, turbines, microturbines, glycol units, etc. Some oilfield facilities may sell gas to a party other than Southern California Gas (such as a nearby agricultural source). The VCAPCD considers these 3rd party gas sales to be a "sales gas system" in the GHG Regulation.

12. The facility shall comply with the record keeping requirements of Section 95672.

13. The facility shall comply with the reporting requirements of Section 95673.

14. The facility shall comply with the implementation requirements of Section 95674. The facility shall register equipment with the California Air Resources Board (ARB) on an initial basis as required by Section 95674(b)(2) and on an annual basis as required by Section 95674(b)(3).

    The facility is not required to submit a permit application to the Ventura County APCD as a mechanism to comply with this regulation. This regulation, however, does not change the Ventura County APCD Rule 10 permitting requirements for new, modified, and replacement oil wells, gas wells, storage tanks, engines, loading racks, heaters, boilers, glycol units, flare, etc.

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10. GENERAL REQUIREMENTS FOR SHORT-TERM ACTIVITIES (ATTACHMENTS)

The general requirements for short-term activities are broadly applicable requirements that apply to temporary activities at the facility (e.g., abrasive blasting, architectural coatings, degassing operations, etc.). These are activities occurring infrequently and for a short duration. Requirements for short-term activities can normally be adequately addressed in the permit application with minimal or no reference to any specific emissions unit, provided that the scope of the requirement and the manner of its enforcement are clear.

As detailed in the Title V Permit Reissuance Application, general applicable requirements for short-term activities that apply to this facility were determined. The permit conditions associated with each requirement for a short-term activity are listed in an individual attachment. The attachment is identified with the label "Attachment (APCD Rule No.) ____" or "Attachment 40CFR61.M" in the lower left corner of each attachment.

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Ventura County Air Pollution Control District
Rule 74.1 Applicable Requirements
Abrasive Blasting

Rule 74.1, "Abrasive Blasting"
Adopted 11/12/91, Federally Enforceable

Applicability:

This attachment applies to short term activities involving any abrasive blasting operation conducted at this facility. Abrasive blasting is the operation of cleaning or preparing a surface by forcibly propelling a stream of abrasive material against that surface. Abrasive materials subject to Rule 74.1 include, but are not limited to, sand, slag, steel shot, garnet or walnut shells.

Conditions:

1. Pursuant to Rule 74.1.B.1.a, all abrasive blasting operations shall be conducted within a permanent building, except for abrasive blasting operations conducted under one or more of the following conditions as detailed in Rule 74.1.B.1.b:

    a. Steel or iron shot/grit is used exclusively

    b. The item to be blasted exceeds eight feet in any dimension

    c. The surface being blasted is situated at its permanent location or no further away from its permanent location than is necessary to allow the surface to be blasted

2. Pursuant to Rule 74.1.B.1.c, any abrasive blasting that is allowed to be conducted outside of a permanent building, and is not exclusively using steel or iron shot/grit, must use one of the following:

    a. Wet abrasive blasting

    b. Hydroblasting

    c. Vacuum blasting

    d. Dry blasting with California ARB certified abrasives

3. Abrasive blasting for pavement marking shall comply with the requirements of Rule 74.1.B.2.

4. Abrasive blasting of stucco and concrete shall comply with the requirements of Rule 74.1.B.3.

5. Packages or containers for abrasives certified in accordance with Section 92530 of the California Code of Regulations used for permissible outdoor blasting shall comply with the labeling requirements of Rule 74.1.B.4.

6. Abrasive blasting operations shall comply with the visible emission standards of Rule 74.1.C.1 and the nuisance prohibition of Rule 74.1.C.2. The visible emission evaluation of abrasive blasting operations shall be conducted in accordance with Section 92400 of the California Code of Regulations.

7. Permittee shall monitor each abrasive blasting operation to ensure that compliance with Rule 74.1 is being maintained. For each abrasive blasting operation conducted at the facility, permittee shall maintain records of the following information:

    a. Date of operation

    b. Type of abrasive blasting media used

    c. Identity, size, and location of item blasted

    d. Whether operation was conducted inside or outside a permanent building

    e. California ARB certifications for abrasives used

    These records shall be maintained at the facility and submitted to the District upon request.

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Ventura County Air Pollution Control District
Rule 74.2 Applicable Requirements
Architectural Coatings

Rule 74.2, "Architectural Coatings"
Federally Enforceable Version Adopted 01/12/10
District Enforceable Version Adopted 11/10/20

This permit attachment lists the requirements of the November 10, 2020 version of the rule. Compliance with this attachment will ensure compliance with both versions of Rule 74.2. The permit conditions below, therefore, are federally enforceable. The District-enforceable version of this rule will become federally enforceable when approved by the EPA as part of the SIP.

Applicability:

This attachment applies to short term activities involving any person who markets, supplies, sells, offers for sale, applies or solicits the application of any architectural coating at this stationary source. An architectural coating is a coating to be applied to stationary structures or their appurtenances at the site of installation, to portable buildings at the site of installation, to pavements, to fields or lawns, or to curbs. Coatings applied in shop applications or to nonstationary structures, such as airplanes, ships, boats, railcars and automobiles, are not considered to be architectural coatings for the purposes of this rule, nor are adhesives.

This attachment and Rule 74.2 do not apply to architectural coatings that are sold in a container with a volume of one liter (1.057 quart) or less (as stipulated in Rule 74.2.F.2); do not apply to any aerosol coating product; and do not apply to colorants added at the factory or at the worksite (as stipulated in Rule 74.2.F.3).

Conditions:

1. Pursuant to Rule 74.2.B.1, the volatile organic compound (VOC) content of architectural coatings shall not exceed the following standards, as found in Table 2 of Rule 74.2.B.1, unless specifically exempted by Rule 74.2:

    a. The VOC content of flat coatings shall not exceed 50 grams per liter of coating.

    b. The VOC content of nonflat coatings shall not exceed 50 grams per liter of coating.

    c. The VOC content of nonflat-high gloss coatings shall not exceed 50 grams per liter of coating.

Limits are expressed as VOC Regulatory (unless otherwise specified in Rule 74.2) thinned to the manufacturer's maximum recommendation, excluding colorant added to the tint bases. VOC Regulatory is defined in Rule 74.2.

2. Pursuant to Rule 74.2.B.1, the VOC content of specialty architectural coatings shall not exceed the VOC limits in the Table of Standards in Rule 74.2, unless specifically exempted by Rule 74.2.

   Specifically, the VOC content of default coatings shall not exceed 50 grams per liter of coating. A default coating is any specialty coating (those other than flat or nonflat coatings) that is not defined in Section J of Rule 74.2 as any other coating category.

   Specifically, the VOC content of industrial maintenance coatings shall not exceed 250 grams per liter of coating.

   Limits are expressed as VOC Regulatory (unless otherwise specified in Rule 74.2) thinned to the manufacturer's maximum recommendation, excluding colorant added to the tint bases. VOC Regulatory is defined in Rule 74.2.

3. Pursuant to Rule 74.2.B.4, all architectural coating containers used to apply the contents therein to a surface directly from the container by pouring, siphoning, brushing, rolling, padding, ragging or other means, shall be closed when not in use. These architectural coating containers include, but are not limited to, drums, buckets, cans, pails, trays or other application containers. Containers of any VOC-containing materials used for thinning and cleanup shall also be closed when not in use.

4. Pursuant to Rule 74.2.B.5, no person who applies or solicits the application of any architectural coating shall apply or solicit the application of any coating that is thinned to exceed the applicable VOC limit specified in the Tables in Subsection B.1.

5. Permittee shall monitor each architectural coating operation to ensure that compliance with Rule 74.2 is being maintained. Permittee shall specify the usage of compliant coatings and shall maintain VOC records of coatings used at the stationary source. This information shall be submitted to the District upon request.

6. The VOC content of architectural coatings, along with other specified physical and chemical properties, shall be measured using the testing procedures in Rule 74.2.G.

Ventura County Air Pollution Control District
Rule 74.4.D Applicable Requirements
Cutback Asphalt - Road Oils

Rule 74.4, "Cutback Asphalt"
Adopted 07/05/83, Federally-Enforceable

Applicability:

This attachment applies to short term activities involving the application of road oils for road, highway or street paving and maintenance. For the purpose of Rule 74.4, road oil shall be synonymous with slow cure asphalt.

Conditions:

1. Pursuant to Rule 74.4.D, road oils used for highway or street paving or maintenance applications shall contain no more than 0.5 percent of organic compounds which boil at less than 500^{o}F as determined by ASTM D402.

2. Permittee shall maintain a test report of oil being proposed for usage in order to ensure that compliance with Rule 74.4.D is being maintained. Permittee shall maintain records of oil analyses at the facility and submit these records to the District upon request.

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Ventura County Air Pollution Control District
Rule 74.16 Applicable Requirements
Oilfield Drilling Operations

Rule 74.16, "Oilfield Drilling Operations"
Adopted 01/08/91, Federally-Enforceable

Applicability:

This attachment applies to short term activities involving all oilfield drilling operations. Oilfield drilling operations are defined as activities powered by nonvehicular internal combustion engines for the purpose of drilling or redrilling oil wells, injection wells, or gas wells. For the purpose of Rule 74.16, drilling operations do not include any operations at any existing well where the derrick is a part of an oilwell production service unit, as defined in the California Vehicle Code. Rule 74.16 applies to drill rig engines over 50 HP including, but not limited to, engines supplying power to drawworks, rotary tables, mud pumps, mud mixers and auxiliary generators.

This attachment applies to an oil company, which Rule 74.16 defines as the person contracting the drilling rig and/or the person who applies for an Authority to Construct for the well. The APCD issues portable Permits to Operate to the owners of drilling rigs. If the drilling rig is registered with the California Air Resources Board Portable Equipment Registration Program (PERP), an APCD Permit to Operate is not required.

This permit does not authorize the operation of any non-vehicular engine of 50 BHP, or greater, for well drilling or workover operations. Prior to using such an engine, the engine owner shall obtain a Permit to Operate for the engine or shall use an engine that is registered with the California Air Resources Board PERP.

Conditions:

1. Pursuant to Rule 74.16.B.1, all drilling operations shall be powered by grid power, unless exempted by Rule 74.16.C.1. Grid power is defined as electricity conveyed by power lines connected physically and contractually to the Southern California Edison System, or any electricity generated by equipment permitted by the District and having permitted emissions commensurate with an emissions rate of not more than 1.0 pound of NO_x per megawatt-hour of electricity produced.

2. Pursuant to Rule 74.16.C.1, an oil company may petition the Air Pollution Control Officer for exemption from Rule 74.16.B.1 by submitting a cost evaluation for grid powered drilling. Best Available Control Technology cost guidelines shall be used to determine cost effectiveness. As detailed in APCD Rule 44, "Exemption Evaluation Fee", Rule 44.B.2 requires that any person requesting an exemption from Rule 74.16 that is based on a cost evaluation shall be assessed an evaluation fee of $450.00.

3. Pursuant to Rule 74.16.B.2.a, if a drilling operation is exempt from Rule 74.16.B.1, NOx emissions from drilling engines, or any exhaust stack of multiple engines permanently manifolded together, shall not exceed 515 ppmv corrected to 15% oxygen. As an alternate, pursuant to Rule 74.16.B.2.c, drilling engines certified by the manufacturer to emit 6.9 grams of NOx per brake horsepower-hour or less based on a California ARB approved heavy duty offroad engine testing procedure shall be deemed in compliance with Rule 74.16.B.2.a, and shall not be subject to the annual source test requirements in Rule 74.16.B.2.b.

   In order to comply with this condition, permittee shall ensure that the drilling rig utilized has a valid APCD Permit to Operate and that the drilling rig has demonstrated compliance with Rule 74.16.B.2.a in accordance with CARB Method 100 as detailed in Rule 74.16.E (Test Methods), or has demonstrated compliance with Rule 74.16.B.2.c. Alternatively, the permittee shall verify that the drilling rig is registered with the California Air Resources Board PERP.

4. In order to demonstrate compliance with Rule 74.16.B.2.a, the drilling rig company shall perform source testing on the drilling engine exhaust annually. Permittee shall obtain from the drilling rig company the most recent source test results for the exempt engines subject to Rule 74.16.B.2.a, or the engine manufacturer certification for engines subject to Rule 74.16.B.2.c. This information shall be made available on site and submitted to the District upon request.

   This condition does not apply to drilling rig engines registered with the California Air Resources Board PERP.

5. Upon District request, the NO_x emissions from the drilling engine exhaust shall be measured using CARB Method 100, in accordance with Rule 74.16.E (Test Methods).

6. In order to demonstrate compliance with Rule 74.16.C.1, permittee shall maintain documentation on the cost analysis as verification to the grid power exemption. This documentation shall be submitted to the District upon request.

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Ventura County Air Pollution Control District
Rule 74.26 Applicable Requirements
Crude Oil Storage Tank Degassing Operations

Rule 74.26, "Crude Oil Storage Tank Degassing Operations"
Adopted 11/08/94, Federally-Enforceable

Applicability:

This attachment applies to short term activities involving degassing of any aboveground crude oil or produced water storage tank that is equipped with a vapor recovery system and has a storage capacity greater than 2,000 barrels; or has a storage capacity of 2,000 barrels and stores a liquid having a modified Reid vapor pressure (mRVP) of 3.4 pounds per square inch (psi) absolute or greater. This attachment also applies to any external or internal floating roof crude oil tank that has a vapor space of 2,000 barrels or more when the tank's roof is resting on the tank's inner roof supports. Rule 74.26 does not apply to vessels rated and operated to contain normal working pressure of at least 15 psi gauge without vapor loss to the atmosphere.

Degassing is defined as the removal of organic vapors from a stationary storage tank for the purpose of cleaning, removing the tank, cleaning the tank's interior, or making repairs to the tank that would require the complete removal of product from the tank.

This permit does not authorize the operation of any air pollution control device for tank degassing operations. This includes, but is not limited to, a thermal or catalytic incinerator, a carbon adsorber, a condenser, or an internal combustion engine. Prior to using such a device, the owner of the air pollution control device shall obtain a Permit to Operate for the device.

Conditions:

1. Pursuant to Rule 74.26.B.1, no person shall conduct or allow the degassing of any storage tank subject to Rule 74.26, unless the emissions are controlled by one of the following options:

    a. Liquid displacement into a vapor recovery system, flare, or fuel gas system (Rule 74.26.B.1.a). Liquid displacement is defined as the removal of ROC vapors from within a storage tank drained of liquid product by introducing into the tank a liquid having an ROC modified Reid vapor pressure (mRVP) of less than 0.5 psi absolute until at least 90 percent of the tank’s vapor volume has been displaced, with the mRVP determined using ASTM Method D 323-82 conducted at 68 degrees Fahrenheit (Rule 74.26.F.10). or

b. An air pollution control device that has a vapor destruction and removal efficiency of at least 95 percent until the vapor concentration in (Rule 74.26.B.1.b):

1. Aboveground crude oil or produced water tanks equipped with a vapor recovery system, is less than 10 percent of the tank's initial vapor concentration determined immediately prior to the tank degassing, or less than 10,000 ppmv, measured as methane, or

2. Floating roof tanks, is less than 10,000 ppmv, measured as methane.

Fugitive emissions that do not qualify as a leak shall be allowed around tank openings such as a manhole during a tank degassing operation performed in compliance with Rule 74.26.

Pursuant to Rule 74.26.E.3, compliance with the above limits shall require that the tank vapor concentration remain at or below 10,000 ppmv for at least one hour as demonstrated by measuring the vapor concentration at least four times at 15-minute intervals. The monitoring instrument used to measure the vapor concentration shall meet the specifications of EPA Method 21.

2. Pursuant to Rule 74.26.B.2, any receiving vessel used during a tank cleaning operation shall either be bottom loaded or shall be loaded by submerged fill pipe. Any vapors emitted from such vessels during a tank degassing operation shall be controlled with an air pollution control device as required by Rule 74.26.B.1.b. As defined in Rule 74.26.F.14, a receiving vessel is a vessel used to receive liquids or sludge material removed from an ROC liquid storage tank during a tank degassing operation.

3. Pursuant to Rule 74.26.B.3, except during an emergency, the District Enforcement Section shall be notified verbally or in writing at least 48 hours prior to starting any tank degassing operation. Such notification shall include an identification of the tank(s) to be degassed and the air pollution control method employed. If a tank degassing operation was required due to an emergency, the District Enforcement Section shall be notified as soon as reasonably possible but no later than four hours after completion of the operation. An emergency is defined as an unplanned and unexpected event that, if not immediately attended to, presents a safety or public health hazard or an unreasonable financial burden.

4. In order to demonstrate compliance for air pollution control devices used to comply with Rule 74.26.B, operator shall record:

a. The vapor concentration in parts per million (ppm) and gas flow rate in cubic feet per minute (cfm) entering and exiting the device (except for a flare) upon beginning use of the device and every thirty minutes thereafter. The instrument

used to measure vapor concentration shall meet the specifications of EPA Method 21, and

b. The tank's vapor concentrations determined in accordance with Rule 74.26.E.3, and

c. If a refrigerated condenser is used, permittee shall record the condenser temperature in degrees Fahrenheit upon beginning use of the condenser and every thirty minutes thereafter. These records shall be maintained and shall be submitted to the District upon request.

5. Pursuant to Rule 74.26.D.3, any person claiming an exemption for a storage tank based on mRVP shall provide records that demonstrate that the liquid stored in the tank has a mRVP less than 3.4 psi absolute, as determined by ASTM Method D 323-82.

6. Pursuant to Rule 74.26.E.2, methods for determining vapor destruction or removal efficiency include vapor flow through the pipes, measured using EPA Method 2A; and the vapor concentration entering and exiting the device, measured using EPA Method 25A. This testing shall be performed upon District request.

7. Pursuant to Rule 74.26.E.3, the monitoring instrument used to measure the tank vapor concentration specified in Subsection B.1.b shall meet the specifications of EPA Method 21 and shall contain a probe inlet located one foot above the bottom of the tank or one foot above the surface of any sludge material on the bottom of the tank. For upright, cylindrical aboveground tanks, the probe inlet shall be (1) located at least 2 feet away from the inner surface of the tank wall and (2) if samples are withdrawn from a manhole, inserted in an opening of no more than one inch diameter on a flexible or inflexible material that is impermeable to reactive organic compound (ROC) vapors, secured over the manhole.

8. In order to comply with the above conditions, permittee shall insure that any tank degassing subcontractor utilized has a valid APCD Permit to Operate for portable tank degassing emission control equipment and that the control equipment complies with Rule 74.26, in accordance with Rule 74.26.E (Test Methods) when necessary.

9. Pursuant to Rule 74.26.C.2, the provisions of Section B of Rule 74.26 shall not apply to in-service tanks undergoing maintenance, including but not limited to repair of regulators, fittings, deck components, hatches, valves, flame arrestors, or compressors, or any leaks found pursuant to the operator inspection requirements in Rule 74.10, provided that (1) the operation will take no longer than 24 hours to complete and (2) the maintenance operation does not require the complete draining of product from the tank.

Ventura County Air Pollution Control District
Rule 74.28 Applicable Requirements
Asphalt Roofing Operations

Rule 74.28, "Asphalt Roofing Operations"
Adopted 05/10/94, Federally-Enforceable

Applicability:

This attachment applies to short term activities involving operation of equipment used for melting, heating, or holding asphalt or coal tar pitch. The permittee shall insure that all asphalt roofing operations comply with Rule 74.28.

The District does not require permits for asphalt roofing operations as they are exempt from permit pursuant to District Rule 23, "Exemptions From Permit", as detailed in Rule 23.F.16 as "equipment for melting and applying coatings of oils, waxes, greases, resins, and like substances where no reactive organic solvents, diluents or thinners are used.

Conditions:

1. Pursuant to Rule 74.28.B.1, no person shall operate or use equipment subject to this rule for the on-site construction, installation, or repair of roofs unless the vapors from such equipment are contained by one or more close fitting lids. The lid(s) shall not be opened except for loading the kettle with solid roofing material or unless the material in the roofing kettle is less than 150°F.

2. Pursuant to Rule 74.28.B.2, the maximum temperature of the material inside a roofing kettle shall be 500°F for asphalt and 400°F for coal tar pitch.

3. Pursuant to Rule 74.28.B.3, the ROC vapors from the kettle shall be contained by a close fitting lid during a roofing kettle draining operation. Within two minutes after the draining operation has been completed, the vessel that received the hot roofing material shall be covered with a close fitting lid or capped to prevent the release of visible smoke from the vessel.

4. Pursuant to Rule 74.28.B.4., any kettle vent shall remain closed except during a pressure release caused by flashing of the roofing material.

5. During times when asphalt roofing operations are underway at the facility, permittee shall ensure that all applicable requirements of Rule 74.28 are met.

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Ventura County Air Pollution Control District
Applicable Requirements for Soil Aeration Operations
Rule 74.29, Soil Decontamination Operations

Rule 74.29, "Soil Decontamination Operations"
Adopted 04/08/08, Federally Enforceable

Applicability:

This attachment applies to short-term activities involving soils that contain gasoline, diesel fuel, or jet fuel. Rule 74.29 does not apply to soil that contains only crude oil or was contaminated by a leaking storage tank used in an agricultural operation engaged in the growing of crops or the raising of fowl or animals.

Specifically, this attachment applies to the aeration of soil that contains gasoline, diesel fuel, or jet fuel. Aeration is defined as the exposure of excavated soil, containing diesel fuel, gasoline, or jet fuel, to the atmosphere without the use of air pollution control equipment or vapor extraction, bioremediation, or bioventing system.

Remediation equipment, such as a vapor extraction system, bioremediation system, or bioventing system, for contaminated soil requires an APCD permit. Rule 74.29 requirements for such remediation equipment would be addressed in another permit attachment, if applicable. As detailed in APCD Rule 23.F.23, any soil aeration project exempt from the soil aeration limit in Rule 74.29 pursuant to Subsection C.1 or C.2 of Rule 74.29 is exempt from the requirement to obtain a permit for the soil aeration project. Also, pursuant to APCD Rule 23.F.24, any soil remediation project where collected vapors are not emitted to the atmosphere by any means is exempt from the requirement to obtain a permit.

Conditions:

1. Pursuant to Rule 74.29.B.1.a, no person shall cause or allow the aeration of soil that contains gasoline, diesel fuel, or jet fuel if such aeration emits reactive organic compounds (ROC) as measured by a certified vapor analyzer, in excess of 50 parts per million by volume (ppmv) above background, as hexane, except nonrepeatable momentary readings. In determining compliance, a portion of soil measuring three inches in depth and no less than six inches in diameter shall be removed from the soil surface and the probe inlet shall be placed near the center of the resulting hole, level with the soil surface surrounding the hole.

   For each soil decontamination operation where soil aeration occurs, the permittee shall determine compliance with Rule 74.29.B.1.a on a weekly basis as detailed above. A dated record of these measurements shall be maintained at the facility and submitted to the District upon request.

2. Pursuant to Rule 74.29.B.1.b, no person shall cause or allow the aeration of soil that contains gasoline, diesel fuel, or jet fuel if such aeration causes a nuisance, as defined in the California Health and Safety Code Section 41700 and APCD Rule 51, "Nuisance." In addition, offsite aeration is prohibited.

3. Pursuant to Rule 74.29.B.2, no person shall excavate an underground storage tank and/or transfer piping currently or previously used to store an applicable compound, or excavate or grade soil containing an applicable compound, unless ROC emissions are monitored with a certified organic vapor analyzer at least once every 15 minutes during the excavation period commencing at the beginning of excavation or grading. Soil with emission measurements in excess of 50 parts per million by volume (ppmv), as hexane, a shall be considered contaminated.

   During excavation, all inactive exposed contaminated soil surfaces shall be treated with a vapor suppressant or covered with continuous heavy duty plastic sheeting (4 mil or greater) or other covering to minimize emissions of ROC to the atmosphere. Covering shall be in good condition, overlapped at the seams, and securely anchored to minimize headspace where vapors may accumulate.

4. Pursuant to Rule 74.29.B.5, the owner or operator of any applicable underground storage tank shall notify the District Compliance Division at least 24 hours prior to the beginning the excavation of the said storage tank and/or transfer piping.

5. Pursuant to Rule 74.29.B.6, contaminated soil in active storage piles shall be kept visibly moist by water spray, treated with a vapor suppressant, or covered with continuous heavy duty plastic sheeting (4 mil or greater) or other covering to minimize emissions of ROC to the atmosphere. Covering shall be in good condition, overlapped at the seams, and securely anchored to minimize headspace where vapors may accumulate. For any active storage pile, the surface area not covered by plastic sheeting or other covering shall not exceed 6,000 square feet. An “active” storage pile is defined as a worksite to which soil is currently being added or from which soil is being currently being removed. Activity must occur within one hour to be current.

6. Pursuant to Rule 74.29.B.7, contaminated soil in inactive storage piles shall be with covered with continuous heavy duty plastic sheeting (4 mil or greater) or other covering to minimize emissions to the atmosphere. The covering shall be in good condition, overlapped at the seams, and securely anchored to minimize headspace where vapors may accumulate.

7. Pursuant to Rule 74.29.B.8, if not removed within 30 days of excavation, on-site treatment to remove contamination from contaminated soil at an excavation or grading site shall be initiated. The treatment of contaminated soil shall be subject to all applicable District Rules and Regulations. This includes, but is not limited to,

compliance with Rule 10, “Permits Required,” and Rule 51, “Nuisance.”

8. Pursuant to Rule 74.29.B.9, trucks used to transport contaminated soil must meet the following requirements:

    a. The truck and trailer shall be tarped prior to leaving the site. Contaminated material shall not be visible beyond the tarp and shall not extend above the sides or rear of the truck or trailer; and

    b. The exterior of the truck, trailer and tires shall be cleaned prior to leaving the site.

9. Pursuant to Rule 74.29.C.2, the soil aeration requirements of Rule 74.29.B.1.a shall not apply to:

    a. Soil excavation activities necessary for the removal of in-situ soil such as in the removal of an underground storage tank, pipe or piping system, provided the exposed soil is covered as specified in Condition No. 6 while inactive; or

    b. Soil moving, loading, or transport activities performed for the sole purpose of complying with local, state, or federal laws, provided the soil is handled in accordance with such laws; or

    c. Soil excavation or handling occurring as a result of an emergency as declared by an authorized health officer, agricultural commissioner, fire protection officer, or other authorized agency officer. Whenever possible, the District Compliance Division shall be notified prior to commencing such excavation; or

    d. Any soil aeration project involving less than 1 cubic yard of contaminated soil; or

    e. Situations where the soil contamination which resulted from a spill or release of less than five (5) gallons of diesel fuel, jet fuel, or gasoline; or

    f. Contaminated soil used as daily cover at permitted Class III Solid Waste Disposal Sites if such soils do not have a gasoline concentration exceeding 100 parts per million by weight (ppmw) or a diesel fuel concentration exceeding 1,000 ppmw, as determined by the method specified in Rule 74.29.F.1. Daily cover is defined as soil that is applied on a daily basis or less frequently as a covering over landfill waste.

        The permittee shall maintain records of the gasoline concentration and diesel fuel concentration of any contaminated soil used as daily cover that need to qualify for this exemption.

10. Pursuant to Rule 74.29.F.1, the percent by weight of contaminant in soil samples shall be determined by EPA Method 8015B. Samples shall be introduced using Method 5035 (Purge and Trap) and shall be taken in accordance with the Los Angeles Regional Water Quality Control Board's guidelines for contaminated soil sampling. Standards shall be the same as the contaminant believed to be in the soil. If the soil is contaminated with methanol 85 (M85) the standard used shall be M85.

11. Pursuant to Rule 74.29.F.3, the ROC concentration measurements required in Subsections B.1 and B.2 of the rule (Condition Nos. 1 – 3 above) shall be made using an organic vapor analyzer certified according to the requirements of EPA Method 21.

12. Pursuant to Rule 74.29.D, for any soil aeration project subject to Rule 74.29, the permittee shall record each date that the soil was disturbed and the quantity of soil disturbed on each date. These records shall be maintained at the facility and submitted to the District upon request.

13. For any soil decontamination project subject to Rule 74.29, other than a soil aeration project, the following information shall be made available to the District upon request:

    a. All dates that soil was disturbed and the quantity of soil disturbed on each date.

    b. Reasons for excavation or grading.

    c. Cause of VOC soil contamination and history of the site.

    d. Description of tanks or piping associated with the soil contamination.

    e. Description of mitigation measures employed for dust, odors and ROC emissions.

    f. Details of treatment and/or disposal of ROC contaminated soil, including the ultimate receptor.

    g. Description of monitoring equipment and techniques.

    h. All ROC emission measurements shall be recorded on a continuous permanent strip-chart or in a format approved by the Air Pollution Control Officer (APCO).

    i. A map showing the facility layout, property line, and surrounding area up to 2500 feet away, and including any schools, residential areas or other sensitive receptors such as hospitals or locations where children or elderly people live or work.

14. The permittee shall monitor each soil aeration operation or underground gasoline storage tank excavation operation to ensure that compliance with Rule 74.29.B.1 and/or

74.29.B.2 is being maintained. This monitoring requirement shall include ensuring that proper operation requirements are being met and shall include the recordkeeping required above.

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Ventura County Air Pollution Control District
40 CFR Part 61, Subpart M Applicable Requirements
National Emission Standard for Asbestos

40 CFR Part 61, Subpart M, "National Emission Standard for Asbestos"
Federally Enforceable

Applicability:

This attachment applies to short term activities conducted at this facility pertaining to procedures for asbestos demolition or renovation activities as detailed in 40 CFR Part 61.145.

As defined in 40 CFR Part 61.141, asbestos means the asbestiform varieties of serpentinite (chrysotile), riebeckite (crocidolite), cummingtonite-grunerite, anthophyllite, and actinolite-tremolite. Renovation means altering a facility or one or more facility components in any way, including the stripping or removal of regulated asbestos containing material (RACM) from a facility component. Operations in which load-supporting structural members are wrecked or taken out are demolitions.

Conditions:

1. Permittee shall insure compliance with 40 CFR Part 61 Subpart M, "National Emission Standard for Asbestos." The owner or operator of a demolition or renovation activity, as defined in 40 CFR Part 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR Part 61.145, "Standards for Demolition and Renovation."

2. During times when asbestos renovation or demolition are underway at the facility, permittee shall ensure that all applicable requirements of 40 CFR Part 61.145 are met.

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11. GENERAL PERMIT CONDITIONS

This section contains general Part 70 permit conditions and general APCD permit to operate conditions. The general Part 70 permit conditions are associated with general federal requirements that apply to all Title V facilities. These conditions are based on APCD Rules 8, 30, 32, and 33, and 40 CFR Part 70.

The general permit to operate conditions are associated with general District requirements that apply to all operating Title V facilities. These conditions are based on APCD Rules 19, 20, 22, and 27.

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Ventura County Air Pollution Control District
General Part 70 Permit Conditions

1. The permittee shall comply with all federally-enforceable conditions of the Part 70 permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of an application for reissuance of the permit. (40 CFR 70.6(a)(6)(i), APCD Rule 33.3.B.1)

2. The permittee shall continue to comply with all the applicable requirements with which the company has certified that it is already in compliance. The permittee shall comply in a timely manner with applicable requirements that become effective during the permit term of this permit.

3. The permittee shall promptly report deviations from Part 70 permit requirements, including those attributable to upset conditions as defined in the Part 70 permit, the probable cause of the deviations, and any corrective actions or preventive measures taken. Promptly is defined as no later than four (4) hours after its detection by such owner or operator, or his agents or employees. (40 CFR 70.6(a)(3)(iii)(B), APCD Rule 33.3.A.3, APCD Rule 32.B.1)

4. The need to halt or reduce activity is not a defense. It shall not be a defense for a permittee in an enforcement action that it would be necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Part 70 permit. (40 CFR 70.6(a)(6)(ii), APCD Rule 33.3.B.2)

5. All applicable records, monitoring data, and support information shall be maintained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, and copies of all reports required by the Part 70 permit. All applicable reports shall be submitted to the District every 6 months and shall be certified by a responsible official. Such reports shall identify any deviations from Part 70 permit conditions. (40 CFR 70.6(a)(3)(ii)(B), 40 CFR 70.6(a)(3)(iii)(A), APCD Rule 33.3.A.3)

6. The permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the Part 70 permit or to determine compliance with the Part 70 permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the Part 70 permit or, for information claimed to be confidential, the permittee may furnish such records directly to the Administrator of the EPA along with a claim of confidentiality. (40 CFR 70.6(a)(6)(v), APCD Rule 33.3.B.5)

7. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the District or an authorized representative to perform the following:

   a. Enter upon the permittee's premises where a Part 70 source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the Part 70 permit;

   b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the Part 70 permit;

   c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the Part 70 permit; and

   d. As authorized by the federal Clean Air Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the Part 70 permit or applicable requirements.

   (40 CFR 70.6(c)(2), APCD Rule 8, APCD Rule 33.3.B.7)

8. The Part 70 permit may be modified, revoked, reopened, reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. (40 CFR 70.6(a)(6)(iii), APCD Rule 33.3.B.3)

9. A Part 70 permit shall be reopened under the following conditions:

   a. Additional applicable requirements under the federal Clean Air Act become applicable to the facility with a remaining Part 70 permit term of 3 or more years. Such a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the Part 70 permit is due to expire, unless the original Part 70 permit or any of its terms and conditions has been extended pursuant to APCD Rule 33.6.D;

   b. Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by the Administrator of the EPA, excess emissions offset plans shall be deemed to be incorporated into the Part 70 permit;

c. The District or EPA determines that the Part 70 permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Part 70 permit; or

d. The Administrator of the EPA or the District determines that the Part 70 permit must be revised or revoked to assure compliance with the applicable requirements.

(40 CFR 70.7(f), APCD Rule 33.8.A)

10. All fees required by District Regulation III, Fees, shall be paid on a timely basis as requested by the District. Notwithstanding the term of the Part 70 permit, if the permittee fails to pay the annual renewal fees required pursuant to APCD Rule 42.H within the time period specified in APCD Rule 30, the Part 70 permit will be void. (40 CFR 70.6(a)(7), APCD Rule 30, APCD Rule 33.3.B.6)

11. The Part 70 permit does not convey any property rights of any sort, or any exclusive privilege. (40 CFR 70.6(a)(6)(iv), APCD Rule 33.3.B.4)

12. The provisions of this Part 70 permit shall be severable, and in the event of any challenge to any portion of the permit, or if any portion is held invalid, the remaining permit conditions shall remain valid and in force. (40 CFR 70.6(a)(5), APCD Rule 33.3.B.8)

13. An application for reissuance of this Part 70 Permit shall be submitted no more than 18 months prior to the expiration date and no less than 6 months prior to the expiration date as stated on this permit. The application shall be subject to the same procedural requirements, including those for public participation and EPA review, that apply to initial Part 70 permit issuance. (40 CFR 70.5(a)(1)(iii), 40 CFR 70.7(c)(1)(i), APCD Rule 33.6.B)

14. Any Part 70 application and any document, including reports, schedule of compliance progress reports, and compliance certification, required by this Part 70 permit shall be certified by a responsible official. The certification shall state that, based on information and belief formed after a reasonable inquiry, the statements and information in the document are true, accurate, and complete (40 CFR 70.5(d), APCD Rule 33.9.C)

15. Permittee must submit certification of compliance with all applicable requirements and all Part 70 permit conditions. A compliance certification shall be submitted with any Part 70 permit application and annually, on the anniversary date of the Part 70 permit, or on a more frequent schedule if required by an applicable requirement or permit condition.

This compliance certification shall identify each applicable requirement or condition of the Part 70 permit, the compliance status of the stationary source, whether the compliance

was continuous or intermittent since the last certification, and the method(s) used to determine compliance. In addition, the certification shall indicate the stationary source's compliance status with any applicable enhanced monitoring and compliance certification requirement of the federal Clean Air Act. A copy of each compliance certification shall be submitted to EPA Region IX. (40 CFR 70.5(c)(9), 40 CFR 70.6(c)(5), APCD Rule 33.3.A.9, APCD Rule 33.9.B)

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Ventura County Air Pollution Control District
General Permit to Operate Conditions

1. Within 30 days after receipt of a permit to operate, the permittee may petition the Hearing Board, in writing, to review any new or modified condition on the permit. (APCD Rule 22)

2. This permit to operate, or a copy, shall be posted reasonably close to the subject equipment and shall be readily accessible to inspection personnel from the District. Posting a copy of the "Permitted Equipment and Applicable Requirements Table" contained in Section No. 2 will fulfill this requirement if the entire permit to operate is readily available at another location at the stationary source. (APCD Rule 19)

3. This permit to operate is not transferable from one location to another unless the equipment is specifically listed as being portable. (APCD Rule 20)

4. If, within a reasonable amount of time, any permittee refuses to furnish information requested by the District, the District may suspend this permit to operate. The permittee will be informed, in writing, of the permit suspension and the reasons for the suspension. (APCD Rule 27)

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12. MISCELLANEOUS FEDERAL PROGRAM CONDITIONS

This section contains miscellaneous federal program conditions that are not emission unit-specific or short-term. These federal requirements are broadly applicable requirements that apply and are enforced in the same manner for all subject emissions units or short-term activities. Permit conditions associated with these miscellaneous federal program requirements are listed in individual attachments. The attachment is identified with the label "Attachment 40CFR(Part No.) __" in the lower left corner of each attachment.

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Ventura County Air Pollution Control District
40 CFR Part 68 Applicable Requirements
Accidental Release Prevention and Risk Management Plans

40 CFR Part 68, "List of Regulated Substances and Thresholds for Accidental Release Prevention"
Federally-Enforceable

Applicability:

This attachment applies to regulated substances that are contained in a process at this facility and that exceed the threshold quantity, as presented in 40 CFR Part 68.130. This regulation addresses the requirements of section 112(r) of the federal Clean Air Act as amended. Specifically, this attachment applies to a facility that has stated that a federal Risk Management Plan pursuant to section 112(r) is currently not required, but where flexibility is desired to preclude a permit reopening should 40 CFR Part 68 become an applicable requirement.

Conditions:

1. Should the stationary source, as defined in 40 CFR Part 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in Part 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 CFR Part 70.

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Ventura County Air Pollution Control District
40 CFR Part 82 Applicable Requirements
Protection of Stratospheric Ozone

40 CFR Part 82, "Protection of Stratospheric Ozone"
40 CFR Part 82, Subpart B, "Servicing of Motor Vehicle Air Conditioners"
40 CFR Part 82, Subpart F, "Recycling and Emissions Reduction"
Federally Enforceable (last revised 11/18/16)

Applicability:

This attachment applies to activities conducted at this facility that involve producing, importing, exporting, or consuming of the specified controlled substances described under 40 CFR Part 82.4. Specifically, this attachment includes the requirements of 40 CFR Part 82, Subpart B, "Servicing of Motor Vehicle Air Conditioners," and 40 CFR Part 82, Subpart F, "Recycling and Emissions Reduction."

As stated in 40 CFR Part 82.30, 40 CFR Part 82, Subpart B applies to any person performing service on a motor vehicle for consideration when this service involves the refrigerant in the motor vehicle air conditioner.

As stated in 40 CFR Part 82.150, 40 CFR Part 82, Subpart F applies to any person maintaining, servicing, or repairing appliances containing class I, class II, or non-exempt substitute refrigerants. This subpart also applies to persons disposing of such appliances (including small appliances and motor vehicle air conditioners), refrigerant reclaimers, technician certifying programs, appliance owners and operators, manufacturers of appliances, manufacturers of recovery and/or recycling equipment, approved recovery and/or recycling equipment testing organizations, and persons buying, selling, or offering to sell class I, class II, or non-exempt substitute refrigerants.

As defined in 40 CFR82.152, *appliance* means any device which contains and uses a class I or class II substance or substitute as a refrigerant and which is used for household or commercial purposes, including any air conditioner, motor vehicle air conditioner, refrigerator, chiller, or freezer. For a system with multiple circuits, each independent circuit is considered a separate appliance. *Refrigerant* means, for purposes of this subpart, any substance, including blends and mixtures, consisting in part or whole of a class I or class II ozone-depleting substance or substitute that is used for heat transfer purposes and provides a cooling effect.

Conditions:

1. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable

requirements as specified in 40 CFR Part 82, Subpart B, "Servicing of Motor Vehicle Air Conditioners."

The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.

2. If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee is subject to all of the applicable requirements as specified in 40 CFR Part 82, Subpart F, "Recycling and Emissions Reduction."

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Ventura County Air Pollution Control District
Engine Permit Shields

40 CFR Part 60, Subpart IIII, "Standards of Performance for Stationary Compression Ignition Internal Combustion Engines"

40 CFR Part 60, Subpart JJJJ, "Standards of Performance for Stationary Spark Ignition Internal Combustion Engines"

Permit Shield:

The New Source Performance Standards listed above have been reviewed; and it has been determined that they are not applicable to this stationary source. The following discussion details the determination of this permit shield for the seven (7) natural gas engines and the two (2) emergency diesel standby engines located at this stationary source.

Discussion:

40 CFR Part 60, Subpart IIII, "Standards of Performance for Stationary Compression Ignition Internal Combustion Engines," is applicable to various categories of compression ignition engines that are manufactured, modified, or reconstructed after specific listed dates. The earliest applicable date listed in the regulation is July 11, 2005. All engines at this stationary source were in operation prior to July 11, 2005.

40 CFR Part 60, Subpart JJJJ, "Standards of Performance for Stationary Spark Ignition Internal Combustion Engines," is applicable to various categories of spark ignition engines that are manufactured, modified, or reconstructed after specific listed dates. The earliest applicable date listed in the regulation is June 12, 2006. All engines at this stationary source were in operation prior to June 12, 2006.

If a new engine is installed or an existing engine is modified or reconstructed at the stationary source, it may be subject to 40 CFR, Part 60, Subpart IIII or 40 CFR Part 60, Subpart JJJJ.

Ventura County Air Pollution Control District
Standards of Performance (NSPS) for
Crude Oil and Natural Gas Facilities

40 CFR Part 60, Subpart OOOOa, "Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015"

Applicability:

This NSPS establishes emission standards and compliance schedules for the control of the pollutant greenhouse gases (GHG). The greenhouse gas standard in this NSPS is in the form of a limitation on emissions of methane from affected facilities in the crude oil and natural gas source category that commence construction, modification, or reconstruction after September 18, 2015. This NSPS also establishes emission standards and compliance schedules for the control of volatile organic compounds (VOC) and sulfur dioxide (SO_2) emissions from affected facilities in the crude oil and natural gas source category that commence construction, modification or reconstruction after September 18, 2015. The effective date of the NSPS is August 2, 2016.

This NSPS applies to all onshore well completions, centrifugal compressors, reciprocating compressors, pneumatic controllers, storage vessels, process units for the extraction or fractionation of natural gas liquids from field gas, sweetening units, pneumatic pumps, and fugitive emissions from well sites and compressor stations which are constructed, modified or reconstructed after September 18, 2015, as discussed in more detail below. Note that this NSPS does not apply to offshore oil platforms in Ventura County.

Well completions subject to the NSPS are limited to the flowback period following hydraulic fracturing operations at an applicable oil or gas well. These applicable well completions include those conducted at newly drilled and fractured wells, as well as completions conducted following refracturing operations that may occur at various times over the life of the well.

Note that the issuance of this NSPS now includes, incorporates, and / or revises the requirements of 40 CFR Part 60, Subpart OOOO, "Standards of Performance (NSPS) for Crude Oil and Natural Gas Production, Transmission and Distribution". 40 CFR Part 60, Subpart OOOO now has an effective date of August 23, 2011 to September 18, 2015 and its requirements are now contained in 40 CFR Part 60, Subpart OOOOa. This document summarizes the requirements of the NSPS and is not intended to supersede or conflict with the requirements of the NSPS.

Conditions:

1. Wells undergoing hydraulic fracturing or hydraulic refracturing subject to this NSPS shall comply with Section 60.5375a. A well is defined as an onshore well drilled for the purpose of producing oil or natural gas, or a well into which fluids are injected. During

the flowback period following hydraulic fracturing or refracturing, the NSPS requires the recovery of flowback liquids and the control of flowback gas. Note that the NSPS has specific requirements for wildcat wells and delineation wells, non-wildcat low pressure gas wells or non-delineation low pressure gas wells, and wells with less than 300 scf of gas per stock tank barrel of oil produced.

The drilling of all new oil wells and all new gas wells requires a Ventura County APCD Authority to Construct. In addition, an Authority to Construct shall be obtained prior to refracturing an existing oil or gas well.

2. Centrifugal compressors subject to this NSPS shall comply with Section 60.5380a. A centrifugal compressor is defined as any machine for raising the pressure of a natural gas by drawing in low pressure natural gas and discharging significantly higher pressure natural gas by means of mechanical rotating vanes or impellers. Screw, sliding vane, and liquid ring compressors are not centrifugal compressors as defined in this NSPS. The NSPS requires the operators of affected centrifugal compressors to reduce methane and VOC emissions from each centrifugal compressor wet seal fluid degassing system by 95.0 percent or greater. Compressors located at or past the point of custody transfer are not covered by this NSPS. A centrifugal compressor located at a well site, or an adjacent well site and servicing more than one well site, is not an affected facility under this NSPS.

   The Ventura County APCD does not require permits for natural gas compressors, but does require permits for an internal combustion engine (in lieu of an electric motor) powering a natural gas compressor (Rule 23.F.18). Therefore, this condition authorizes the installation of the equipment necessary to comply with these centrifugal compressor requirements provided that the permittee comply with all the requirements of Section 60.5380a, including the required notification, recordkeeping and reporting requirements.

3. Reciprocating compressors subject to this NSPS shall comply with Section 60.5385a. A reciprocating compressor is defined as a piece of equipment that increases the pressure of a process gas by positive displacement, employing linear movement of a drive shaft. The NSPS requires the operators of affected reciprocating compressors to replace the rod packing every 26,000 hours or 36 months from the date of initial startup, or last rod packing replacement, of the reciprocating compressor affected facility. As an alternative to rod packing replacement, the NSPS requires that operators collect the methane and VOC emissions from the rod packing using a rod packing emissions collection system that operates under negative pressure and route the rod packing emissions to a process through a closed vent system. Compressors located at or past the point of custody transfer are not covered by this NSPS. A compressor located at a well site, or an adjacent well site and servicing more than one well site, is not an affected facility under this NSPS.

The Ventura County APCD does not require permits for natural gas compressors, but does require permits for an internal combustion engine (in lieu of an electric motor) powering a natural gas compressor (Rule 23.F.18). Therefore, this condition authorizes the work necessary to comply with these reciprocating compressor requirements provided that the permittee comply with all the requirements of Section 60.5385a, including the required notification, recordkeeping and reporting requirements.

4. Pneumatic controllers subject to this NSPS shall comply with Section 60.5390a. A pneumatic controller is defined as an automated instrument used for maintaining a process condition such as liquid level, pressure, delta-pressure and temperature. This NSPS requires each pneumatic controller affected facility at a natural gas processing plant to have a natural gas bleed rate of zero standard cubic feet per hour. Each pneumatic controller affected facility, at a location other than at a natural gas processing plant, must have a natural gas bleed rate of less than or equal to 6 standard cubic feet per hour. Note that a natural gas processing plant is defined as any processing site engaged in the extraction of natural gas liquids from field gas, fractionation of mixed natural gas liquids to natural gas products, or both. A Joule-Thompson valve, a dew point suppression valve, or an isolated or stand-alone Joule-Thompson skid is not a natural gas processing plant.

   These requirements do not apply if it is determined that the use of a pneumatic controller affected facility with a bleed rate greater than the applicable standard is required based on functional needs, including but not limited to response time, safety and positive actuation. However, an applicable pneumatic controller must be tagged with the month and year of installation, reconstruction or modification, and identification information that allows traceability to the records for that pneumatic controller.

   The Ventura County APCD does not require permits for the installation and operation of pneumatic controllers and other components such as valves and flanges (Rule 23.J.9). Therefore, this condition authorizes the work necessary to comply with these pneumatic controller requirements provided that the permittee comply with all the requirements of Section 60.5390a, including the required notification, recordkeeping and reporting requirements.

5. Pneumatic pumps subject to this NSPS shall comply with Section 60.5393a. For natural gas processing plants, each pneumatic pump affected facility is a single natural gas-driven diaphragm pump. For well sites, each pneumatic pump affected facility is a single natural gas-driven diaphragm pump. A single natural gas-driven diaphragm pump that is in operation less than 90 days per calendar year is not an affected facility under this subpart provided the owner/operator keeps records of the days of operation each calendar year and submits such records to the EPA Administrator (or delegated enforcement authority) upon request.

This NSPS requires each pneumatic pump affected facility at a natural gas processing plant to have a natural gas bleed rate of zero standard cubic feet per hour. A pneumatic pump affected facility located at a well site must reduce natural gas emissions by 95.0 percent, except as provided in paragraphs (b)(3) and (4) of this section for a well site at a greenfield site, and except as provided in paragraphs (b)(3), (4) and (5) of this section for a well site not located at a greenfield site. Greenfield site is defined as a site, other than a natural gas processing plant, which is entirely new construction. Natural gas processing plants are not considered to be greenfield sites, even if they are entirely new construction.

The Ventura County APCD does not require permits for the installation and operation of pneumatic pumps and other components such as valves and flanges (Rule 23.J.9). Therefore, this condition authorizes the work necessary to comply with these pneumatic pump requirements provided that the permittee comply with all the requirements of Section 60.5393a, including the required notification, recordkeeping and reporting requirements.

6. Storage vessels subject to this NSPS shall comply with Section 60.5395a. A storage vessel is defined as a tank or other vessel that contains an accumulation of crude oil, condensate, intermediate hydrocarbon liquids, or produced water, and that is constructed primarily of non-earthen materials (such as wood, concrete, steel, fiberglass, or plastic) which provide structural support. A well completion vessel that receives recovered liquids from a well after startup of production following flowback for a period which exceeds 60 days is considered a storage vessel under this NSPS. Note that pressure vessels designed to operate in excess of 204.9 kilopascals (29.7 psi) and without emissions to the atmosphere are not considered to be storage vessels. Also, process vessels such as surge control vessels, bottoms receivers, and knockout vessels are not considered to be storage vessels.

   The NSPS requires that individual storage vessels with VOC emissions equal to or greater than 4 tons per year achieve at least 95.0 percent reduction in VOC emissions. These requirements do not apply to storage vessels subject to and controlled in accordance with the requirements for storage vessels in 40 CFR Part 60, Subpart Kb, and 40 CFR Part 63, Subparts G, CC, HH, or WW.

   The Ventura County APCD does require permits for the installation and operation of storage vessels such as crude oil storage tanks, wash tanks, and produced water storage tanks. Pressure vessels without routine emissions to the atmosphere are not required to be listed on the permit. In addition, these tanks must comply with the vapor recovery requirements of Rule 71.1, “Crude Oil Production and Separation”, which in most cases is more stringent than this NSPS.

7. Fugitive emissions from well sites and compressor stations, except compressors located at a well site or compressors located at an onshore natural gas processing plant, subject to

this NSPS shall comply with Section 60.5397a.

The NSPS requires a leak detection and repair program for fugitive emissions components such as valves, connectors, pressure relief devices, open-ended lines, flanges, certain covers and closed vent systems, thief hatches or other openings on a controlled storage vessel (not subject to Section 60.5395a), compressors, instruments, and meters. An emissions monitoring plan is required and emission monitoring surveys are required at least semiannually for well sites and a least quarterly for compressor stations. "Difficult-to-monitor" components must be monitored at least once per calendar year and "unsafe-to-monitor" components must be monitored on a schedule, as included in the monitoring plan.

Fugitive emissions are defined as: a) any visible emission from a fugitive emissions component observed using optical gas imaging, or b) an instrument reading 500 ppm or greater using EPA Method 21.

Each identified source of fugitive emissions shall be repaired or replaced as soon as practicable, but no later than 30 calendar days after the detection of the fugitive emissions, except as provided for specified repairs and replacements in the NSPS.

The Ventura County APCD does not require permits for the installation and operation of components subject to the fugitive emissions requirements of this NSPS. Therefore, this condition authorizes any work necessary to comply with these leak detection and repair requirements provided that the permittee comply with all the requirements of Section 60.5397a, including the monitoring, repair, replacement, recordkeeping and reporting requirements.

8. All process units, except compressors, located at an onshore natural gas processing plant subject to this NSPS shall comply with Section 60.5400a. A process unit means components assembled for the extraction of natural gas liquids from field gas, the fractionation of the liquids into natural gas products or other operations associated with the processing of natural gas products.

   The NSPS requires a leak detection and repair program for components such as pressure relief devices, pumps and valves that reflects the procedures and leak thresholds established in 40 CFR Part 60, Subpart VVa, the NSPS for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry (that is, this NSPS OOOO references out to NSPS VVa). For specified components, a leak is defined as 500 ppm or greater as measured by EPA Method 21, and a first attempt at a repair must be made no later than 5 calendar days after a leak is detected. The leak must be repaired as soon as practicable, but no later than 15 days after detection.

9. Sweetening units at onshore natural gas processing plants subject to this NSPS shall

comply with Section 60.5405a. A sweetening unit is defined as a process device that removes hydrogen sulfide and / or carbon dioxide from the sour natural gas stream. To qualify as a sweetening unit, there must be sulfur recovery technology with a liquid sulfur accumulation rate. These requirements do not apply to sweetening units located on offshore oil platforms in Ventura County. The requirements also do not apply to devices that remove hydrogen sulfide or carbon dioxide that use replaceable media or units that use membrane separation technology.

The NSPS requires that the sweetening unit achieve a minimum SO2 reduction efficiency that varies from 74.0% to 99.9% depending on the hydrogen sulfide content of the acid gas and the sulfur feed rate.

The Ventura County APCD does require an Authority to Construct for the installation of a sweetening unit at both onshore natural gas plants and offshore natural gas plants. Any sweetening unit at this facility subject to this NSPS will be specifically addressed elsewhere in this permit, as applicable.

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Ventura County Air Pollution Control District
Permit Shield
National Emission Standards for Hazardous Air Pollutants
From Oil and Natural Gas Production Facilities
40 CFR Part 63, Subpart HH

40 CFR Part 63, Subpart HH, "National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities"

Permit Shield:

The requirements of 40 CFR Part 63, Subpart HH, "National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities" have been reviewed; and it has been determined that this federal regulation is not applicable to the glycol dehydrator unit(s) at this stationary source. The following discussion details the determination of this permit shield.

Discussion:

40 CFR Part 63, Subpart HH exempts a stationary source that exclusively processes, stores, or transfers "black oil" which is defined as hydrocarbon (petroleum) liquid with an initial producing gas-to-oil ratio (GOR) less than 0.31 cubic meters per liter and an API gravity of less than 40 degrees. This GOR is approximately equal to 1740 standard cubic feet per barrel. The oil processed, stored, or transferred at this stationary source meets this definition of "black oil".

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13. PART 70 PERMIT APPLICATION PACKAGE

The Part 70 permit application, which was submitted by this facility, is included in this section for reference only and is not a part of the Part 70 permit.

During the processing of the permit application, additional information was submitted by the facility in response to District requests. This additional information is included with the application. If the applicant was asked to replace a page or a portion of the application, the original submittal is stamped "REPLACED" and the replacement page or section is placed in front of the original. The applicant and District correspondence for the Part 70 permit application is located in the District permit file for this stationary source.

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VENTURA AVENUE LEASES
TITLE V APPLICATION
PERMIT 00041 REISSUANCE

September 2018

AERA

September 24, 2018

Mr. Kerby E. Zozula, P.E.
Ventura County Air Pollution Control District
669 County Square Drive
Ventura, CA 93003

Dear Mr. Zozula:

SUBJECT: RE-ISSUANCE APPLICATION FOR TITLE V PERMIT 00041
VENTURA AVENUE LEASES

Aera Energy LLC (Aera) submits the re-issuance application for Title V Permit 00041 for the Ventura Avenue Leases. The current permit expires on March 31, 2019.

This application package includes the following:

1. General Facility Information form and its required attachments
2. The following tables from the current Permit to Operate and proposed revisions:
   - Periodic Monitoring Summary (Table No. 1)
   - Permitted Equipment and Applicable Requirements (Table No. 2)
   - Permitted Throughput / Consumption Limit (Table No. 3)
   - Permitted Emissions (Table No. 4)
3. Summary Reports:
   - Equipment and Emissions
   - Air Toxic "Hot Spots" Emissions
   - Greenhouse Gas Emissions
4. Compliance Plan
5. Compliance Certification
6. Insignificant Activities
7. Compliance Assurance Monitoring Plan
8. Permitted Well List
9. $2,450.00 check for the filing fee and deposit

Should you have any questions on this matter, please contact me at (805) 648-8207 or via e-mail at crlogan@aeraenergy.com.

Thank you for your consideration of this application.

Sincerely,

C. Logan

Christopher Logan
Environmental Advisor

Enclosures

cc: Aera Energy LLC
Peggy Shue, Environmental Manager – Air Quality

VCAPCD PART 70 PERMIT REISSUANCE APPLICATION FORM

General Facility Information Form

Form TVAF11

1. Permit Number: 0 0 0 4 1

2. Company Name:
   Aera Energy LLC

3. Company Mailing Address:
   3382 N. Ventura Ave.

4. Company City, State Zip Code:
   Ventura, CA 93001

5. Responsible Official and Title (as defined in 40 CFR 70.2 and VCAPCD Rule 33.1):
   Mr. William J. Spear III, Manager of Operations

6. Responsible Official Telephone Number:
   (805) 648-8438

7. Facility Name (Usually Same As Company Name):
   Ventura Avenue Leases

8. Facility Street Address (or Lease Name/Field Name):
   3382 N. Ventura Ave.

9. Facility City, CA Zip Code:
   Ventura, CA 93001

RECEIVED
VENTURA COUNTY
2018 SEP 24 PM 4:35
A.P.C.D.

10. Title V Permit Contact Person and Title:
    Mr. Christopher Logan, Environmental Advisor

11. Title V Permit Contact Person Telephone Number and Email:
    (805) 648-8207 crlogan@aeraenergy.com

12. Title V Permit Contact Street Address:
    3382 N. Ventura Ave.

13. Title V Permit Contact City, State Zip Code:
    Ventura, CA 93001

DISTRICT USE ONLY

Amount Paid: $ 2,450 Date Received: 9/24/18 Receipt No. 93057

14. Type of Organization:

☒ Corporation	☐ Sole Proprietorship
☐ Partnership	☐ Government

15. Facility Operating Schedule: _24_ Hours/Day _7_ Days/Week _52__ Weeks/Year

16. Facility SIC Code: 1 3 1 1

CAM (Compliance Assurance Monitoring) Plans

17. Does the current Part 70 Permit for this facility include any CAM Plan(s) as required by 40 CFR Part 64?

☒ Yes ☐ No

If yes, list the emissions unit(s) that are required to comply with CAM
2-748 BHP Rich Burn NG Engines (CP2-1 and CP2-2)_____

If yes, are there any proposed changes to the CAM Plan(s)? ☐ Yes ☒ No

Provide details of any changes to the CAM Plan(s) as necessary. See the District CAM Plan Instructions for more detail.

Alternative Scenarios – If you answer "yes" to any questions 18 through 20 below, submit supplemental information as an attachment to the application. See instructions for more detail.

18. Does this application request alternative operating scenarios pursuant to Rule 33.4.B? ☐ Yes ☒ No

19. Doe this application request voluntary emission caps pursuant to Rule 33.4.C? ☐ Yes ☒ No

20. Does this application include any proposed exemptions from otherwise applicable requirements pursuant to Rule 33.2.A.5? ☐ Yes ☒ No

Miscellaneous Federal Requirements

21. Has this facility been required to prepare a federal Risk Management Plan pursuant to Section 112(r) of the federal Clean Air Act and 40 CFR Part 68? ☒ Yes ☐ No

If yes, has the federal Risk Management Plan been submitted to the implementing agency? ☒ Yes ☐ No

If a federal Risk Management Plan is required but has not been submitted to the implementing agency, provide a detailed explanation as an attachment to the application.

22. Does this facility conduct any activities that are regulated by the federal protection of stratospheric ozone requirements in 40 CFR Part 82? ☐ Yes ☒ No

23. Is this facility subject to the acid rain requirements in 40 CFR Part 72 through 40 CFR Part 78? ☐ Yes ☒ No

24. Is this facility subject to the federal outer continental shelf air regulations in 40 CFR Part 55? ☐ Yes ☒ No

Permit Shields

25. Does the current Part 70 permit for this facility include any permit shields? ☒ Yes ☐ No

If yes, list the emissions unit(s) with shields and the regulation they are shielded from: 9 natural gas engines and 2 emergency diesel standby engines have an existing permit shield for 40 CFR Part 60, Subpart IIII and 40 CFR Part 60, Subpart JJJJ.

If yes, is the basis for each permit shield still correct? ☒ Yes ☐ No

If the current Part 70 permit contains any permit shield for which the basis is no longer correct, provide a detailed explanation as an attachment to the application.

Facilities Must Submit Process Descriptions, Plot Plans, and Process Flow Diagrams That Provide the Following:

26. General Nature of Business (e.g., Autobody Painting, Gasoline Storage & Dispensing, Oil Production, etc.)

27. Facility Process Description

28. A Street Map or Road Map That Shows the Location of the Facility in Ventura County.

29. A Facility Map That Clearly Indicates the Facility Boundaries and the Location of Permitted Equipment.

30. A Process Flow Diagram That Traces the Processes Throughout All Permitted Equipment from Start to Finish.

31. Certification by Responsible Official (as defined in 40 CFR 70.2 and VCAPCD Rule 33.1)

I certify that, based on information and belief formed after reasonable inquiry, the statements and information provided for this Part 70 Permit Application are true, accurate, and complete.

Signature and Title of Responsible Official:	Date:
Manager of Operations	9/24/2018

VENTURA AVENUE OIL FIELD
VCAPCD PERMIT TO OPERATE NO. 00041

GENERAL NATURE OF BUSINESS:
CRUDE OIL AND NATURAL GAS PRODUCTION AND PROCESSING

FACILITY DESCRIPTION

The Ventura Avenue Oil Field is located north of the city of Ventura, encompassing properties on the west and east sides of State Highway 33. Crude oil and natural gas are produced, treated, and sold via pipeline with occasional tank-truck transport. Natural gas liquids are sold from an NGL storage and truck-loading facility.

Ventura Avenue Central includes the former Shell Oil Company and CalResources LLC operations on the Taylor lease and other small leases. Ventura Avenue East was acquired from Texaco on March 19, 1996. Ventura Avenue Central and East are operated as separate entities, integrated only to the extent that produced natural gas from Ventura Avenue Central is routed to Gas Plant No. 7 at Ventura Avenue East. Once treated at the plant, the gas is equivalent to utility-quality gas, a portion of which is returned to Ventura Avenue Central and East for use as fuel.

VENTURA AVENUE CENTRAL

Ventura Avenue Central consists of fifteen (15) contiguous production leases:

Taylor	Orton	Barnard Notten
Edison	Notten	Hartman Ranch
Gosnell	Willett	Decalta Hartman
Barnard	Hartman-Barnard	Mobil Barnard
Citrus	Hartman	
Foster	Gulf Barnard	

Oil production from the Taylor lease, Riverbottom Unit (RBU), and D&N Unit (D&N) is treated separately. Not all leases are currently active and some leases have been abandoned and the associated equipment has been removed.

Oil and Gas Production

Ventura Avenue Central produces approximately 30° API-gravity oil. Waterflooding is used to enhance oil production. Rod-pump and submersible-pump production methods are used. Produced oil, water, and gas are routed from the wells to automatic well test stations (AWTS) where well production is tested, and some gas is removed by separators. From the AWTS, the oil and water are directed to one of two oil dehydration facilities - either the Taylor Dehy

or the D&N Dehy. At the dehydration facilities, oil and water are separated as the fluid progresses through free-water knockout (FWKO) vessels and storage tanks. Oil is sold for refining via pipeline.

Gas from the AWTS separators, FWKO vessels, and storage tank vapor recovery compressors is collected and transported through gas pipelines for further processing. Gas compressors are used to transfer the produced gas to Gas Plant No. 7 at the Lloyd lease within Ventura Avenue East.

Water

Water separated from the oil is routed to produced water tanks and then to an induced gas flotation vessel for further separation. The additional oil separated from the produced water is returned to the production system tanks. The water exiting the induced gas flotation vessel is filtered and then piped to injection wells for waterflooding.

VENTURA AVENUE EAST

Ventura Avenue East consists of five contiguous oil-production leases:

Lloyd	V.L.& W.	McGonigle
Lloyd Corporation	Hartman	

In addition to the oil-production operations, there is also a gas plant on the Lloyd lease which removes natural-gas liquids from the gas produced within the field.

Oil and Gas Production

Ventura Avenue East produces approximately 30° API-gravity oil. Waterflooding is used to enhance oil production. Rod-pump and submersible-pump production methods are used. Produced oil, water, and gas are routed from the wells to AWTS for removal of gas. From the AWTS, the oil and water is directed to field storage tanks dedicated to either “C-Block” or “D-Block” production at the Lloyd Dehydration Facility. At this dehydration facility, oil and water are separated as the fluid progresses through FWKO vessels and oil tanks. Oil is sold for refining via pipeline.

Gas from the AWTS separators, FWKO vessels, and storage tank vapor recovery compressors is collected and transported through gas pipelines for further processing. Gas compressors are used to transfer the produced gas to Gas Plant No. 7 at the Lloyd lease within Ventura Avenue East.

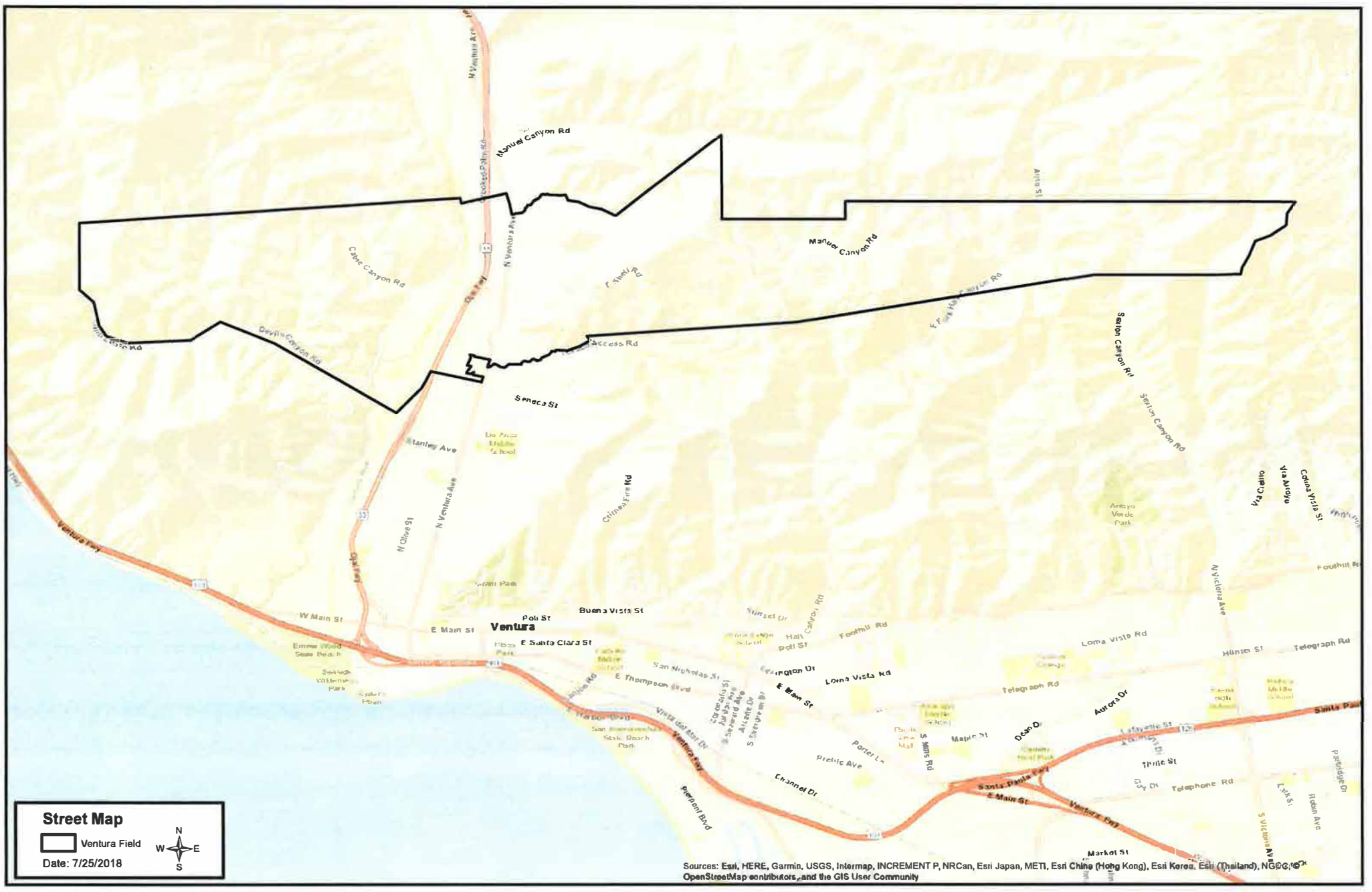
Water

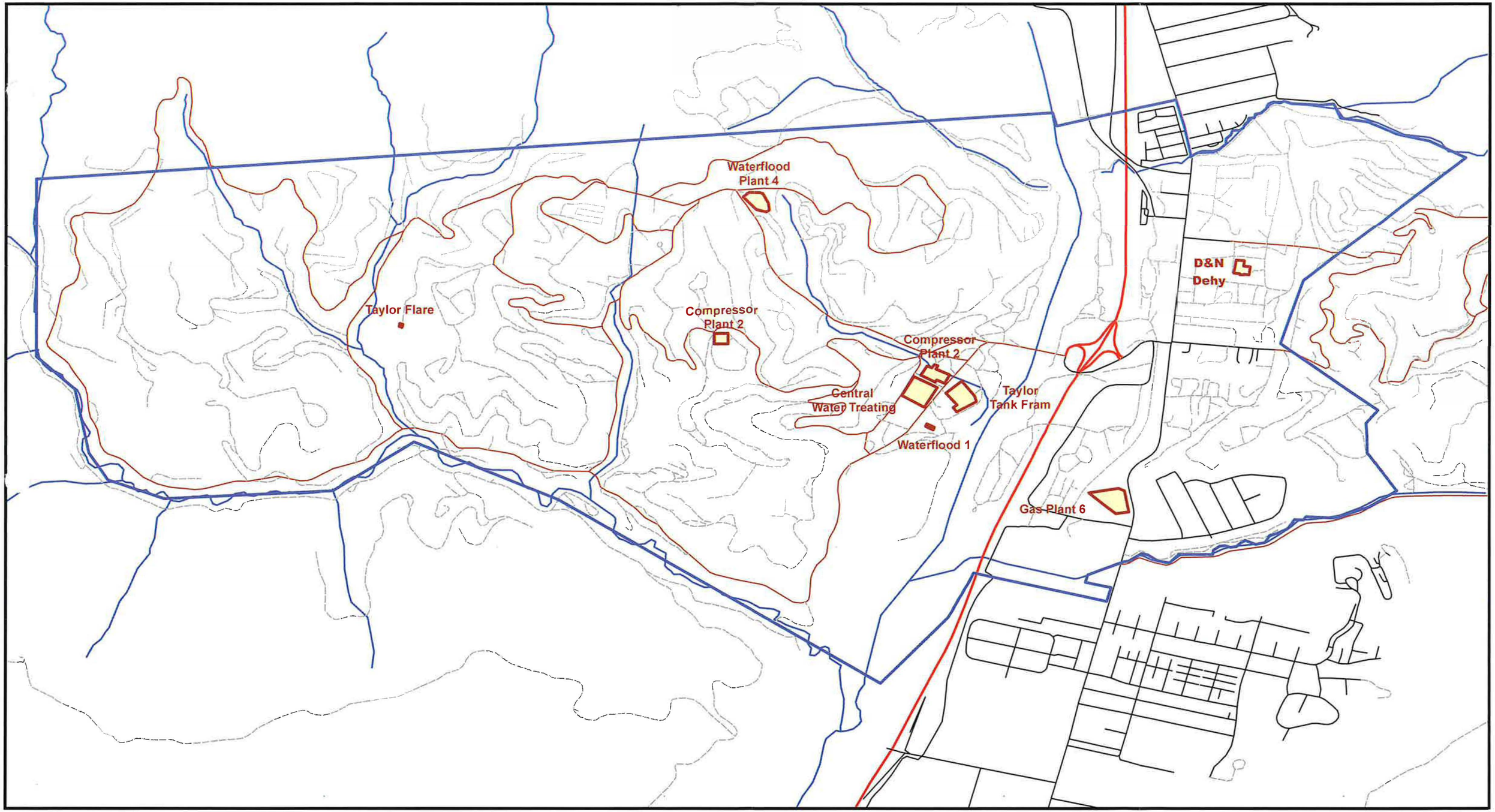
Water initially separated from the oil is routed to produced-water tanks and then to an induced gas flotation vessel. The additional oil separated from the produced water is returned to the production system tanks. The water exiting the induced gas flotation vessel is filtered and then piped to injection wells for waterflooding.

Gas Plant No. 7

This facility processes produced gas from Aera's operations. The raw, liquids-heavy gas is treated by various processes to remove the dissolved liquids and produce a sales-quality natural gas. The natural gas is currently sold via pipeline to the Southern California Gas Company.

The removed liquids are then piped to Gas Plant No. 6 where custody transfer occurs and tanker trucks are filled via loading rack.


Street Map
Ventura Field
Date: 7/25/2018
N
W
E
S
Manuel Canyon Rd
Cabe Canyon Rd
Devils Canyon Rd
Seneca St
Stanley Ave
N Ventura Ave
Olivas
Ventura Fwy
Ventura
E Main St
W Main St
E Santa Clara St
Poli St
Buena Vista St
E Thompson Blvd
Harbor Blvd
Seaton Canyon Rd
Loma Vista Rd
Telegraph Rd
Foothill Rd
Aurora Dr
Maple St
Dean Dr
Telephone Rd
Channel Dr
Pierpont Blvd
Prefumo Canyon Rd
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, ©
OpenStreetMap contributors, and the GIS User Community



Ventura Field - Central Facility Map

0.5 0.25 0 0.5 Miles

Major Roads
Freeway
Highway
Major Field Road
Minor Field Road
Street
Rivers
Facilities
Ventura Central

N
W E
S

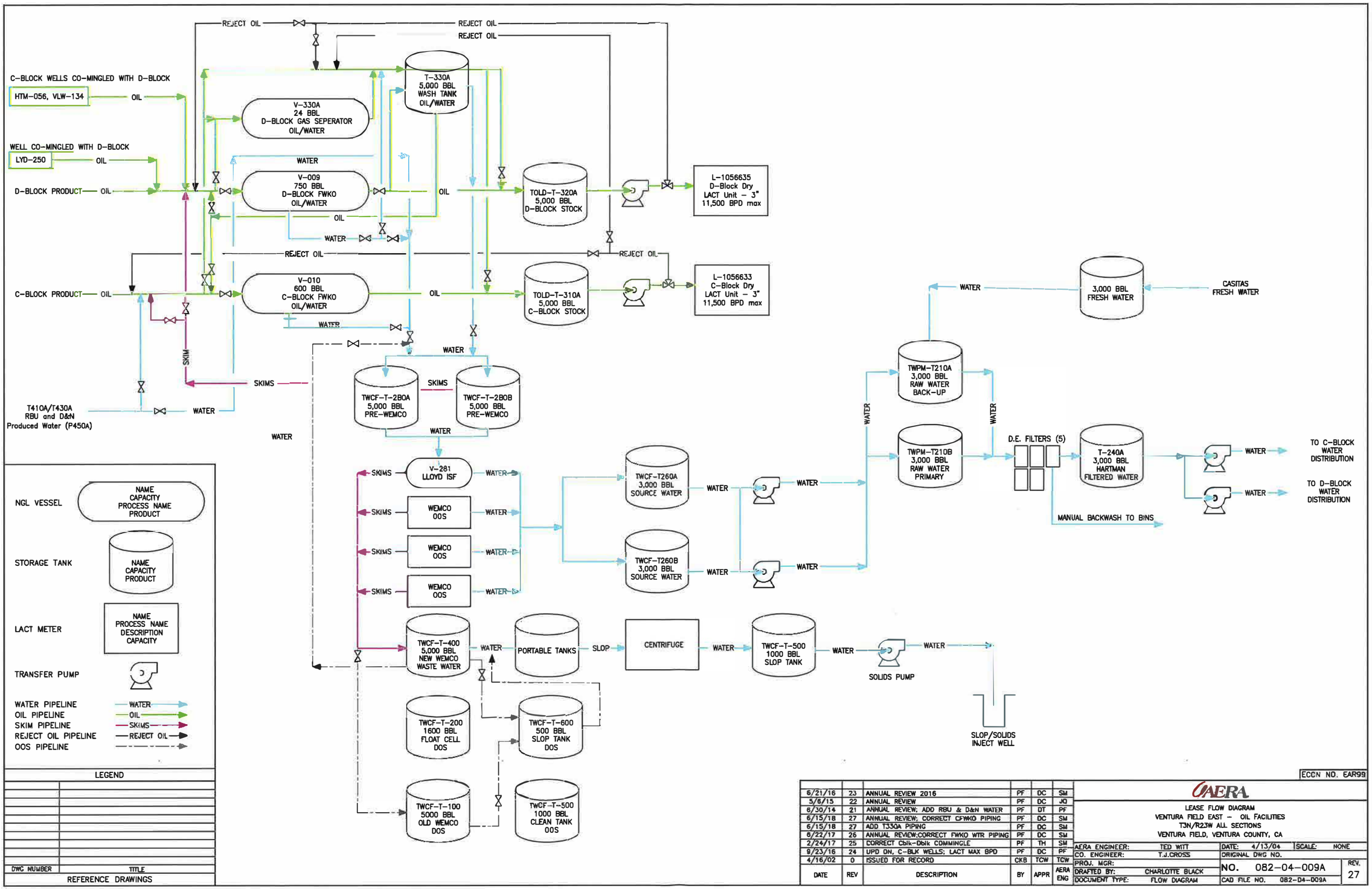
Hartman Water Flood
Central Compressor Plant
Injection Plant 2
Injection Plant 3
Gas Plant 2
Lloyd Tank Farm
Ventura Field Office
Lloyd Water Treating Plant
GP7 HP Flare
GP7 LP Flare
Gas Plant 7

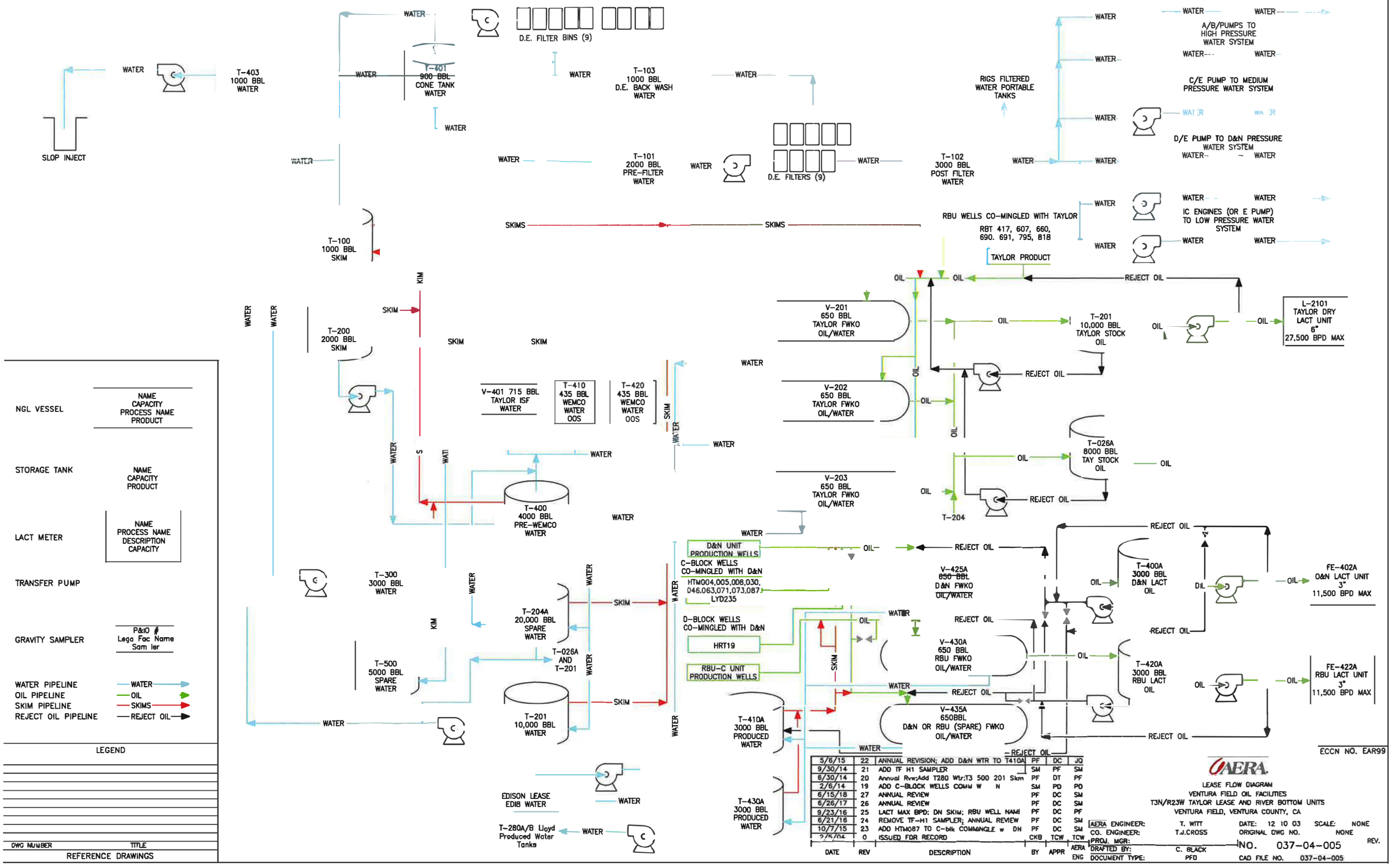
Ventura Field - East Facility Map

1 0.5 0 1 Miles

Major Roads
Freeway
Highway
Major Field Road
Minor Field Road
Street
Rivers
Facilities
Ventura_East

N W E S


REJECT OIL
REJECT OIL
REJECT OIL
C-BLOCK WELLS CO-MINGLED WITH D-BLOCK
HTM-056, VLW-134
OIL
T-330A
5,000 BBL
WASH TANK
OIL/WATER
V-330A
24 BBL
D-BLOCK GAS SEPERATOR
OIL/WATER
WELL CO-MINGLED WITH D-BLOCK
LYD-250
OIL
WATER
D-BLOCK PRODUCT
OIL
V-009
750 BBL
D-BLOCK FWKO
OIL/WATER
OIL
TOLD-T-320A
5,000 BBL
D-BLOCK STOCK
L-1056635
D-Block Dry
LACT Unit - 3"
11,500 BPD max
OIL
WATER
REJECT OIL
REJECT OIL
C-BLOCK PRODUCT
OIL
V-010
600 BBL
C-BLOCK FWKO
OIL/WATER
OIL
TOLD-T-310A
5,000 BBL
C-BLOCK STOCK
L-1056633
C-Block Dry
LACT Unit - 3"
11,500 BPD max
WATER
WATER
SKIM
SKIMS
SKIMS
T410A/T430A
RBU and D&N
Produced Water (P450A)
WATER
TWCF-T-280A
5,000 BBL
PRE-WEMCO
SKIMS
TWCF-T-280B
5,000 BBL
PRE-WEMCO
WATER
WATER
SKIMS
V-281
LLOYD ISF
WATER
SKIMS
WEMCO
OOS
WATER
SKIMS
WEMCO
OOS
WATER
SKIMS
WEMCO
OOS
WATER
TWCF-T260A
3,000 BBL
SOURCE WATER
WATER
WATER
TWCF-T260B
3,000 BBL
SOURCE WATER
WATER
WATER
TWCF-T-400
5,000 BBL
NEW WEMCO
WASTE WATER
WATER
PORTABLE TANKS
SLOP
CENTRIFUGE
WATER
TWCF-T-500
1000 BBL
SLOP TANK
WATER
WATER
SOLIDS PUMP
SLOP/SOLIDS
INJECT WELL
TWCF-T-200
1600 BBL
FLOAT CELL
DOS
TWCF-T-600
500 BBL
SLOP TANK
DOS
TWCF-T-100
5000 BBL
OLD WEMCO
DOS
TWCF-T-500
1000 BBL
CLEAN TANK
OOS
WATER
3,000 BBL
FRESH WATER
CASITAS
FRESH WATER
WATER
WATER
TWPM-T210A
3,000 BBL
RAW WATER
BACK-UP
TWPM-T210B
3,000 BBL
RAW WATER
PRIMARY
D.E. FILTERS (5)
T-240A
3,000 BBL
HARTMAN
FILTERED WATER
WATER
WATER
TO C-BLOCK
WATER
DISTRIBUTION
TO D-BLOCK
WATER
DISTRIBUTION
MANUAL BACKWASH TO BINS
NGL VESSEL
NAME
CAPACITY
PROCESS NAME
PRODUCT
STORAGE TANK
NAME
CAPACITY
PRODUCT
LACT METER
NAME
PROCESS NAME
DESCRIPTION
CAPACITY
TRANSFER PUMP
WATER PIPELINE
OIL PIPELINE
SKIM PIPELINE
REJECT OIL PIPELINE
OOS PIPELINE
LEGEND
DWG NUMBER
TITLE
REFERENCE DRAWINGS
ECCN NO. EAR99
AERA
LEASE FLOW DIAGRAM
VENTURA FIELD EAST - OIL FACILITIES
T3N/R23W ALL SECTIONS
VENTURA FIELD, VENTURA COUNTY, CA
AERA ENGINEER: TED WITT
DATE: 4/13/04
SCALE: NONE
CO. ENGINEER: T.J.CROSS
ORIGINAL DWG NO.
PROJ. MGR:
DRAFTED BY: CHARLOTTE BLACK
NO. 082-04-009A
REV. 27
DOCUMENT TYPE: FLOW DIAGRAM
CAD FILE NO. 082-04-009A
6/21/16 23 ANNUAL REVIEW 2016 PF DC SM
5/6/15 22 ANNUAL REVIEW PF DC JQ
6/30/14 21 ANNUAL REVIEW; ADD RBU & D&N WATER PF DT PF
6/15/18 27 ANNUAL REVIEW; CORRECT CFWKO PIPING PF DC SM
6/15/18 27 ADD T330A PIPING PF DC SM
6/22/17 26 ANNUAL REVIEW;CORRECT FWKO WTR PIPING PF DC SM
2/24/17 25 CORRECT Cblk-Dblk COMMINGLE PF TH SM
9/23/16 24 UPD DN, C-BLK WELLS; LACT MAX BPD PF DC PF
4/16/02 0 ISSUED FOR RECORD CKB TCW TCW
DATE REV DESCRIPTION BY APPR AERA ENG
PAGE 1 OF 1
PATH: bkcal102\groups\Lease Flow Diagram\VENTURA\08204009A (rel 2000)



NGL VESSEL

NAME
CAPACITY
PROCESS NAME
PRODUCT

STORAGE TANK

NAME
CAPACITY
PRODUCT

LACT METER

NAME
PROCESS NAME
DESCRIPTION
CAPACITY

TRANSFER PUMP

GRAVITY SAMPLER

P&ID #
Lega Fac Name
Sam ler

WATER PIPELINE — WATER
OIL PIPELINE — OIL
SKIM PIPELINE — SKIMS
REJECT OIL PIPELINE — REJECT OIL

LEGEND

DWG NUMBER | TITLE

REFERENCE DRAWINGS

DATE	REV	DESCRIPTION	BY	APPR
5/6/15	22	ANNUAL REVISION; ADD D&N WTR TO T410A	PF	DC	JO
9/30/14	21	ADD TF H1 SAMPLER	SM	PF	SM
6/30/14	20	Annual Rvw;Add T280 Wtr;T3 500 201 Skim	PF	DT	PF
2/6/14	19	ADD C-BLOCK WELLS COMM W N	SM	PD	PD
6/15/18	27	ANNUAL REVIEW	PF	DC	SM
6/26/17	26	ANNUAL REVIEW	PF	DC	SM
9/23/16	25	LACT MAX BPD; DN SKIM; RBU WELL NAM	PF	DC	PF
6/21/16	24	REMOVE TF-H1 SAMPLER; ANNUAL REVIEW	PF	DC	SM
10/7/15	23	ADD HTM087 TO C-blk COMMINGLE w DN	PF	DC	SM
2/6/14	0	ISSUED FOR RECORD	CKB	TCW	TCW

AERA

LEASE FLOW DIAGRAM
VENTURA FIELD OIL FACILITIES
T3N/R23W TAYLOR LEASE AND RIVER BOTTOM UNITS
VENTURA FIELD, VENTURA COUNTY, CA

AERA ENGINEER:	T. WITT	DATE: 12 10 03	SCALE: NONE
CO. ENGINEER:	T.J.CROSS	ORIGINAL DWG NO.	NONE
PROJ. MGR:		NO.	037-04-005
DRAFTED BY:	C. BLACK		REV.
DOCUMENT TYPE:	PFD	CAD FILE NO.	037-04-005

PATH: \\bkcal02\groups\Lease Flow Diagrams\VENTURA\037-04-005

037-04-005_VTA_CENTRAL_OIL_REV_27.dwg 06/15/2018 10:32 pf208254 [06/15/2018 10:29]

1.c. PERIODIC MONITORING SUMMARY

This periodic monitoring summary is intended to aid the permittee in quickly identifying key monitoring, recordkeeping, and reporting requirements. It is not intended to be used as a "stand alone" monitoring guidance document that completely satisfies the requirements specifically applicable to this facility. The following tables are included in the periodic monitoring summary:

- Table 1.c.1 - Specific Applicable Requirements
- Table 1.c.2 - Permit-Specific Conditions
- Table 1.c.3 - General Applicable Requirements
- Table 1.c.4 - General Requirements for Short-Term Activities

1.c.1. Specific Applicable Requirements

The Specific Applicable Requirements Table includes a summary of the monitoring requirements, recordkeeping requirements, reporting requirements, and test methods associated with the attachments contained in Section No. 7 of this permit.

Attachment No./ Condition No.	Applicable Rule or Requirement	Monitoring	Recordkeeping	Semi-annual Reports	Test Methods	Comments
71.1N1	Rules 71.1.B.1.a, 74.10	•Quarterly inspection of the following components for proper operation: gas compressor, hatches, relief valves, pressure regulators, flare, as applicable •Verbal notice of maintenance activities •Rule 74.10 inspections •Annual compliance certification including verification that tanks are equipped with a vapor recovery system	•Records of quarterly inspections and tank maintenance activities •Rule 74.10 records	None	None	
71.1N6	Rules 71.1.B.3, 71.1.D.1.c, 74.10	•Annual compliance certification including verification of the integrity of the roof and pressure-vacuum relief valve	•Records of number of days the tank has stored or held crude oil during the maintenance operation, location of the tank relative to a tank battery, and whether tank was connected to vapor recovery	None	None	

1.c.1. Specific Applicable Requirements (Continued)

Attachment No./ Condition No.	Applicable Rule or Requirement	Monitoring	Recordkeeping	Semi-annual Reports	Test Methods	Comments
71.3N3	Rules 71, 71.3.B.2.a.2, 71.3.B.2.b.1	•Annual compliance certification including monitoring one complete loading operation for leaks and for proper operation of the loading equipment and delivery vessel vapor recovery and overfill protection systems •Routine surveillance during loading operations to assure proper operation	•Records of annual inspections of the loading operations	None	•Leak Detection - Appropriate analyzer calibrated with methane or alternative screening procedure in EPA Reference 21	
71.4N1	Rule 71.4.B.2 and 74.10	•Verbal notice of maintenance operations •Rule 74.10 inspections •Annual compliance certification including verifying the integrity of the cover	•Records of maintenance •Rule 74.10 records	None	None	
71.4N2	Rule 71.4.C.1.b	•Annual compliance certification including verifying that the pit is used only for emergency service	•Records of emergency pit use and clean-up procedures	None	None	
71.4N3	Rule 71.4.C.1.c	•Annual compliance certification including lab results of ROC content •Routine surveillance ensuring no change in liquid contents or method of operation	•Records of lab results of ROC content	None	ROC Content - EPA Method 8015 and EPA Method 5030	
71.5N1	Rules 71.5.B.1.a.1, 71.5.B.2, 71.5.B.3, 71, 71.1, and 74.10	•Rule 74.10 inspections •Annual compliance certification including visual inspection to ensure system is closed and leak free	•Records of visual inspections •Records of current glycol dehydrator information •Rule 74.10 records	None	Gas Leak - EPA Method 21, Appendix A	

1.c.1. Specific Applicable Requirements (Continued)

Attachment No./ Condition No.	Applicable Rule or Requirement	Monitoring	Recordkeeping	Semi-annual Reports	Test Methods	Comments
74.9N3-00041(CAM)	Rules 74.9.B.1, B.2 and 40 CFR Part 64 (CAM)	•Quarterly screening analysis •Biennial source test (ROC, NOx, CO) •Annual compliance certification •Daily measure NOx concentration with portable analyzer (CAM)	•Records of inspections •Records of maintenance •Records of daily portable NOx analyzer readings (ppmvd at 15% oxygen), time of measurement, excursions noted, corrective actions noted (CAM)	•Actual annual usage •Summary of maintenance and testing •Biennial Source Test Report •Number, duration, and cause of CAM excursions and corrective action taken	•ROC-EPA Method 25 or EPA Method 18 •NO_x-ARB Method 100 •CO-ARB Method 100	
74.9N4	Rules 74.9.B.1 74.9.B.2, and 74.9.B.5	•Quarterly screening analysis •Biennial source test (ROC, NOx, CO) •Annual compliance certification	•Records of inspections •Records of maintenance	•Actual annual usage •Summary of maintenance and testing •Biennial Source Test Report	•ROC-EPA Method 25 or EPA Method 18 •NO_x-ARB Method 100 •CO-ARB Method 100 •NH_3 – BAAQMD Method ST-1B	
74.9N7	Rule 74.9.D.3	•Annual compliance certification •Hours of operation	•Records of operating hours •Date, time, duration, and reason for emergency operation •Records of engine data	None	None	
74.15N1	Rule 74.15.B.1	•Annual compliance certification •Biennial Source Test (NO_x, CO)	•Records of source tests •Daily records of alternate fuel consumption	None	•NO_x-ARB Method 100 •CO-ARB Method 100	
ATCM Engine N2	ATCM for Stationary Compression Ignition Engines	•Hours of operation records for maintenance and testing •Fuel type records	•Hours of operation records for maintenance and testing •Fuel type records	None	None	Not Federally Enforceable
40CFR63ZZZZN3	RICE MACT for emergency diesel engines – oil change and inspections	•Maintenance records •Annual compliance certification	•Maintenance records •Hours of operation records	None	None	
40CFR63ZZZZN7	RICE MACT for non-emergency spark ignited REMOTE engines – oil change and inspections	•Maintenance records •Annual compliance certification	•Maintenance records	None	None	

1.c.2. Permit-Specific Conditions

The Permit-Specific Conditions Table includes a summary of the monitoring requirements, recordkeeping requirements, reporting requirements, and test methods associated with the attachments contained in Section No. 8 of this permit.

Attachment No./ Condition No.	Applicable Rule or Requirement	Monitoring	Recordkeeping	Semi-annual Reports	Test Methods	Comments
PO00041PC1 - Condition No. 1	Rules 26 and 29 General Recordkeeping	•Annual compliance certification •Monthly records of throughput and consumption	•Monthly records	None	None	
PO00041PC1 - Condition No. 2	Rule 26 Natural Gas Only	•Annual compliance certification	None	None	None	
PO00041PC1 - Condition No. 3	Rule 29 Maximum Number of Oil Wells	•Annual compliance certification	None	None	None	
PO00041PC1 - Condition No. 4	Rule 26 Oil Well BACT Requirements	•Annual compliance certification	None	None	None	
PO00041PC1 - Condition No.5	Rule 29 Exempt Solvents	•Maintain a list of solvents in use and permit exemption status	None	None	None	
PO00041PC2 - Condition Nos. 1, 2, and 5	Rule 26 Flare Fuel Consumption	•Fuel consumption •Identify emergency vs. non-emergency usage •Annual compliance certification	•Monthly records of fuel consumption	None	None	
PO00041PC2 - Condition Nos. 3 and 4	Rules 71.1 and 71.3 Flare Ignition System Operation	•Monthly tests of flare's ignition system •Annual compliance certification	•Records of ignition system •Maintenance records	None	None	
PO00041PC3 - Condition Nos. 1 and 2	Rule 26 Annual fuel consumption	•Fuel consumption •Annual compliance certification	•Monthly records of fuel consumption	None	None	
PO00041PC3 – Condition No. 3	Rules 26 and 74.15 BYIS Oil Heater Emission Limits	•Biennial source test (NOx & CO) •Annual compliance certification	•Records of source tests	None	•NO_x-ARB Method 100 •CO - ARB Method 100	
PO00041PC3 – Condition No. 4	Rule 26 BYIS Oil Heater natural gas only	•Annual compliance certification	•Fuel use records	None	None	

1.c.2. Permit-Specific Conditions (Continued)

Attachment No./ Condition No.	Applicable Rule or Requirement	Monitoring	Recordkeeping	Semi-annual Reports	Test Methods	Comments
PO00041PC3 - Condition Nos. 5, 6, and 7	Rule 74.15.B.1 Wheco Oil Heater Oxygen Trim Controller Settings	•Annual compliance certification •Daily monitoring of stack gas oxygen concentration •Daily monitoring of PLC set point •Monthly review of stack gas oxygen concentrations to determine if operating properly •Biennial source test (NOx & CO)	•Daily records of stack gas oxygen concentration •Daily records of PLC set point •Records of any re-tuning of the oxygen trim system •Records of source tests	None	None	
PO00041PC4 - Condition No. 1	Rule 74.9 Compressor Engine Air to Fuel Ratio Controllers	•Annual compliance certification	None	None	None	
PO00041PC4 - Condition No. 2	Rule 26 Compressor Engine Fuel Consumption	•Annual compliance certification •Amount of fuel consumed	•Fuel consumption records	None	None	
PO00041PC5	Rule 26 Portable Mixing Bin Operations	•Annual compliance certification •Hourly usage	•Monthly records of hourly usage per day	None	None	
PO00041PC9	Rule 26 Grid Power Requirements	•Annual compliance certification to ensure compressors are powered by grid electricity	None	None	None	
PO00041PC11	Rule 26 LPG Loading Facility	•Annual compliance certification to ensure proper maintenance and operation of the vapor recovery system and the nitrogen purge system	None	None	None	
PO00041PC12	Rule 26 Filter Agent Storage Silos	•Annual compliance certification to ensure proper operation and maintenance of the dust filters	•Records of any maintenance performed on the dust filters	None	None	
PO00041PC13	Rule 29 Out of Service Emissions Units	•Annual compliance certification	None	None	None	
PO00041PC14	Rules 26, 71.1, 71.4	•Monthly throughput records •Annual compliance certification to ensure compliance with Permit Conditions 2 - 6	•Monthly records	None	None	
PO00041PC15	Rule 26 Emergency / Standby / Blowdown Tanks	•Used as secondary containment emergency containment only •Remove fluids after each event •Monthly inspection •Maintain inspection log	•Maintain inspection log	None	None	

1.c.3. General Applicable Requirements

The General Applicable Requirements Table includes a summary of the monitoring requirements, recordkeeping requirements, reporting requirements, and test methods associated with the attachments contained in Section No. 9 of this permit.

Attachment No./ Condition No.	Applicable Rule or Requirement	Monitoring	Recordkeeping	Semi-annual Reports	Test Methods	Comments
50	Rule 50	•Routine surveillance •Visual inspections •Annual compliance certification, including a formal survey •Opacity readings upon request •Notification required for uncorrectable visible emissions	•All occurrences of visible emissions for periods>3min in any one hour •Annual formal survey of all emissions units	None	•Opacity - EPA Method 9	
54.B.1	Rule 54.B.1	•Annual compliance certification •Follow monitoring requirements under Rule 64 •Upon request, source test for sulfur compounds at point of discharge	None	None	•Sulfur Compounds - EPA Test Method 6, 6A, 6C, 8, 15, 16A,16B, or SCAQMD Method 307-94, as appropriate	•Compliance with Rule 64 ensures compliance with this rule based on District analysis
54.B.2	Rule 54.B.2	•Annual compliance certification •Determine ground or sea level concentrations of SO_2, upon request	•Representative fuel analysis or exhaust analysis and compliance demonstration	None	•SO_2 - BAAQMD Manual of Procedures, Vol.VI, Section 1, Ground Level Monitoring for H_2S and SO_2	
55	Rule 55	•Annual compliance certification	•As applicable	None	•EPA Method 9	
57.1	Rule 57.1	•Annual compliance certification	None	None	None	•Not required based on District analysis
64.B.1	Rule 64.B.1	•Annual compliance certification •None for PUC-quality gas •Annual test for non PUC-quality gas (submit with annual compliance certification)	•Annual fuel gas analysis for non PUC-quality gas	None	•SCAQMD Method 307-94	
64.B.2	Rule 64.B.2	•Annual compliance certification •Fuel supplier's certification, or fuel test per each delivery (submit with annual compliance certification)	•Fuel supplier's certification, or fuel test per each delivery	None	•ASTM Method D4294-83 or D2622-87	
71.1.C	Rules 71.1.C and 74.10	•Annual compliance certification •Rule 74.10 inspections •Visual inspection to ensure collection system is closed •Quarterly inspection of flare to ensure proper operation	•Records of inspections of flare •Rule 74.10 records	None	None	Compliance with Rule 74.10 ensures compliance with the gas collection system's maintenance requirements

1.c.3. General Applicable Requirements (Continued)

Attachment No./ Condition No.	Applicable Rule or Requirement	Monitoring	Recordkeeping	Semi-annual Reports	Test Methods	Comments
71.4.B.1	Rule 71.4.B.1	•Annual compliance certification to ensure there are no first stage sumps	None	None	None	
71.4.B.3	Rule 71.4.B.3	•Annual compliance certification •Routine surveillance and visual inspections of well cellars	•Records of maintenance or workover activity during periods of oil storage	None	None	
74.6	Rule 74.6	•Annual compliance certification •Maintain current solvent information •Routine surveillance of solvent cleaning activities •Upon request, solvent testing	•Records of current solvent information	None	•ROC content-EPA Test Method 24 •Identity of solvent components-ASTM E168-67, ASTM E169-87, or ASTM E260-85 •True vapor pressure or composite partial pressure -ASTM D2879-86 •Initial boiling point-ASTM 1078-78 or published source •Spray gun active/passive solvent losses-SCAQMD Method (10-3-89)	
74.10	Rule 74.10	•Annual compliance certification •Identify leaking components •Inspections every shift or 8 hours at natural gas processing plants •Daily and/or weekly inspections for specified equipment •Quarterly inspections for specified components •Pressure relief valve inspections •Annual update to Operator Management Plan •Notification of major leaks in critical components •Notification of repeat leaks	•Records of leak inspections in inspection log	None	•Gas Leaks - EPA Method 21 •ROC Concentration of Gas Streams - ASTM E168-88, ASTM E169-87, or ASTM E260-85 •Weight percentage of evaporated compounds of liquids – ASTM Method D 86-82 •API Gravity - ASTM Method D287	
74.11.1	Rule 74.11.1	•Annual compliance certification •Maintain identification records of large water heaters and small boilers	•Records of current information of large water heaters and small boilers	None	None	•Rule only applies to the installation of large water heaters and small boilers
74.22	Rule 74.22	•Annual compliance certification •Maintain furnace identification records	•Records of current furnace information	None	None	•Rule only applies to future installation of natural gas-fired, fan-type furnaces

1.c.4. General Requirements for Short-Term Activities

The General Requirements for Short-Term Activities Table includes a summary of the monitoring requirements, recordkeeping requirements, reporting requirements, and test methods associated with the attachments contained in Section No. 10 of this permit.

Attachment No./ Condition No.	Applicable Rule or Requirement	Monitoring	Recordkeeping	Semi-annual Reports	Test Methods	Comments
74.1	Rule 74.1	•Annual compliance certification •Routine surveillance and visual inspections of abrasive blasting operation •Abrasive blasting records	•Abrasive blasting records	None	•Visible emission evaluation-Section 92400 of CCR	
74.2	Rule 74.2	•Annual compliance certification •Routine surveillance •Maintain VOC records of coatings used	•Maintain VOC records of coatings used	None	•VOC content-EPA Method 24, CARB Method 432 • Acid content-ASTM Method D 1613-85, •Metal content-SCAQMD Method 311-91	
74.4.D	Rule 74.4.D	•Annual compliance certification •Test ROC content of oil sample being proposed for usage	•Records of oil analyses	None	•ASTM D402	
74.16	Rule 74.16	•Annual compliance certification to ensure grid power being used, or •Maintain cost analysis documentation as verification to grid power exemption, if applicable •Annual source tests (NO_x) or engine manufacturer certification	•Records of source tests or engine manufacturer certification •Records of cost analysis documentation	None	•NO_x-ARB Method 100	
74.26	Rule 74.26	•Annual compliance certification •Record vapor concentration and gas flow rate of control device •Record vapor concentration of tank •Routine surveillance to ensure proper operation •Vapor destruction or removal efficiency upon request •Insure subcontractor has valid permit for portable equipment, if applicable •Notification required for degassing	•Vapor concentration and gas flow rate of control device •Vapor concentration of tank being degassed	None	•Liquid mRVP-ASTM Method D 323-82 •Vapor concentration-EPA Method 21 •Vapor flow-EPA Method 2A •Vapor destruction or removal efficiency-EPA Method 25A	

1.c.4. General Requirements for Short-Term Activities (Continued)

Attachment No./ Condition No.	Applicable Rule or Requirement	Monitoring	Recordkeeping	Semi-annual Reports	Test Methods	Comments
74.28	Rule 74.28	•Annual compliance certification •Visual inspection to ensure proper vapor control during roofing kettle operation	None	None		
74.29	Rule 74.29	•Annual compliance certification •Weekly measurements of in-situ soil bioventing or bioremediation •Weekly measurements of soil aeration •Date and quantity of soil aerated •Routine surveillance •Notification required for excavation	•Weekly measurements of soil decontamination operation vapor concentration •Date and quantity of soil aerated	None	•Vapor concentration- EPA Method 21 •Wt. % of contaminant in soil-EPA Method 8015B	
40CFR.61.M	40 CFR Part 61, Subpart M	•Annual compliance certification •See 40 CFR Part 61.145 for inspection procedures	•See 40 CFR Part 61.145 for recordkeeping procedures	•See 40 CFR Part 61.145 for notification procedures	•See 40 CFR Part 61.145 for test methods	

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TABLE NO. 2

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT
Permit to Operate No. 00041
Permitted Equipment and Applicable Requirements

Equipment	71.1	71.3	71.4	71.5	74.9	74.15	ATCM Engine	RICE MACT	Additional Requirements
CENTRAL FIELD									
Plants Team									
Taylor Tank Farm									
1 - 8,000 BBL LACT Tank (VORD-T026A) VR	1								
1 - 10,500 BBL LACT Tank (VOTD-T201) VR	1								
1 - 20,000 BBL PWT / LACT Tank (T-204A), 32'H x 67'D VR	1								
Central Water Treating Plant									
1- 5000 BBL PWT Blended Water Tank (VWCP-T500) VR	1								
1- 4000 BBL PWT PRE-Wemco Tank (VWCP-T400) VR	1								
1- 3000 BBL PWT Brine Tank (VWCP-T300) VR	1								
1- 2000 BBL PWT Wemco Skim Tank (VWCP-T200) VR	1								
1- 1000 BBL PWT Overflow Tank (VWCP-T100) VR	1								
1 - 894 BBL PWT Cone Bottom 5-Cell Tank (VWCP-T401) VR	1								
1- 1000 BBL Solids Tank, COST (VWSI-T403) VR	1								PC1
1 - 435 BBL PWT Wemco #1 (VWCP-W410) VR Out of Service									PC13
1 - 435 BBL PWT Wemco #2 (VWCP-W420) VR Out of Service									PC13
Waterflood Plant No. 1									
1 - 625 BHP Rich Burn White NG Engine, Model 8G825 (WFI-1) NSCR - Out of Service									PC13
1 - 625 BHP Rich Burn White NG Engine, Model 8G825 (WFI-2) NSCR - Out of Service									PC13
1 - 300 sqft Pit (V127) Exempt < 5 mg/l - Out of Service									PC13
Waterflood Plant No. 4									
1 - 2,000 BBL Raw Water Tank (VWP4-T101) VR	1								
1 - 3,000 BBL Filtered Water Tank (VWP4-T102) VR	1								
1 - 7,000 CF (48' x 21.5'O.D.) Filter Agent Storage Silo w/DCE Siloair Dust Filter Model VS15KS3 (VWP4-S001)									PC1, PC12
River Bottom Production Area									
1 - 3,000 BBL LACT Tank (T-400A) VR	1								
1 - 3,000 BBL LACT Tank (T-420A) VR	1								
1 - 3,000 BBL PWT / LACT Tank (T-410A) VR	1								
1 - 3,000 BBL PWT / LACT Tank (T-430A) VR	1								
Gas Operations Team									
Compressor Plant No. 2									
1 - 292 MMBTU/Hr Kaldair Low Pressure Flare									PC1, PC2
1 - 748 BHP Rich Burn Waukesha NG EngineModel L579OGU (CP2-1) NSCR					3 (CAM)			7	PC1, PC4
1 - 748 BHP Rich Burn Waukesha NG Engine Model L579OGU (CP2-2) NSCR					3 (CAM)			7	PC1, PC4
Crude Lifting Team									
Trap Farm 13									
1 - 238 BBL Emergency / Standby / Blowdown Tank									PC15
EAST FIELD									
Plants Team									
Lloyd Tank Farm									
1 - 5000 BBL FWKO/Wash Tank (TOLD-T330A) VR	1								
1 - 5000 BBL C-Block LACT Tank (TOLD-T310A) VR	1								
1 - 5000 BBL D-Block LACT Tank (TOLD-T320A) VR	1								
1 - 5000 BBL PWT Pre-Wemco Tank / LACT Tank (TWCF-T280A) VR	1								
1 - 5000 BBL PWT Spare Pre-Wemco Tank / LACT Tank (TWCF-T280B) VR	1								
1 - Crude Oil Loading Facility BL VR Out of Service									PC13
Lloyd Water Treating Plant									
1 - 173 BBL PWT Wemco #1 (TWCF-W001) VR Out of Service									PC13
1 - 173 BBL PWT Wemco #2 (TWCF-W002) VR Out of Service									PC13
1 - 173 BBL PWT Wemco #3 (TWCF-W003) VR Out of Service									PC13
1 - 3000 BBL PWT Spare Source Water Tank (TWCF-T260B) VR	1								
1 - 3000 BBL PWT Spare Source Water Tank (TWCF-T260A) VR	1								
1 - 1000 BBL PWT Clean Water Tank (TWCF-T500) VR Out of Service									PC13
1 - 5000 BBL PWT Old Wemco Tank (TWCF-T100) VR Out of Service									PC13
1 - 5000 BBL PWT New Wemco Tank (TWCF-T400) VR	1								
1 - 500 BBL PWT SlopTank (TWCF-T600) VR Out of Service									PC13
1 - 1600 BBL PWT Flotation Cell Tank (TWCF-T200) VR Out of Service									PC13
1 - 70,000 BBL Emergency Cement Bowl (CMTD-S70K), Out of Service									PC13
Lloyd Water Treating Plant Solids Processing System									
1 - 42.75 sqft (9.5' x 4.5') Covered Trough (Sump)			1						PC14
2 - 500 BBL Waste Fluids/Solids Storage Tanks, VR	1								PC14

TABLE NO. 2

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT
Permit to Operate No. 00041
Permitted Equipment and Applicable Requirements

Equipment	71.1	71.3	71.4	71.5	74.9	74.15	ATCM Engine	RICE MACT	Additional Requirements
1 - Brandt Centrifuge, Model HS-3400 FS, 14" x 49.5" bowl size									PC14
1 - 1000 BBL Solids Tank, COST (TWSI-T001) VR	1								PC1, PC14
Hartman Waterflood									
1 - 3000 BBL PWT Hartman A Tank (TWPM-T210A) VR	1								
1 - 3000 BBL PWT Hartman B Tank (TWPM-T210B) VR	1								
1 - 3000 BBL Hartman Filtered Water Tank (T-240A) VR	1								
1 - 830 BBL Filter Agent Silo with Baghouse Control System (TWPM-T010)									PC1
Gas Operations Team									
Gas Plant No. 2									
1 - 616 BHP Lean Burn NG Waukesha Engine Model F352 IGL (C-201)					4			7	PC1
1 - 616 BHP Lean Burn NG Waukesha Engine Model F352IGL (C-202)					4			7	PC1
Gas Plant No. 6									
1 - Tank Truck LPG Loading Facility w/ Closed Vapor Recovery System									PC1, PC11
Gas Plant No. 7									PC9
1 - 8.0 MMBTU/Hr NG BYIS Manufacturing Oil Heater, Unit No. 601A, equipped with a Bloom Engineering/Gideon Ultra Low NOx burner						1			PC1, PC3
1 - 14.25 MMBTU/Hr NG Wheco Heater Serial No.WJ-81-009, Unit No. 602, equipped with a low NOx burner, Out of Service									PC13
1 - 1050 MMBTU/Hr John Zink Hydra 8" Flare									PC1, PC2
1 - 205 MMBTU/Hr 6" Flare (includes coaxial 2 MMBTU/Hr 1.5" unit)									PC1, PC2
1 - Glycol Dehydrator System (12.3 MMSCFD/Ethylene Glycol) consisting of:									
1 - Glycol Dehydrator Vent VR				1					
1 - 1.50 MMBTU/HR Glycol Reboiler (hot oil heated)									
1 - 14 BBL Glycol Condensate Tank No. V-600 (pressure vessel)									
1 - 630 BHP Detroit Diesel Emergency Standby Engine, Model 71237305, Serial No. L16349, EPA Family Name: DDL2VA081299, I.D. No. VNFGPLT7GNGP7ELGEN1					7		2	3	
Crude Lifting Team									
Central Compressor Plant									
1 - 1108 BHP Lean Burn NG Waukesha Engine Model L7042GL (C-101) (Out of Service)									PC13
1 - 1108 BHP Lean Burn NG Waukesha Engine Model L7042GL (C-102) (Out of Service)									PC13
1 - 1108 BHP Lean Burn NG Waukesha Engine Model L7042GL (C-103) (Out of Service)									PC13
1 - Glycol Dehydrator System (16.1 MMSCFD/Triethylene Glycol) consisting of: (Out of Service)									PC13
1 - Glycol Dehydrator Vent VR									
1 - 0.865 MMBTU/HR NG Glycol Reboiler UNC									
1 - 11 BBL Glycol Condensation Tank No. V-403 (pressure vessel)									
1 - 630 BHP Detroit Diesel Emergency Standby Engine, Model 71237305, Serial No. L16330, EPA Family Name: DDL2VA081299, I.D. No. VCSECSCPGNCSGEN101 Out of Service									PC13
AWT2									
1- 500 BBL Emergency / Standby / Blowdown Tank									PC15
AWT3									
2 - 500 BBL Emergency / Standby / Blowdown Tanks									PC15
Miscellaneous									
For Use Throughout Leases									
856 - Oil Wells									PC1
69 - 500 BBL Portable Tanks	6								
1 - Portable Open Top Mixing Bin, 242.25 sqft									PC5
Exempt Equipment									
Remote Reservoir Cold Cleaners (Exempt - Rule 23.F.10.c)									
Solvent Wipe Cleaning (Exempt - Rule 23.F.10.a or 23.F.10.b)									PC1

TITLE V EQUIPMENT LIST DESCRIPTION KEY

For Title V permits, the Permitted Equipment and Applicable Requirements Table contains a number of terms, abbreviations, and acronyms that have been standardized for oilfield facilities. The following list describes many of the terms on an oilfield equipment list:

BHP The output of an internal combustion engine as measured in brake horsepower.

BL A crude oil loading facility that is equipped with bottom loading capabilities.

Condensate Tank A tank that is used for the purpose of storing water and hydrocarbon liquids recovered from natural gas scrubbers. This tank is assumed to operate with a variable liquid level and has an associated throughput limit.

COST A crude oil storage tank that generally operates with a variable liquid level and has an associated throughput limit. An oil shipping tank that has a truck loading rack is a COST by definition. These tanks may also be known as shipping tanks.

Cover Indicates that a petroleum sump, pit, or pond is equipped with a properly installed and maintained cover which complies with Rule 71.4.

EXEMPT A tank, pit, or sump that processes produced water with an ROC content of less than 5 milligrams per liter and is exempt from Rule 71.1 or Rule 71.4.

Gauge or Test Tank A tank that is used for the purpose of production testing a well or group of wells. This tank is assumed to operate with a variable liquid level and has an associated throughput limit.

LACT Tank A Lease Automated Custody Transfer tank that operates at a constant or near constant liquid level and does not have an associated throughput limit. This tank is generally equipped with a LACT pump for pipeline oil shipping. A shipping tank with a truck loading rack is not by definition a LACT tank, but is a COST.

Loading Facility A crude oil loading rack or loading valve used for the transfer of crude oil from a storage tank or group of tanks to a delivery vessel.

Lo-NOx Device has equipment to control the emissions of NOx and CO to meet the requirements of Rules 74.15 or 74.15.1, or best available control technology requirements.

MMBTU/Hr The heat input of an external combustion device as measured in millions of British Thermal Units per hour.

NG Indicates that the equipment is permitted to be fired on natural gas only.

NG/FO Indicates that equipment is permitted to be fired on natural gas with fuel oil or diesel as a backup fuel.

NSCR Engine that is equipped with non-selective catalytic reduction to meet its Rule 74.9 compliance requirements.

OOS Out of Service

Pit Device used to receive emergency or intermittent flows.

PSC Engine that is equipped with a pre-stratified charge to meet its Rule 74.9 compliance requirements.

PWT A produced water tank that generally operates with a constant liquid level and does not have an associated throughput limit. These tanks may also be known as free water knock out (FWKO) tanks.

Rich Burn or Lean Burn A designation associated with a gas-fired internal combustion engine that determines its Rule 74.9 compliance requirements.

SCR Engine or turbine that is equipped with selective catalytic reduction and ammonia injection to meet its Rule 74.9 or Rule 74.23 compliance requirements.

SF A crude oil loading facility that is equipped with submerged fill loading capabilities.

Sump Device used for separation, generally in constant use.

UNC Indicates that the equipment is uncontrolled. For example, a tank that is not equipped with a vapor recovery system, or an engine or heater that is not equipped with NOx controls are labeled UNC.

VR A vapor recovery system that is installed on a tank, loading rack or loading facility, glycol dehydrator, or other piece of process equipment.

Wash Tank A tank that stores and separates oil and water that generally operates with a constant liquid level. It does not have an associated throughput limit.

TITLE V APPLICABLE REQUIREMENT CODE KEY

Rule 71.1, "Crude Oil Production and Separation"

1. Storage tanks shall be equipped with a vapor recovery system that directs all vapors to a gas gathering system or flare (71.1.B.1.a)
2. Storage tanks shall be equipped with a vapor recovery system that directs all vapors to some other control system with a minimum destruction or removal efficiency of 90% by weight (71.1.B.1.b)
3. Tank batteries installed prior to June 20, 1978 are exempt from vapor recovery when processing crude oil having a modified Reid vapor pressure of less than 0.5 psia. Solid roof and pressure-vacuum relief valve is required. (71.1.B.2/71.1.D.1.a)
4. Storage tanks are exempt from the solid roof and vapor recovery requirements if the ROC content of the liquid entering the tank is less than 5 milligrams per liter. (71.1.D.3)
5. Storage tanks are exempt from the solid roof and vapor recovery requirements if a BACT Cost Analysis indicates that maximum emission reduction has already taken place. (71.1.D.4)
6. Portable tanks shall be equipped with closed covers and pressure vacuum valves and have limited exemptions from vapor recovery requirements. (71.1.B.3/71.1.D.1.c)

Rule 71.3, "Transfer of Reactive Organic Compound Liquids"

1. Requirement for submerged fill pipe or bottom loading and exemption from vapor recovery based on low throughput. (71.3.B.1) Requirement for leak-free equipment. (71.3.B.3)
2. Requirement for bottom loaded vapor recovery system which connects to a gas pipeline recovery and distribution system with automatic primary and secondary overfill protection. (71.3.B.2.a.1 and 71.3.B.2.b.1) Requirement for leak-free equipment. (71.3.B.3)
3. Requirement for bottom loaded vapor recovery system which connects to a 90% vapor disposal system with automatic primary and secondary overfill protection. (71.3.B.2.a.2 and 71.3.B.2.b.1) Requirement for leak-free equipment. (71.3.B.3)
4. Requirement for bottom loaded vapor recovery system which connects to a gas pipeline recovery and distribution system and APCO-approved alternative primary and secondary overfill protection. (71.3.B.2.a.1 and 71.3.B.2.b.2) Requirement for leak-free equipment. (71.3.B.3)
5. Requirement for bottom loaded vapor recovery system which connects to a 90% vapor disposal system and APCO-approved alternative primary and secondary overfill protection (71.3.B.2.a.2 and 71.3.B.2.b.2) Requirement for leak-free equipment. (71.3.B.3)
6. Exemption from Rule 71.3 because the crude oil has a modified Reid vapor pressure of less than 0.5 psia. (71.3.E.1)
7. Requirement for submerged fill pipe or bottom loading and exemption from vapor recovery when transfer is from a tank exempt from the vapor recovery requirements of Rule 71.1. (71.3.B.1 and 71.3.E.2) Requirement for leak-free equipment. (71.3.B.3)

8. Requirement for submerged fill pipe or bottom loading and exemption from vapor recovery when transfer is from a tank that is located more than 1200 feet from a loading facility constructed prior to July 1, 1990. (71.3.B.1 and 71.3.E.3) Requirement for leak-free equipment. (71.3.B.3)
9. Exemption from Rule 71.3 because the crude oil is being transferred into a vacuum truck, and not into a ROC liquid delivery vessel as defined in Rule 71.B.26. (71.B.26)

Rule 71.4, "Petroleum Sumps, Pits, Ponds and Well Cellars"

1. Second and third stage sumps, pits, and ponds shall have an impermeable cover (71.4.B.2)
2. Exemption from cover requirement for emergency pits (71.4.C.1.b)
3. Exemption from cover requirement for sumps, pits, or pond if the ROC content of the liquid at the point of entry is less than 5 milligrams per liter (71.4.C.1.c)
4. Exemption from cover requirement for sumps, pits, or pond when a BACT Cost Analysis indicates that maximum emission reduction has already taken place. (71.4.C.1.d)

Rule 71.5, "Glycol Dehydrators"

1. Requirement to have a condenser or separator system which directs vapors to a fuel gas or sales gas system. (71.5.B.1.a.1) Requirement to prevent hydrocarbon liquid evaporation and control system leaks. (71.5.B.2 and 71.5.B.3)
2. Requirement to have a condenser or separator system which directs vapors to a flare, incinerator, thermal oxidizer or reboiler. (71.5.B.1.a.2) Operation requirements for flare or incinerator. (71.5.B.1.b) Requirement to prevent hydrocarbon liquid evaporation and control system leaks. (71.5.B.2 and 71.5.B.3)
3. Requirement to have a condenser or separator system which directs vapors to another 95% control system. (71.5.B.1.a.3) Requirement to prevent hydrocarbon liquid evaporation and control system leaks. (71.5.B.2 and 71.5.B.3)
4. Requirement to have any other control system with a 95% control efficiency or which meets an emission limit of 1.7 lb ROC per MMSCF of gas dehydrated. (71.5.B.1.c) Requirement to prevent hydrocarbon liquid evaporation and control system leaks. (71.5.B.2 and 71.5.B.3)
5. Exemption from the control requirements of Rule 71.5 for unit that is operated less than 200 hours per year. (71.5.C)

Rule 74.9, "Stationary Internal Combustion Engines"

1. Pre-January 1, 2002 emissions limits for rich-burn engines (increments of progress have passed)
2. Pre-January 1, 2002 emissions limits for lean-burn engines (increments of progress have passed)
3. Natural gas-fired rich-burn engines (74.9.B.1 or 74.9.B.2)
4. Natural gas-fired lean-burn engines (74.9.B.1 or 74.9.B.2) with ammonia emission limit, if applicable. (74.9.B.5)

5. Diesel engines. (74.9.B.1 or 74.9.B.2) with ammonia emission limit, if applicable. (74.9.B.5)
6. Exemption from Rule 74.9 for engines operated less than 200 hours per calendar year (74.9.D.2)
7. Exemption from Rule 74.9 for emergency standby engines operated during either an emergency or maintenance operation. (74.9.D.3)
8. Exemption from Rule 74.9 for diesel engines with a permitted capacity factor of less than or equal to 15%. (74.9.D.8)
9. Exemption from Rule 74.9 for diesel engines used to power cranes and welding equipment. (74.9.D.9)
10. Exemption from Rule 74.9 for diesel engines operated on San Nicolas Island. (74.9.D.10)

Rule 74.15, "Boilers, Steam Generators and Process Heaters"

1. NOx and CO emission limits for units with an annual heat input rate greater than or equal to 9,000 MMBTU per calendar year (74.15.B.1)
2. Tuning and fuel metering requirements for units with an annual heat input rate of less than 9,000 MMBTU per calendar year. (74.15.B.2 and 74.15.D.1)

Section 93115, Title 17, California Code of Regulations California Airborne Toxic Control Measure For Stationary Compression Ignition (CI) Engines

1. In-use emergency fire pump assembly engines
2. In-use emergency engines operated not more than 20 hours per year for maintenance and testing purposes.
3. Engines operated solely on OCS Platforms
4. In-use emergency engines – 50 hours per year
5. Emergency engines installed after January 1, 2005

40 CFR Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engine (RICE MACT)

1. Existing compression ignition and spark ignition engine compliance dates
2. Existing landfill gas engines – area source
3. Existing emergency diesel engines – area source
4. Existing non-emergency diesel engines $\leq$ 300 HP – area source
5. Existing non-emergency diesel engines 300 HP $<$ X $\leq$ 500 HP – area source
6. Existing non-emergency diesel engines $<$ 500 HP – area source
7. Existing non-emergency spark-ignited remote engine $>$ 500 HP – area source
8. Existing non-emergency diesel engines greater than 300 HP at an area source of HAPs that qualify under the national security exemption
9. Existing emergency spark ignited engines

TABLE NO. 3

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT
Permit to Operate No. 00041
Permitted Throughput/Consumption Limits

Equipment	Throughput Permit Limit	District (D)/ Federal(F) Enforceable	Calculation Throughput Limit
CENTRAL FIELD			
Plants Team			
Taylor Tank Farm			
1 - 8,000 BBL LACT Tank (VORD-T026A) VR			
1 - 10.500 BBL LACT Tank (VOTD-T201) VR			
1 - 20,000 BBL PWT / LACT Tank (T-204A), 32'H x 67'D VR			
Central Water Treating Plant			
1- 5000 BBL PWT Blended Water Tank (VWCP-T500) VR			
1- 4000 BBL PWT PRE-Wemco Tank (VWCP-T400) VR			
1- 3000 BBL PWT Brine Tank (VWCP-T300) VR			
1- 2000 BBL PWT Wemco Skim Tank (VWCP-T200) VR			
1- 1000 BBL PWT Overflow Tank (VWCP-T100) VR			
1 - 894 BBL PWT Cone Bottom 5-Cell Tank (VWCP-T401) VR			
1- 1000 BBL Solids Tank, COST (VWSI-T403) VR	1,277.5 MBBL/Yr	F	1,277.5 MBBL/Yr
1 - 435 BBL PWT Wemco #1 (VWCP-W410) VR Out of Service			
1 - 435 BBL PWT Wemco #2 (VWCP-W420) VR Out of Service			
Waterflood Plant No. 1			
1 - 625 BHP Rich Burn White NG Engine, Model 8G825 (WF1-1) NSCR - OOS	104.2 MMCF/Yr	D	52.1 MMCF/Yr
1 - 625 BHP Rich Burn White NG Engine, Model 8G825 (WF1-2) NSCR - OOS	*	D	52.1 MMCF/Yr
1 - 300 sqft Pit (V127) Exempt < 5 mg/l - OOS			
Waterflood Plant No. 4			
1 - 2,000 BBL Raw Water Tank (VWP4-T101) VR			
1 - 3,000 BBL Filtered Water Tank (VWP4-T102) VR			
1 - 7,000 CF (48' x 21.5'O.D.) Filter Agent Storage Silo w/DCE Siloair Dust Filter Model VS15KS3 (VWP4-S001)	1,300 TPY	F	1,300 TPY
River Bottom Production Area			
1 - 3,000 BBL LACT Tank (T-400A) VR			
1 - 3,000 BBL LACT Tank (T-420A) VR			
1 - 3,000 BBL PWT / LACT Tank (T-410A) VR			
1 - 3,000 BBL PWT / LACT Tank (T-430A) VR			
Gas Operations Team			
Compressor Plant No. 2			
1 - 292 MMBTU/Hr Kaldair Low Pressure Flare	104 MMCF/Yr	F	104 MMCF/Yr
1 - 748 BHP Rich Burn Waukesha NG EngineModel L579OGU (CP2-1) NSCR	48.0 MMCF/Yr	F	24.0 MMCF/Yr
1 - 748 BHP Rich Burn Waukesha NG Engine Model L579OGU (CP2-2) NSCR	*	F	24.0 MMCF/Yr
Crude Lifting Team			
Trap Farm 13			
1 - 238 BBL Emergency / Standby / Blowdown Tank			
EAST FIELD			
Plants Team			
Lloyd Tank Farm			
1 - 5000 BBL FWKO/Wash Tank (TOLD-T330A) VR			
1 - 5000 BBL C-Block LACT Tank (TOLD-T310A) VR			
1 - 5000 BBL D-Block LACT Tank (TOLD-T320A) VR			
1 - 5000 BBL PWT Pre-Wemco Tank / LACT Tank (TWCF-T280A) VR			
1 - 5000 BBL PWT Spare Pre-Wemco Tank / LACT Tank (TWCF-T280B) VR			
1 - Crude Oil Loading Facility BL VR Out of Service	900 MBBL/Yr	D	900 MBBL/Yr
Lloyd Water Treating Plant			
1 - 173 BBL PWT Wemco #1 (TWCF-W001) VR Out of Service			

TABLE NO. 3

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT
Permit to Operate No. 00041
Permitted Throughput/Consumption Limits

Equipment	Throughput Permit Limit	District (D)/ Federal(F) Enforceable	Calculation Throughput Limit
1 - 173 BBL PWT Wemco #2 (TWCF-W002) VR Out of Service			
1 - 173 BBL PWT Wemco #3 (TWCF-W003) VR Out of Service			
1 - 3000 BBL PWT Spare Source Water Tank (TWCF-T260B) VR			
1 - 3000 BBL PWT Spare Source Water Tank (TWCF-T260A) VR			
1 - 1000 BBL PWT Clean Water Tank (TWCF-T500) VR Out of Service			
1 - 5000 BBL PWT Old Wemco Tank (TWCF-T100) VR Out of Service			
1 - 5000 BBL PWT New Wemco Tank (TWCF-T400) VR			
1 - 500 BBL PWT SlopTank (TWCF-T600) VR Out of Service			
1 - 1600 BBL PWT Flotation Cell Tank (TWCF-T200) VR Out of Service			
1 - 70,000 BBL Emergency Cement Bowl (CMTD-S70K) Out of Service			
Lloyd Water Treating Plant Solids Processing System			
1 - 42.75 sqft (9.5' x 4.5') Covered Trough (Sump)			
2 - 500 BBL Waste Fluids/Solids Storage Tanks, VR	1,825 MBBL/YR each	F	1,825 MBBL/YR each
1 - Brandt Centrifuge, Model HS-3400 FS, 14" x 49.5" bowl size			
1 - 1000 BBL Solids Tank, COST (TWSI-T001) VR	1,825 MBBL/YR	F	1,825 MBBL/YR
Hartman Waterflood			
1 - 3000 BBL PWT Hartman A Tank (TWPM-T210A) VR			
1 - 3000 BBL PWT Hartman B Tank (TWPM-T210B) VR			
1 - 3000 BBL Hartman Filtered Water Tank (T-240A) VR			
1 - 830 BBL Filter Agent Silo with Baghouse Control System (TWPM-T010)	867 TPY	F	867 TPY
Gas Operations Team			
Gas Plant No. 2			
1 - 616 BHP Lean Burn NG Waukesha Engine Model F352 IGL (C-201)	100.2 MMCF/Yr	F	100.2 MMCF/Yr
1 - 616 BHP Lean Burn NG Waukesha Engine Model F352IGL(C-202)	*	F	*
Gas Plant No. 6			
1 - Tank Truck LPG Loading Facility w/ Closed Vapor Recovery System	40 MMGal/Yr	F	40 MMGal/Yr
Gas Plant No. 7			
1 - 8.0 MMBTU/Hr NG BYIS Manufacturing Oil Heater, Unit No. 601A, equipped with a Bloom Engineering/Gideon Ultra Low NOx burner	71.4 MMCF/Yr	F	71.4 MMCF/Yr
1 - 14.25 MMBTU/Hr NG Wheco Heater Serial No. WJ-81-009, Unit No. 602, equipped with a low NOx burner, Out of Service	78.9 MMCF/Yr	F	78.9 MMCF/Yr
1 - 1050 MMBTU/Hr John Zink Hydra 8" Flare	86.5 MMCF/Yr	F	86.5 MMCF/Yr
1 - 205 MMBTU/Hr 6" Flare (includes coaxial 2 MMBTU/Hr 1.5" unit)	*	F	*
1 - Glycol Dehydrator System (12.3 MMSCFD/Ethylene Glycol) consisting of:			
1 - Glycol Dehydrator Vent VR	No Limit		8760 Hrs/Yr
1 - 1.50 MMBTU/HR Glycol Reboiler (hot oil heated)			
1 - 14 BBL Glycol Condensate Tank No. V-600 (pressure vessel)			
1 - 630 BHP Detroit Diesel Emergency Standby Engine, Model 71237305, Serial No. L16349, EPA Family Name: DDL2VA081299, I.D. No. VNFGPLT7GNGP7ELGEN1	20 hr/yr **	D	20 hr/yr
Crude Lifting Team			
Central Compressor Plant			
1 - 1108 BHP Lean Burn NG Waukesha Engine Model L7042GL (C-101) (Out of Service)	No Limit		227.4 MMCF/Yr
1 - 1108 BHP Lean Burn NG Waukesha Engine Model L7042GL (C-102) (Out of Service)	*		*
1 - 1108 BHP Lean Burn NG Waukesha Engine Model L7042GL (C-103) (Out of Service)	*		*
1 - Glycol Dehydrator System (16.1 MMSCFD/Triethylene Glycol) consisting of: (Out of Service)			
1 - Glycol Dehydrator Vent VR	No Limit		8760 Hrs/Yr
1 - 0.865 MMBTU/HR NG Glycol Reboiler UNC	No Limit		7.2 MMCF/Yr

TABLE NO. 3

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT
Permit to Operate No. 00041
Permitted Throughput/Consumption Limits

Equipment	Throughput Permit Limit	District (D)/ Federal(F) Enforceable	Calculation Throughput Limit
1 - 11 BBL Glycol Condensation Tank No. V-403 (pressure vessel) 1 - 630 BHP Detroit Diesel Emergency Standby Engine, Model 71237305, Serial No. L16330, EPA Family Name: DDL2VA081299, I.D. No. VCSECSCPGNCSGEN101 Out of Servie	20 hr/yr **	D	20 hr/yr
AWT2 1 - 500 BBL Emergency / Standby / Blowdown Tank			
AWT3 2 - 500 BBL Emergency / Standby / Blowdown Tanks			
For Use Throughout Leases 856 - Oil Wells 69 - 500 BBL Portable Tanks 1 - Portable Open Top Mixing Bin, 242.25 sqft	12 Hrs/day & 1,440 Hrs/Yr	F	12 Hrs/day & 1,440 Hrs/Yr
Exempt Equipment Remote Reservoir Cold Cleaners (Exempt - Rule 23.F.10.c) Solvent Wipe Cleaning (Exempt - Rule 23.F.10.a or 23.F.10.b)			
* - Included in the Throughput Permit Limit Above ** - Limit is for maintenance and testing only. Emergency use is unlimited.			

TABLE NO. 4

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT
Permit to Operate No. 00041
Permitted Emissions

Equipment	TONS PER YEAR					POUNDS PER HOUR				
	ROC	NOx	PM	SOx	CO	ROC	NOx	PM	SOx	CO
CENTRAL FIELD										
Plants Team										
Taylor Tank Farm										
1 - 8,000 BBL LACT Tank (VORD-T026A) VR	0.48					0.11				
1 - 10,500 BBL LACT Tank (VOTD-T201) VR	1.17					0.27				
1 - 20,000 BBL PWT / LACT Tank (T-204A), 32'H x 67'D VR	2.22					0.51				
Central Water Treating Plant										
1- 5000 BBL PWT Blended Water Tank (VWCP-T500) VR	0.09					0.02				
1- 4000 BBL PWT PRE-Wemco Tank (VWCP-T400) VR	0.07					0.02				
1- 3000 BBL PWT Brine Tank (VWCP-T300) VR	0.05					0.01				
1- 2000 BBL PWT Wemco Skim Tank (VWCP-T200) VR	0.04					0.01				
1- 1000 BBL PWT Overflow Tank (VWCP-T100) VR	0.02					<0.01				
1 - 894 BBL PWT Cone Bottom 5-Cell Tank (VWCP-T401) VR	0.04					0.01				
1- 1000 BBL Solids Tank, COST (VWSI-T403) VR	3.20					0.73				
1 - 435 BBL PWT Wemco #1 (VWCP-W410) VR Out of Service	0.01					<0.01				
1 - 435 BBL PWT Wemco #2 (VWCP-W420) VR Out of Service	0.01					<0.01				
Waterflood Plant No. 1										
1 - 625 BHP Rich Burn White NG Engine, Model 8G825 (WF1-1) NSCR - OOS	0.46	2.52	0.26	0.02	153.43	0.11	0.58	0.06	<0.01	35.34
1 - 625 BHP Rich Burn White NG Engine, Model 8G825 (WF1-2) NSCR - OOS	0.39	2.52	0.26	0.02	153.43	0.09	0.58	0.06	<0.01	35.34
1 - 300 sqft Pit (V127) Exempt < 5 mg/l - OOS	<0.01					<0.01				
Waterflood Plant No. 4										
1 - 2,000 BBL Raw Water Tank (VWP4-T101) VR	0.04					0.01				
1 - 3,000 BBL Filtered Water Tank (VWP4-T102) VR	0.05					0.01				
1 - 7,000 CF (48' x 21.5'O.D.) Filter Agent Storage Silo w/DCE Siloair Dust Filter Model VS15KS3 (VWP4-S001)			0.18					0.07		
River Bottom Production Area										
1 - 3,000 BBL LACT Tank (T-400A) VR	0.18					0.04				
1 - 3,000 BBL LACT Tank (T-420A) VR	0.18					0.04				
1 - 3,000 BBL PWT / LACT Tank (T-410A) VR	0.18					0.04				
1 - 3,000 BBL PWT / LACT Tank (T-430A) VR	0.18					0.04				
Gas Operations Team										
Compressor Plant No. 2										
1 - 292 MMBTU/Hr Kaldair Low Pressure Flare	2.83	3.71	0.27	3.71	20.20	15.88	20.85	1.53	20.85	113.44
1 - 748 BHP Rich Burn Waukesha NG EngineModel L579OGU (CP2-1) NSCR	1.61	1.16	0.12	0.01	70.68	0.95	0.69	0.07	<0.01	41.82
1 - 748 BHP Rich Burn Waukesha NG Engine Model L579OGU (CP2-2) NSCR	1.61	1.16	0.12	0.01	70.68	0.95	0.69	0.07	<0.01	41.82
Crude Lifting Team										
Trap Farm 13										
1 - 238 BBL Emergency / Standby / Blowdown Tank	0.03					0.01				
EAST FIELD										
Plants Team										
Lloyd Tank Farm										
1 - 5000 BBL FWKO/Wash Tank (TOLD-T330A) VR	0.30					0.07				
1 - 5000 BBL C-Block LACT Tank (TOLD-T310A) VR	0.30					0.07				
1 - 5000 BBL D-Block LACT Tank (TOLD-T320A) VR	0.30					0.07				
1 - 5000 BBL PWT Pre-Wemco Tank / LACT Tank (TWCF-T280A) VR	0.09					0.02				
1 - 5000 BBL PWT Spare Pre-Wemco Tank / LACT Tank (TWCF-T280B) VR	0.09					0.02				
1 - Crude Oil Loading Facility BL VR Out of Service	5.17					2.30				
Lloyd Water Treating Plant										
1 - 173 BBL PWT Wemco #1 (TWCF-W001) VR Out of Service	0.01					<0.01				
1 - 173 BBL PWT Wemco #2 (TWCF-W002) VR Out of Service	0.01					<0.01				
1 - 173 BBL PWT Wemco #3 (TWCF-W003) VR Out of Service	0.01					<0.01				
1 - 3000 BBL PWT Spare Source Water Tank (TWCF-T260B) VR	0.11					0.03				
1 - 3000 BBL PWT Spare Source Water Tank (TWCF-T260A) VR	0.11					0.03				
1 - 1000 BBL PWT Clean Water Tank (TWCF-T500) VR Out of Service	0.04					0.01				
1 - 5000 BBL PWT Old Wemco Tank (TWCF-T100) VR Out of Service	0.21					0.05				
1 - 5000 BBL PWT New Wemco Tank (TWCF-T400) VR	0.19					0.04				
1 - 500 BBL PWT SlopTank (TWCF-T600) VR Out of Service	0.02					<0.01				
1 - 1600 BBL PWT Flotation Cell Tank (TWCF-T200) VR Out of Service	0.07					0.02				
1 - 70,000 BBL Emergency Cement Bowl (CMTD-S70K) Out of Service	3.46					9.62				

TABLE NO. 4

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT
Permit to Operate No. 00041
Permitted Emissions

Equipment	TONS PER YEAR					POUNDS PER HOUR				
	ROC	NOx	PM	SOx	CO	ROC	NOx	PM	SOx	CO
Lloyd Water Treating Plant Solids Processing System										
1 - 42.75 sqft (9.5' x 4.5') Covered Trough (Sump)	0.08					0.02				
2 - 500 BBL Waste Fluids/Solids Storage Tanks, VR	2.25					0.51				
1 - Brandt Centrifuge, Model HS-3400 FS, 14" x 49.5" bowl size	<0.01					<0.01				
1 - 1000 BBL Solids Tank, COST (TWSI-T001) VR	2.27					0.52				
Hartman Waterflood										
1 - 3000 BBL PWT Hartman A Tank (TWPM-T210A) VR	0.11					0.03				
1 - 3000 BBL PWT Hartman B Tank (TWPM-T210B) VR	0.11					0.03				
1 - 3000 BBL Hartman Filtered Water Tank (T-240A) VR	0.05					0.01				
1 - 830 BBL Filter Agent Silo with Baghouse Control System (TWPM-T010)			0.12					3.78		
Gas Operations Team										
Gas Plant No. 2										
1 - 616 BHP Lean Burn NG Waukesha Engine Model F352 1GL (C-201)	19.86	8.71	0.50	0.03	295.09	4.64	2.03	0.12	0.01	68.91
1 - 616 BHP Lean Burn NG Waukesha Engine Model F3521GL(C-202)	*	*	*	*	*	*	*	*	*	*
Gas Plant No. 6										
1 - Tank Truck LPG Loading Facility w/ Closed Vapor Recovery System	12.00					10.80				
Gas Plant No. 7										
1 - 8.0 MMBTU/Hr NG BYIS Manufacturing Oil Heater, Unit No. 601A, equipped with a Bloom Engineering/Gideon Ultra Low NOx burner	0.20	0.55	0.27	0.02	11.09	0.04	0.12	0.06	<0.01	2.36
1 - 14.25 MMBTU/Hr NG Wheco Heater Serial No. WJ-81-009, Unit No. 602, equipped with a low NOx burner, Out of Service	0.22	1.97	0.30	0.02	12.25	0.07	0.68	0.10	0.01	4.22
1 - 1050 MMBTU/Hr John Zink Hydra 8" Flare	2.35	3.09	0.23	3.09	16.80	54.40	71.40	5.25	71.40	388.50
1 - 205 MMBTU/Hr 6" Flare (incl. coaxial 2 MMBTU/Hr 1.5" unit)	*	*	*	*	*	10.62	13.94	1.02	13.94	75.84
1 - Glycol Dehydrator System (12.3 MMSCFD/Ethylene Glycol) consisting of:										
1 - Glycol Dehydrator Vent VR	8.92					2.04				
1 - 1.50 MMBTU/HR Glycol Reboiler (hot oil heated)										
1 - 14 BBL Glycol Condensate Tank No. V-600 (pressure vessel)										
1 - 630 BHP Detroit Diesel Emergency Standby Engine, Model 71237305, Serial No. L16349, EPA Family Name: DDL2VA081299, I.D. No. VNFGPLT7GNGP7ELGEN1	0.01	0.21	0.01	<0.01	0.05	0.15	2.10	0.15	0.03	0.46
Crude Lifting Team										
Central Compressor Plant										
1 - 1108 BHP Lean Burn NG Waukesha Engine Model L7042GL (C-101) (Out of Service)	32.40	19.77	1.14	0.07	669.73	7.41	4.52	0.26	0.02	153.14
1 - 1108 BHP Lean Burn NG Waukesha Engine Model L7042GL (C-102) (Out of Service)	*	*	*	*	*	*	*	*	*	*
1 - 1108 BHP Lean Burn NG Waukesha Engine Model L7042GL (C-103) (Out of Service)	*	*	*	*	*	*	*	*	*	*
1 - Glycol Dehydrator System (16.1 MMSCFD/Triethylene Glycol) consisting of: (Out of Service)										
1 - Glycol Dehydrator Vent VR	11.50					2.63				
1 - 0.865 MMBTU/HR NG Glycol Reboiler UNC	0.02	0.36	0.03	<0.01	0.30	<0.01	0.08	0.01	<0.01	0.07
1 - 11 BBL Glycol Condensation Tank No. V-403 (pressure vessel)										
1 - 630 BHP Detroit Diesel Emergency Standby Engine, Model 71237305, Serial No. L16330, EPA Family Name: DDL2VA081299, I.D. No. VCSECSCPGNCSGEN101 Out of Service	0.01	0.21	0.01	<0.01	0.05	0.15	2.10	0.15	0.03	0.46
AWT2										
1 - 500 BBL Emergency / Standby / Blowdown Tank	0.03					0.01				
AWT3										
2 - 500 BBL Emergency / Standby / Blowdown Tanks	0.07					0.02				
Miscellaneous										
For Use Throughout Leases										
856 - Oil Wells	312.44					71.39				
69 - 500 BBL Portable Tanks	25.53					5.83				
1 - Portable Open Top Mixing Bin, 242.25 sqft	0.04					0.05				
Exempt Equipment										
Remote Reservoir Cold Cleaners (Exempt - Rule 23.F.10.c)										
Solvent Wipe Cleaning (Exempt - Rule 23.F.10.a or 23.F.10.b)										
* - Included in Emissions Above										
Total Permitted Emissions	456.10	45.94	3.82	7.00	1473.78	203.58	120.36	12.76	106.29	961.72

TABLE NO. 4

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT
Permit to Operate No. 00041
Permitted Emissions

Equipment	TONS PER YEAR					POUNDS PER HOUR				
	ROC	NOx	PM	SOx	CO	ROC	NOx	PM	SOx	CO
HAP Emissions Ref.: AB 2588 Air Toxics Report	Reporting Year: 2003			Submittal Date: 03/11/05						

Part 70 Permit Tables No. 1-4

The Ventura County Air Pollution Control District "Tables No. 1-4" Permit to Operate No. 00041, have been reviewed and are correct to the best of our knowledge.

Permitted Emissions Summary

Criteria Pollutants

00041-1661 Aera Energy LLC

Permit Period: 4/1/2017 to 3/31/2018

	Tons per Year					Pounds Per Hour				
Equipment	**ROC**	**NOx**	**PM**	**SOx**	**CO**	**ROC**	**NOx**	**PM**	**SOx**	**CO**
1 - 8000 Barrel LACT Tank	0.48	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00
1 - 10500 Barrel LACT Tank	1.17	0.00	0.00	0.00	0.00	0.27	0.00	0.00	0.00	0.00
1 - 20000 Barrel Produced Water Tank / LACT Tank	2.22	0.00	0.00	0.00	0.00	0.51	0.00	0.00	0.00	0.00
1 - 5000 Barrel Produced Water Tank	0.09	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00
1 - 4000 Barrel Produced Water Tank	0.07	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00
1 - 3000 Barrel Produced Water Tank	0.05	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
1 - 2000 Barrel Produced Water Tank	0.04	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
1 - 1000 Barrel Produced Water Tank	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1 - 894 Barrel Produced Water Tank	0.04	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
1 - 1000 Barrel Crude Oil Storage Tank	3.20	0.00	0.00	0.00	0.00	0.73	0.00	0.00	0.00	0.00
1 - 435 Barrel Produced Water Tank	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1 - 435 Barrel Produced Water Tank	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1 - 625 BHP White, Model 8G825, Natural Gas Engine	0.46	2.52	0.26	0.02	153.43	0.11	0.58	0.06	0.00	35.34
1 - 625 BHP White, Model 8G825, Natural Gas Engine	0.39	2.52	0.26	0.02	153.43	0.09	0.58	0.06	0.00	35.34
1 - 300 Sqft-Surface Pit	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1 - 2000 Barrel Produced Water Tank	0.04	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
1 - 3000 Barrel Produced Water Tank	0.05	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
1 - 7000 CF Filter Agent Storage Silo	0.00	0.00	0.18	0.00	0.00	0.00	0.00	0.07	0.00	0.00
1 - 3000 Barrel LACT Tank (T-400A)	0.18	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00
1 - 3000 Barrel LACT Tank (T-420A)	0.18	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00
1 - 3000 Barrel Produced Water Tank / LACT Tank (T-410	0.18	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00
1 - 3000 Barrel Produced Water Tank / LACT Tank (T-430	0.18	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00
1 - 292 MMBTU/hr Kaldair Low Pressure Flare	2.83	3.71	0.27	3.71	20.20	15.88	20.85	1.53	20.85	113.44
1 - 748 BHP Waukesha, Model L579OGU, Natural Gas En	1.61	1.16	0.12	0.01	70.68	0.95	0.69	0.07	0.00	41.82
1 - 748 BHP Waukesha, Model L579OGU, Natural Gas En	1.61	1.16	0.12	0.01	70.68	0.95	0.69	0.07	0.00	41.82
1 - 238 Barrel Emergency / Standby / Blowdown Tank	0.03	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
1 - 5000 Barrel FWKO/Wash Tank	0.30	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00
1 - 5000 Barrel C-Block LACT Tank	0.30	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00
1 - 5000 Barrel D-Block LACT Tank	0.30	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00
1 - 5000 Barrel PWT Pre-Wemco Tank / LACT Tank (TW	0.09	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00
1 - 5000 Barrel PWT Spare Pre-Wemco Tank / LACT Tank	0.09	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00
1 - Crude Oil Loading Facility	5.17	0.00	0.00	0.00	0.00	2.30	0.00	0.00	0.00	0.00
1 - 173 Barrel Produced Water Tank	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1 - 173 Barrel Produced Water Tank	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1 - 173 Barrel Produced Water Tank	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1 - 3000 Barrel Produced Water Tank	0.11	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00
1 - 3000 Barrel Produced Water Tank	0.11	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00
1 - 1000 Barrel Produced Water Tank	0.04	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
1 - 5000 Barrel Produced Water Tank	0.21	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00

Equipment	Tons per Year					Pounds Per Hour				
	ROC	NOx	PM	SOx	CO	ROC	NOx	PM	SOx	CO
1 - 5000 Barrel Produced Water Tank	0.19	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00
1 - 500 Barrel Produced Water Tank	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1 - 1600 Barrel Produced Water Tank	0.07	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00
1 - 70000 Barrel Wastewater Pit	3.46	0.00	0.00	0.00	0.00	9.62	0.00	0.00	0.00	0.00
1 - 42.75 Sqft-Surface (9.5' x 4.5') Covered Trough (Sump)	0.08	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00
2 - 500 Barrel Waste Fluids/Solids Storage Tanks	2.25	0.00	0.00	0.00	0.00	0.51	0.00	0.00	0.00	0.00
1 - 1000 Barrel Crude Oil Storage Tank	2.27	0.00	0.00	0.00	0.00	0.52	0.00	0.00	0.00	0.00
1 - 3000 Barrel Produced Water Tank	0.11	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00
1 - 3000 Barrel Produced Water Tank	0.11	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00
1 - 3000 Barrel Produced Water Tank (Filtered Water) (T-2	0.05	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
1 - 830 Barrel Filter Agent Silo	0.00	0.00	0.12	0.00	0.00	0.00	0.00	3.78	0.00	0.00
1 - 616 BHP Waukesha, Model F352IGL, Natural Gas Engi	19.86	8.71	0.50	0.03	295.09	4.64	2.03	0.12	0.01	68.91
1 - Tank Truck LPG Loading Facility	12.00	0.00	0.00	0.00	0.00	10.80	0.00	0.00	0.00	0.00
1 - 8 MMBTU/hr BYIS Manufacturing Oil Heater, Unit No	0.20	0.55	0.27	0.02	11.09	0.04	0.12	0.06	0.00	2.36
1 - 14.25 MMBTU/hr Wheco Heater	0.22	1.97	0.30	0.02	12.25	0.07	0.68	0.10	0.01	4.22
1 - 1050 MMBTU/hr John Zink Hydra 8" Flare	2.35	3.09	0.23	3.09	16.80	54.40	71.40	5.25	71.40	388.50
1 - 205 MMBTU/hr 6" Flare	0.00	0.00	0.00	0.00	0.00	10.62	13.94	1.02	13.94	75.84
1 - 1.5 MMBTU/hr Glycol Reboiler	8.92	0.00	0.00	0.00	0.00	2.04	0.00	0.00	0.00	0.00
1 - 630 BHP Detroit Diesel Emergency Standby Engine	0.01	0.21	0.01	0.00	0.05	0.15	2.10	0.15	0.03	0.46
1 - 1108 BHP Waukesha, Model L7042GL, Natural Gas En	21.60	13.18	0.76	0.05	446.49	4.93	3.01	0.17	0.01	101.90
1 - 1108 BHP Waukesha, Model L7042GL, Natural Gas En	10.80	6.59	0.38	0.02	223.24	2.48	1.51	0.09	0.01	51.24
1 - 0.86 MMBTU/hr Glycol Reboiler	11.52	0.36	0.03	0.00	0.30	2.63	0.08	0.01	0.00	0.07
1 - 630 BHP Detroit Diesel Emergency Standby Engine	0.01	0.21	0.01	0.00	0.05	0.15	2.10	0.15	0.03	0.46
1 - 500 Barrel Emergency / Standby / Blowdown Tank	0.03	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
2 - 500 Barrel Emergency / Standby / Blowdown Tanks	0.07	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00
856 - Oil Wells	312.44	0.00	0.00	0.00	0.00	71.39	0.00	0.00	0.00	0.00
69 - 500 Barrel Portable Tanks	25.53	0.00	0.00	0.00	0.00	5.83	0.00	0.00	0.00	0.00
1 - 242.25 Sqft-Surface Sump	0.04	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00
Total	456.10	45.94	3.82	7.00	1473.78	203.58	120.36	12.76	106.29	961.72

Equipment and Emissions Summary

00041 - 1661 Aera Energy LLC Permit Period: 4/1/2017 to 3/31/2018 SIC Code 1311 - Crude Oil Production

DEVICE NO: 17802 1 - 8000 Barrel LACT Tank (VORD-T026A)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301071 - Brth Ht>20' VP 3.1-5.0psi	bbl-Cap.	8000.0000 bbl-Cap.	0.9132 bbl-Cap.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.48	0.11	1.2000	0.1000	0.1200	Y	Y		Y	Vapor Recovery (90%)

DEVICE NO: 10642 1 - 10500 Barrel LACT Tank (VOTD-T201)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301072 - Brth Ht>20' VP >5.0psi	bbl-Cap.	10500.0000 bbl-Cap.	1.1986 bbl-Cap.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	1.17	0.27	2.2200	0.1000	0.2200	Y	Y		Y	Vapor Recovery (90%)

DEVICE NO: 10644 1 - 20000 Barrel Produced Water Tank / LACT Tank (T-204A), 32'H x 67'D

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301072 - Brth Ht>20' VP >5.0psi	bbl-Cap.	20000.0000 bbl-Cap.	2.2831 bbl-Cap.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	2.22	0.51	2.2200	0.1000	0.2200	Y	Y		Y	Vapor Recovery (90%)

DEVICE NO: 10686 1 - 5000 Barrel Produced Water Tank (Blended Water Tank) (VWCP-T500)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301069 - Brth Ht>20' VP <1.5psi	bbl-Cap.	5000.0000 bbl-Cap.	0.5708 bbl-Cap.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.09	0.02	0.3400	0.1000	0.0300	Y	Y		Y	Vapor Recovery (90%)

DEVICE NO: 10687 1 - 4000 Barrel Produced Water Tank (Pre-Wemco) (VWCP-T400)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301069 - Brth Ht>20' VP <1.5psi	bbl-Cap.	4000.0000 bbl-Cap.	0.4566 bbl-Cap.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.07	0.02	0.3400	0.1000	0.0300	Y	Y		Y	Vapor Recovery (90%)

Equipment and Emissions Summary

00041 - 1661 Aera Energy LLC Permit Period: 4/1/2017 to 3/31/2018 SIC Code 1311 - Crude Oil Production

DEVICE NO: 10688 1 - 3000 Barrel Produced Water Tank (Brine Tank) (VWCP-T300)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301069 - Brth Ht>20' VP <1.5psi	bbl-Cap.	3000.0000 bbl-Cap.	0.3425 bbl-Cap.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.05	0.01	0.3400	0.1000	0.0300	Y	Y		Y	Vapor Recovery (90%)

DEVICE NO: 10689 1 - 2000 Barrel Produced Water Tank (Wemco Skim Tank) (VWCP-T200)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301065 - Brth Ht 12-20' VP <1.5psi	bbl-Cap.	2000.0000 bbl-Cap.	0.2283 bbl-Cap.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.04	0.01	0.3700	0.1000	0.0400	Y	Y		Y	Vapor Recovery (90%)

DEVICE NO: 10690 1 - 1000 Barrel Produced Water Tank (Overflow Tank) (VWCP-T100)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301065 - Brth Ht 12-20' VP <1.5psi	bbl-Cap.	1000.0000 bbl-Cap.	0.1142 bbl-Cap.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.02	0.00	0.3700	0.1000	0.0400	Y	Y		Y	Vapor Recovery (90%)

DEVICE NO: 10691 1 - 894 Barrel Produced Water Tank (Cone Bottom 5-Cell Tank) (VWCP-T401)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301066 - Brth Ht 12-20' VP 1.5-3.0	bbl-Cap.	894.0000 bbl-Cap.	0.1021 bbl-Cap.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.04	0.01	0.8500	0.1000	0.0900	Y	Y		Y	Vapor Recovery (90%)

Equipment and Emissions Summary

00041 - 1661 Aera Energy LLC Permit Period: 4/1/2017 to 3/31/2018 SIC Code 1311 - Crude Oil Production

DEVICE NO: 10692 1 - 1000 Barrel Crude Oil Storage Tank (Solids Tank) (VWSI-T403)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301067 - Brth Ht 12-20' VP 3.1-5.0	bbl-Cap.	1000.0000 bbl-Cap.	0.1142 bbl-Cap.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.07	0.02	1.4800	0.1000	0.1500	Y	Y		Y	Vapor Recovery (90%)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301083 - Work VP 3.1-5.0psi	Mbbl	1277.5000 Mbbl	0.1458 Mbbl	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	3.13	0.71	48.9300	0.1000	4.8900	Y	Y		Y	Vapor Recovery (90%)

DEVICE NO: 10693 1 - 435 Barrel Produced Water Tank (Wemco #1) (VWCP-W410) Out of Service

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (If used)
40301061 - Brth Ht<12' VP <1.5 psi	bbl-Cap.	435.0000 bbl-Cap.	0.0497 bbl-Cap.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.01	0.00	0.4300	0.1000	0.0400	Y	Y		Y	Vapor Recovery (90%)

DEVICE NO: 10694 1 - 435 Barrel Produced Water Tank (Wemco #2) (VWCP-W420) Out of Service

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301061 - Brth Ht<12' VP <1.5 psi	bbl-Cap.	435.0000 bbl-Cap.	0.0497 bbl-Cap.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.01	0.00	0.4300	0.1000	0.0400	Y	Y		Y	Vapor Recovery (90%)

Equipment and Emissions Summary

00041 - 1661 Aera Energy LLC Permit Period: 4/1/2017 to 3/31/2018 SIC Code 1311 - Crude Oil Production

DEVICE NO: 10702 1 - 625 BHP White, Model 8G825, Natural Gas Engine (WF1-1), rich burn, equipped with NSCR Out of Service

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200202 - Natural Gas ICE <1000 B	MMcf	52.1000 MMcf	625.0000 BHPNG<1000	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.46	0.11	17.5000	1.0000	17.5000	Y	Y	Y	Y	
Nitrogen Oxides	2.52	0.58	96.6000	1.0000	96.6000	Y	Y	Y	Y	Ru74.9 (25 ppm) <1000 BHP
Particulate Matter	0.26	0.06	10.0000	1.0000	10.0000	Y	Y		Y	
Sulfur Oxides	0.02	0.00	0.6000	1.0000	0.6000	Y	Y		Y	
Carbon Monoxide	153.43	35.34	5890.0000	1.0000	5890.0000	Y	Y	Y	Y	
CO = 2500 ppm										

DEVICE NO: 10703 1 - 625 BHP White, Model 8G825, Natural Gas Engine (WF1-2), rich burn, equipped with NSCR Out of Service

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200202 - Natural Gas ICE <1000 B	MMcf	52.1000 MMcf	625.0000 BHPNG<1000	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.39	0.09	14.8000	1.0000	14.8000	Y	Y	Y	Y	
Nitrogen Oxides	2.52	0.58	96.6000	1.0000	96.6000	Y	Y	Y	Y	Ru74.9 (25 ppm) <1000 BHP
Particulate Matter	0.26	0.06	10.0000	1.0000	10.0000	Y	Y		Y	
Sulfur Oxides	0.02	0.00	0.6000	1.0000	0.6000	Y	Y		Y	
Carbon Monoxide	153.43	35.34	5890.0000	1.0000	5890.0000	Y	Y	Y	Y	
CO = 2500 ppm										

DEVICE NO: 10704 1 - 300 Sqft-Surface Pit (V127), exempt from cover: < 5 mg/l, Out of Service

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
31000105 - Pits	sqft-surl.	300.0000 sqft-surf.	0.0342 sqft-surf.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	0.00	0.0000	1.0000	0.0000	Y	Y	Y	Y	

Equipment and Emissions Summary

00041 - 1661 Aera Energy LLC Permit Period: 4/1/2017 to 3/31/2018 SIC Code 1311 - Crude Oil Production

DEVICE NO: 10708 1 - 2000 Barrel Produced Water Tank (Raw Water) (VWP4-T101)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301065 - Brth Ht 12-20' VP <1.5psi	bbl-Cap.	2000.0000 bbl-Cap.	0.2283 bbl-Cap.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.04	0.01	0.3700	0.1000	0.0400	Y	Y		Y	Vapor Recovery (90%)

DEVICE NO: 10709 1 - 3000 Barrel Produced Water Tank (Filtered Water) (VWP4-T102)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301069 - Brth Ht>20' VP <1.5psi	bbl-Cap.	3000.0000 bbl-Cap.	0.3425 bbl-Cap.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.05	0.01	0.3400	0.1000	0.0300	Y	Y		Y	Vapor Recovery (90%)

DEVICE NO: 10710 1 - 7000 CF Filter Agent Storage Silo (48' x 21.5' O.D.), equipped with a DCE Siloair, Model VS15KS3, Dust Filter (VWP4-S001)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
30501107 - Dry Material Silo-cont	Tons	1300.0000 Tons	500.0000 Pounds	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Particulate Matter	0.18	0.07	0.2700	1.0000	0.2700	Y	Y		Y	

DEVICE NO: 19335 1 - 3000 Barrel LACT Tank (T-400A)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301071 - Brth Ht>20' VP 3.1-5.0psi	bbl-Cap.	3000.0000 bbl-Cap.	0.3425 bbl-Cap.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.18	0.04	1.2000	0.1000	0.1200	Y	Y		Y	Vapor Recovery (90%)

DEVICE NO: 19337 1 - 3000 Barrel LACT Tank (T-420A)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301071 - Brth Ht>20' VP 3.1-5.0psi	bbl-Cap.	3000.0000 bbl-Cap.	0.3425 bbl-Cap.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.18	0.04	1.2000	0.1000	0.1200	Y	Y		Y	Vapor Recovery (90%)

Equipment and Emissions Summary

00041 - 1661 Aera Energy LLC Permit Period: 4/1/2017 to 3/31/2018 SIC Code 1311 - Crude Oil Production

DEVICE NO: 19336 1 - 3000 Barrel Produced Water Tank / LACT Tank (T-410A)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301071 - Brth Ht>20' VP 3.1-5.0psi	bbl-Cap.	3000.0000 bbl-Cap.	0.3425 bbl-Cap.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.18	0.04	1.2000	0.1000	0.1200	Y	Y		Y	Vapor Recovery (90%)

DEVICE NO: 19338 1 - 3000 Barrel Produced Water Tank / LACT Tank (T-430A)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301071 - Brth Ht>20' VP 3.1-5.0psi	bbl-Cap.	3000.0000 bbl-Cap.	0.3425 bbl-Cap.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.18	0.04	1.2000	0.1000	0.1200	Y	Y		Y	Vapor Recovery (90%)

DEVICE NO: 10712 1 - 292 MMBTU/hr Kaldair Low Pressure Flare

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
10201302 - Flare	MMcf	104.0000 MMcf	292.0000 Mcf	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	2.83	15.88	54.4000	1.0000	54.4000	Y	Y		Y	
Nitrogen Oxides	3.71	20.85	71.4000	1.0000	71.4000	Y	Y		Y	
Particulate Matter	0.27	1.53	5.2500	1.0000	5.2500	Y	Y		Y	
Sulfur Oxides	3.71	20.85	71.4000	1.0000	71.4000	Y	Y		Y	
Carbon Monoxide	20.20	113.44	388.5000	1.0000	388.5000	Y	Y		Y	

Equipment and Emissions Summary

00041 - 1661 Aera Energy LLC Permit Period: 4/1/2017 to 3/31/2018 SIC Code 1311 - Crude Oil Production

DEVICE NO: 10713 1 - 748 BHP Waukesha, Model L579OGU, Natural Gas Engine (CP2-1), rich burn, equipped with NSCR

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200202 - Natural Gas ICE <1000 B	MMcf	24.0000 MMcf	748.0000 BHPNG<1000	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	1.61	0.95	134.4000	1.0000	134.4000	Y	Y	Y	Y	
Nitrogen Oxides	1.16	0.69	96.6000	1.0000	96.6000	Y	Y	Y	Y	Ru74.9 (25 ppm) <1000 BHP
Particulate Matter	0.12	0.07	10.0000	1.0000	10.0000	Y	Y		Y	
Sulfur Oxides	0.01	0.00	0.6000	1.0000	0.6000	Y	Y		Y	
Carbon Monoxide	70.68	41.82	5890.0000	1.0000	5890.0000	Y	Y	Y	Y	

CO = 2500 ppm

DEVICE NO: 10714 1 - 748 BHP Waukesha, Model L579OGU, Natural Gas Engine (CP2-2), rich burn, equipped with NSCR

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200202 - Natural Gas ICE <1000 B	MMcf	24.0000 MMcf	748.0000 BHPNG<1000	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	1.61	0.95	134.4000	1.0000	134.4000	Y	Y	Y	Y	
Nitrogen Oxides	1.16	0.69	96.6000	1.0000	96.6000	Y	Y	Y	Y	Ru74.9 (25 ppm) <1000 BHP
Particulate Matter	0.12	0.07	10.0000	1.0000	10.0000	Y	Y		Y	
Sulfur Oxides	0.01	0.00	0.6000	1.0000	0.6000	Y	Y		Y	
Carbon Monoxide	70.68	41.82	5890.0000	1.0000	5890.0000	Y	Y	Y	Y	

CO = 2500 ppm

DEVICE NO: 21521 1 - 238 Barrel Emergency / Standby / Blowdown Tank

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
31000104 - Sumps	sqft-surf.	186.2700 sqft-surf.	0.0213 sqft-surf.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.03	0.01	3.6500	0.1000	0.3700	Y	Y		Y	Sump/Pit Cover

Diameter of tank assumed at 15.4'.

Equipment and Emissions Summary

00041 - 1661 Aera Energy LLC Permit Period: 4/1/2017 to 3/31/2018 SIC Code 1311 - Crude Oil Production

DEVICE NO: 20005 1 - 5000 Barrel FWKO/Wash Tank (TOLD-T330A)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301071 - Brth Ht>20' VP 3.1-5.0psi	bbl-Cap.	5000.0000 bbl-Cap.	0.5708 bbl-Cap.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.30	0.07	1.2000	0.1000	0.1200	Y	Y		Y	Vapor Recovery (90%)

DEVICE NO: 20006 1 - 5000 Barrel C-Block LACT Tank (TOLD-T310A)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301071 - Brth Ht>20' VP 3.1-5.0psi	bbl-Cap.	5000.0000 bbl-Cap.	0.5708 bbl-Cap.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.30	0.07	1.2000	0.1000	0.1200	Y	Y		Y	Vapor Recovery (90%)

DEVICE NO: 20007 1 - 5000 Barrel D-Block LACT Tank (TOLD-T320A)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301071 - Brth Ht>20' VP 3.1-5.0psi	bbl-Cap.	5000.0000 bbl-Cap.	0.5708 bbl-Cap.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.30	0.07	1.2000	0.1000	0.1200	Y	Y		Y	Vapor Recovery (90%)

DEVICE NO: 20008 1 - 5000 Barrel PWT Pre-Wemco Tank / LACT Tank (TWCF-T280A)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301069 - Brth Ht>20' VP <1.5psi	bbl-Cap.	5000.0000 bbl-Cap.	0.5708 bbl-Cap.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.09	0.02	0.3400	0.1000	0.0300	Y	Y		Y	Vapor Recovery (90%)

DEVICE NO: 20009 1 - 5000 Barrel PWT Spare Pre-Wemco Tank / LACT Tank (TWCF-T280B)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301069 - Brth Ht>20' VP <1.5psi	bbl-Cap.	5000.0000 bbl-Cap.	0.5708 bbl-Cap.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.09	0.02	0.3400	0.1000	0.0300	Y	Y		Y	Vapor Recovery (90%)

Equipment and Emissions Summary

00041 - 1661 Aera Energy LLC Permit Period: 4/1/2017 to 3/31/2018 SIC Code 1311 - Crude Oil Production

DEVICE NO: 10771 1 - Crude Oil Loading Facility, bottom loaded with vapor recovery (Out of Service)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40600142 - Oil Loading Facility	Mgal	900.0000 Mbbl	200.0000 bbl	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	5.17	2.30	2.7400	0.1000	0.2700	Y	Y		Y	Vapor Recovery (90%)

DEVICE NO: 10754 1 - 173 Barrel Produced Water Tank (Wemco #1) (TWCF-W001) Out of Service

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301062 - Brth Ht<12' VP 1.5-3.0psi	bbl-Cap.	173.0000 bbl-Cap.	0.0197 bbl-Cap.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.01	0.00	1.0600	0.1000	0.1100	Y	Y		Y	Vapor Recovery (90%)

DEVICE NO: 10755 1 - 173 Barrel Produced Water Tank (Wemco #2) (TWCF-W002) Out of Service

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301062 - Brth Ht<12' VP 1.5-3.0psi	bbl-Cap.	173.0000 bbl-Cap.	0.0197 bbl-Cap.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.01	0.00	1.0600	0.1000	0.1100	Y	Y		Y	Vapor Recovery (90%)

DEVICE NO: 10756 1 - 173 Barrel Produced Water Tank (Wemco #3) (TWCF-W003) Out of Service

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301062 - Brth Ht<12' VP 1.5-3.0psi	bbl-Cap.	173.0000 bbl-Cap.	0.0197 bbl-Cap.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.01	0.00	1.0600	0.1000	0.1100	Y	Y		Y	Vapor Recovery (90%)

DEVICE NO: 10758 1 - 3000 Barrel Produced Water Tank (Spare Source Water Tank) (TWCF-T260B)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301070 - Brth Ht>20' VP 1.5-3.0psi	bbl-Cap.	3000.0000 bbl-Cap.	0.3425 bbl-Cap.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.11	0.03	0.7400	0.1000	0.0700	Y	Y		Y	Vapor Recovery (90%)

Equipment and Emissions Summary

00041 - 1661 Aera Energy LLC Permit Period: 4/1/2017 to 3/31/2018 SIC Code 1311 - Crude Oil Production

DEVICE NO: 10759 1 - 3000 Barrel Produced Water Tank (Spare Source Water Tank) (TWCF-T260A)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301070 - Brth Ht>20' VP 1.5-3.0psi	bbl-Cap.	3000.0000 bbl-Cap.	0.3425 bbl-Cap.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.11	0.03	0.7400	0.1000	0.0700	Y	Y		Y	Vapor Recovery (90%)

DEVICE NO: 10761 1 - 1000 Barrel Produced Water Tank (Clean Water Tank) (TWCF-T500) (Out of Service)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301066 - Brth Ht 12-20' VP 1.5-3.0	bbl-Cap.	1000.0000 bbl-Cap.	0.1142 bbl-Cap.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.04	0.01	0.8500	0.1000	0.0900	Y	Y		Y	Vapor Recovery (90%)

DEVICE NO: 10765 1 - 5000 Barrel Produced Water Tank (Old Wemco Tank) (TWCF-T100) Out of Service

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301066 - Brth Ht 12-20' VP 1.5-3.0	bbl-Cap.	5000.0000 bbl-Cap.	0.5708 bbl-Cap.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.21	0.05	0.8500	0.1000	0.0900	Y	Y		Y	Vapor Recovery (90%)

DEVICE NO: 10766 1 - 5000 Barrel Produced Water Tank (New Wemco Tank) (TWCF-T400)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301070 - Brth Ht>20' VP 1.5-3.0psi	bbl-Cap.	5000.0000 bbl-Cap.	0.5708 bbl-Cap.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.19	0.04	0.7400	0.1000	0.0700	Y	Y		Y	Vapor Recovery (90%)

DEVICE NO: 10768 1 - 500 Barrel Produced Water Tank (Slop Tank) (TWCF-T600) Out of Service

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301066 - Brth Ht 12-20' VP 1.5-3.0	bbl-Cap.	500.0000 bbl-Cap.	0.0571 bbl-Cap.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.02	0.00	0.8500	0.1000	0.0900	Y	Y		Y	Vapor Recovery (90%)

Equipment and Emissions Summary

00041 - 1661 Aera Energy LLC Permit Period: 4/1/2017 to 3/31/2018 SIC Code 1311 - Crude Oil Production

DEVICE NO: 10769 1 - 1600 Barrel Produced Water Tank (Flotation Cell) (TWCF-T200) (Out of Service)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301066 - Brth Ht 12-20' VP 1.5-3.0	bbl-Cap.	1600.0000 bbl-Cap.	0.1826 bbl-Cap.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.07	0.02	0.8500	0.1000	0.0900	Y	Y		Y	Vapor Recovery (90%)

DEVICE NO: 10770 1 - 70000 Barrel Wastewater Pit (Emergency Cement Bowl) (CMTD-S70K) (Out of Service)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
31000105 - Pits	sqft-surf.	34636.0000 sqft-surf.	48.1056 sqft-surf.	Calculate Hourly Using 720 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	3.46	9.62	0.2000	1.0000	0.2000	Y	Y	Y	Y	

DEVICE NO: 18808 1 - 42.75 Sqft-Surface (9.5' x 4.5') Covered Trough (Sump)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
31000104 - Sumps	sqft-surf.	42.7500 sqft-surf.	0.0049 sqft-surf.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.08	0.02	3.6500	1.0000	3.6500	Y	Y		Y	

DEVICE NO: 18809 2 - 500 Barrel Waste Fluids/Solids Storage Tanks

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301065 - Brth Ht 12-20' VP <1.5psi	bbl-Cap.	500.0000 bbl-Cap.	0.0571 bbl-Cap.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.02	0.00	0.3700	0.1000	0.0400	Y	Y		Y	Vapor Recovery (90%)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301081 - Work VP <1.5 psi	Mbbl	1825.0000 Mbbl	0.2083 Mbbl	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	2.23	0.51	12.2300	0.1000	1.2200	Y	Y		Y	Vapor Recovery (90%)

Equipment and Emissions Summary

00041 - 1661 Aera Energy LLC Permit Period: 4/1/2017 to 3/31/2018 SIC Code 1311 - Crude Oil Production

DEVICE NO: 10767 1 - 1000 Barrel Crude Oil Storage Tank (Solids Tank) (TWSI-T001)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301066 - Brth Ht 12-20' VP 1.5-3.0	bbl-Cap.	1000.0000 bbl-Cap.	0.1142 bbl-Cap.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.04	0.01	0.8500	0.1000	0.0900	Y	Y		Y	Vapor Recovery (90%)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301082 - Work VP 1.5-3.0psi	Mbbl	1825.0000 Mbbl	0.2083 Mbbl	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	2.23	0.51	24.4700	0.1000	2.4500	Y	Y		Y	Vapor Recovery (90%)

DEVICE NO: 10795 1 - 3000 Barrel Produced Water Tank (Hartman A Tank) (TWPM-T210A)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301070 - Brth Ht>20' VP 1.5-3.0psi	bbl-Cap.	3000.0000 bbl-Cap.	0.3425 bbl-Cap.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.11	0.03	0.7400	0.1000	0.0700	Y	Y		Y	Vapor Recovery (90%)

DEVICE NO: 10796 1 - 3000 Barrel Produced Water Tank (Hartman B Tank) (TWPM-T210B)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301070 - Brth Ht>20' VP 1.5-3.0psi	bbl-Cap.	3000.0000 bbl-Cap.	0.3425 bbl-Cap.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.11	0.03	0.7400	0.1000	0.0700	Y	Y		Y	Vapor Recovery (90%)

DEVICE NO: 20597 1 - 3000 Barrel Produced Water Tank (Filtered Water) (T-240A)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301069 - Brth Ht>20' VP <1.5psi	bbl-Cap.	3000.0000 bbl-Cap.	0.3425 bbl-Cap.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.05	0.01	0.3400	0.1000	0.0300	Y	Y		Y	Vapor Recovery (90%)

Equipment and Emissions Summary

00041 - 1661 Aera Energy LLC Permit Period: 4/1/2017 to 3/31/2018 SIC Code 1311 - Crude Oil Production

DEVICE NO: 10800 1 - 830 Barrel Filter Agent Silo with Baghouse Control System (TWPM-T010)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
30501107 - Dry Material Silo-cont	Tons	867.0000 Tons	14.0000 Tons	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Particulate Matter	0.12	3.78	0.2700	1.0000	0.2700	Y	Y		Y	

DEVICE NO: 10775 1 - 616 BHP Waukesha, Model F352IGL, Natural Gas Engine (C-202), lean burn

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200202 - Natural Gas ICE <1000 B	MMcf	100.2000 MMcf	1232.0000 BHPNG<1000	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	19.86	4.64	396.5000	1.0000	396.5000	Y	Y	Y	Y	
Nitrogen Oxides	8.71	2.03	173.9000	1.0000	173.9000	Y	Y	Y	Y	Ru74.9 (45 ppm) <1000 BHP
Particulate Matter	0.50	0.12	10.0000	1.0000	10.0000	Y	Y		Y	
Sulfur Oxides	0.03	0.01	0.6000	1.0000	0.6000	Y	Y		Y	
Carbon Monoxide	295.09	68.91	5890.0000	1.0000	5890.0000	Y	Y	Y	Y	
CO = 2500 ppm										

DEVICE NO: 10806 1 - Tank Truck LPG Loading Facility with Closed Vapor Recovery System

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40899999 - LPG Loading Rack	Mgal	40000.0000 Mgal	18.0000 Mgal	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	12.00	10.80	120.0000	0.0100	0.6000	Y	Y	Y	Y	Vapor Recovery (90%)

Equipment and Emissions Summary

00041 - 1661 Aera Energy LLC Permit Period: 4/1/2017 to 3/31/2018 SIC Code 1311 - Crude Oil Production

DEVICE NO: 20598 1 - 8 MMBTU/hr BYIS Manufacturing Oil Heater, Unit No. 601A, equipped with a Bloom Engineering/Gideon Ultra Low NOx burner

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
10200601 - Boiler-Nat Gas-Default	MMcf	71.4000 MMcf	8.0000 MMBTU NG	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.20	0.04	5.5000	1.0000	5.5000	Y	Y		Y	
Nitrogen Oxides	0.55	0.12	15.3600	1.0000	15.3600	Y	Y	Y	Y	
Particulate Matter	0.27	0.06	7.6000	1.0000	7.6000	Y	Y		Y	
Sulfur Oxides	0.02	0.00	0.6000	1.0000	0.6000	Y	Y		Y	
Carbon Monoxide	11.09	2.36	310.6000	1.0000	310.6000	Y	Y	Y	Y	

NOx based on 12 ppm; CO based on 400 ppm

DEVICE NO: 10779 1 - 14.25 MMBTU/hr Wheco Heater (Serial No. WJ-81-009) Lo-NOx (Out of Service)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
10200602 - Boiler-NG-40 ppm NOx	MMcf	78.9000 MMcf	14.2500 MMBTU NG	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.22	0.07	5.5000	1.0000	5.5000	Y	Y		Y	
Nitrogen Oxides	1.97	0.68	50.0000	1.0000	50.0000	Y	Y		Y	
Particulate Matter	0.30	0.10	7.6000	1.0000	7.6000	Y	Y		Y	
Sulfur Oxides	0.02	0.01	0.6000	1.0000	0.6000	Y	Y		Y	
Carbon Monoxide	12.25	4.22	310.6000	1.0000	310.6000	Y	Y	Y	Y	

NOx based on 40 ppm; CO based on 400 ppm

DEVICE NO: 10772 1 - 1050 MMBTU/hr John Zink Hydra 8" Flare, Gas Plant 7

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
10201302 - Flare	MMcf	86.5000 MMcf	1.0000 MMcf	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	2.35	54.40	54.4000	1.0000	54.4000	Y	Y		Y	
Nitrogen Oxides	3.09	71.40	71.4000	1.0000	71.4000	Y	Y		Y	
Particulate Matter	0.23	5.25	5.2500	1.0000	5.2500	Y	Y		Y	
Sulfur Oxides	3.09	71.40	71.4000	1.0000	71.4000	Y	Y		Y	
Carbon Monoxide	16.80	388.50	388.5000	1.0000	388.5000	Y	Y		Y	

Equipment and Emissions Summary

00041 - 1661 Aera Energy LLC Permit Period: 4/1/2017 to 3/31/2018 SIC Code 1311 - Crude Oil Production

DEVICE NO: 10773 1 - 205 MMBTU/hr 6" Flare, including coaxial 2 MMBTU/Hr 1.5" unit

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
10201302 - Flare	MMcf	0.0000 MMcf	0.1952 MMcf	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	10.62	54.4000	1.0000	54.4000	Y	Y		Y	
Nitrogen Oxides	0.00	13.94	71.4000	1.0000	71.4000	Y	Y		Y	
Particulate Matter	0.00	1.02	5.2500	1.0000	5.2500	Y	Y		Y	
Sulfur Oxides	0.00	13.94	71.4000	1.0000	71.4000	Y	Y	Y	Y	
Carbon Monoxide	0.00	75.84	388.5000	1.0000	388.5000	Y	Y		Y	

DEVICE NO: 10781 1 - 1.5 MMBTU/hr Glycol Reboiler, part of a Dehydrator System rated at 12.3 MMSCFD, with glycol vent piped to the 14 bbl Glycol System Condensate Tank No. V-600 (pressure vessel), utilizing ethylene glycol

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
31000227 - Glycol Reboiler Vent	Tons	178.3000 Tons	0.0204 Tons	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	8.92	2.04	2000.0000	0.0500	100.0000	Y	Y		Y	Glycol condensor

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301063 - Brth Ht<12' VP 3.1-5.0psi	bbl-Cap.	14.0000 bbl-Cap.	0.0016 bbl-Cap.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	0.00	2.0300	0.1000	0.2000	Y	Y		Y	Vapor Recovery (90%)

DEVICE NO: 17184 1 - 630 BHP Detroit Diesel Emergency Standby Engine, Model 71237305, Serial No. L16349, EPA Family Name: DDL2VA081299, I.D. No. VNFGPLT7GNGP7ELGEN1

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200103 - Diesel ICE - g/hp-hr<1000	BHP-g<1000	12600.0000 BHP-d<1000	63.0000 BHP-d<1000	Calculate Hourly Using 200 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.01	0.15	1.0700	1.0000	1.0700	Y	Y		Y	
Nitrogen Oxides	0.21	2.10	15.1000	1.0000	15.1000	Y	Y		Y	
Particulate Matter	0.01	0.15	1.0800	1.0000	1.0800	Y	Y		Y	
Sulfur Oxides	0.00	0.03	2.4200	0.1000	0.2400	Y	Y		Y	Low Sulfur 0.05 fuel
Carbon Monoxide	0.05	0.46	3.2800	1.0000	3.2800	Y	Y		Y	

Equipment and Emissions Summary

00041 - 1661 Aera Energy LLC Permit Period: 4/1/2017 to 3/31/2018 SIC Code 1311 - Crude Oil Production

DEVICE NO: 10784 1 - 1108 BHP Waukesha, Model L7042GL, Natural Gas Engine (C-101), lean burn (OUT OF SERVICE)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200205 - Natural Gas ICE>=1000 B	MMcf	151.6090 MMcf	2216.0000 BHPNG>1000	Calculate Annual Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	21.60	4.93	284.9000	1.0000	284.9000	Y	Y	Y	Y	
Nitrogen Oxides	13.18	3.01	173.9000	1.0000	173.9000	Y	Y	Y	Y	
Particulate Matter	0.76	0.17	10.0000	1.0000	10.0000	Y	Y		Y	
Sulfur Oxides	0.05	0.01	0.6000	1.0000	0.6000	Y	Y		Y	
Carbon Monoxide	446.49	101.90	5890.0000	1.0000	5890.0000	Y	Y	Y	Y	

NOx based on 45 ppm (R 74.9) CO = 2500 ppm

DEVICE NO: 10785 1 - 1108 BHP Waukesha, Model L7042GL, Natural Gas Engine (C-102), lean burn

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200205 - Natural Gas ICE>=1000 B	MMcf	75.8045 MMcf	1108.0000 BHPNG>1000	Calculate Annual Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	10.80	2.48	284.9000	1.0000	284.9000	Y	Y	Y	Y	
Nitrogen Oxides	6.59	1.51	173.9000	1.0000	173.9000	Y	Y	Y	Y	
Particulate Matter	0.38	0.09	10.0000	1.0000	10.0000	Y	Y		Y	
Sulfur Oxides	0.02	0.01	0.6000	1.0000	0.6000	Y	Y		Y	
Carbon Monoxide	223.24	51.24	5890.0000	1.0000	5890.0000	Y	Y	Y	Y	

CO = 2500 ppm

Equipment and Emissions Summary

00041 - 1661 Aera Energy LLC Permit Period: 4/1/2017 to 3/31/2018 SIC Code 1311 - Crude Oil Production

DEVICE NO: 10788 1 - 0.86 MMBTU/hr Glycol Reboiler, part of a Dehydrator System rated at 16.1 MMSCFD, natural gas fired, with glycol vent piped to the 11 bbl Glycol System Condensate Tank No. V-403 (pressure vessel), utilizing triethylene glycol (OUT OF SERVICE)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
10200601 - Boiler-Nat Gas-Default	MMcf	7.2000 MMcf	0.8650 MMBTU NG	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.02	0.00	5.5000	1.0000	5.5000	Y	Y		Y	
Nitrogen Oxides	0.36	0.08	100.0000	1.0000	100.0000	Y	Y		Y	
Particulate Matter	0.03	0.01	7.6000	1.0000	7.6000	Y	Y		Y	
Sulfur Oxides	0.00	0.00	0.6000	1.0000	0.6000	Y	Y		Y	
Carbon Monoxide	0.30	0.07	84.0000	1.0000	84.0000	Y	Y		Y	

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
31000227 - Glycol Reboiler Vent	Tons	229.9500 Tons	0.0263 Tons	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	11.50	2.63	2000.0000	0.0500	100.0000	Y	Y		Y	Glycol condensor

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301063 - Brth Ht<12' VP 3.1-5.0psi	bbl-Cap.	11.0000 bbl-Cap.	0.0013 bbl-Cap.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	0.00	2.0300	0.1000	0.2000	Y	Y		Y	Vapor Recovery (90%)

DEVICE NO: 17183 1 - 630 BHP Detroit Diesel Emergency Standby Engine, Model 71237305, Serial No. L16330, EPA Family Name: DDL2VA081299, I.D. No. VNSECSCPGNCSGEN101 (Out of Service)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200103 - Diesel ICE - g/hp-hr<1000	BHP-g<1000	12600.0000 BHP-d<1000	63.0000 BHP-d<1000	Calculate Hourly Using 200 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.01	0.15	1.0700	1.0000	1.0700	Y	Y		Y	
Nitrogen Oxides	0.21	2.10	15.1000	1.0000	15.1000	Y	Y		Y	
Particulate Matter	0.01	0.15	1.0800	1.0000	1.0800	Y	Y		Y	
Sulfur Oxides	0.00	0.03	2.4200	0.1000	0.2400	Y	Y		Y	Low Sulfur 0.05 fuel
Carbon Monoxide	0.05	0.46	3.2800	1.0000	3.2800	Y	Y		Y	

Equipment and Emissions Summary

00041 - 1661 Aera Energy LLC Permit Period: 4/1/2017 to 3/31/2018 SIC Code 1311 - Crude Oil Production

DEVICE NO: 22148 1 - 500 Barrel Emergency / Standby / Blowdown Tank

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
31000104 - Sumps	sqft-surf.	186.2700 sqft-surf.	0.0213 sqft-surf.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.03	0.01	3.6500	0.1000	0.3700	Y	Y		Y	Sump/Pit Cover

DEVICE NO: 21523 2 - 500 Barrel Emergency / Standby / Blowdown Tanks

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
31000104 - Sumps	sqft-surf.	186.2700 sqft-surf.	0.0213 sqft-surf.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.07	0.02	3.6500	0.1000	0.3700	Y	Y		Y	Sump/Pit Cover

DEVICE NO: 10802 856 - Oil Wells

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
31000122 - Crude Oil Well	Well-Day	365.0000 Well-Day	0.0417 Well-Day	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	312.44	71.39	2.0000	1.0000	2.0000	Y	Y		Y	

DEVICE NO: 10803 69 - 500 Barrel Portable Tanks

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301067 - Brth Ht 12-20' VP 3.1-5.0	bbl-Cap.	500.0000 bbl-Cap.	0.0571 bbl-Cap.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	25.53	5.83	1.4800	1.0000	1.4800	Y	Y		Y	

DEVICE NO: 10805 1 - 242.25 Sqft-Surface Sump (Portable Open Top Mixing Bin)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
31000104 - Sumps	sqft-surf.	121.1250 sqft-surf.	0.0841 sqft-surf.	Calculate Hourly Using 1440 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.04	0.05	0.6000	1.0000	0.6000	Y	Y	Y	Y	

Attached is the Air Toxics "Hot Spots" Emission Summary for Aera Energy's Ventura facility (permit VN 0041), from the most recent Air Toxics update in 2012. Since 2012, there have been several equipment changes that would affect emissions of air toxics. Below is a list of these changes.

Equipment No Longer in Use or Out of Service

Device #	Equipment Description
62	IC Engine-Pump WF1-1
63	IC Engine-Pump WF1-2
14478	C-101
14479	C-102
14480	C-103
14481	C-104
14486	Glycol Reboiler
14551	C-101
14552	C-102
14553	C-103
14554	C-104

emission totals

41 **2012** AERA ENERGY LLC

CAS Number	Pollutant Name	lbs/yr	lbs/hr
1110	Gasoline vapors	72.891	0.785
1150	PAHs, total, with individ.	55.51900152	0.03429516396
9901	Diesel engine exhaust, pa	1985.3866	0.49308
9902	Diesel engine exhaust, tot	4227.825	1.05
50000	Formaldehyde	3714.109783	2.71945191605
67561	Methanol	39.236217	0.0044786
67630	Isopropyl alcohol	242.01525	0.0276249
71432	Benzene	656.7411333	0.4548885024
75070	Acetaldehyde	579.758869	0.2236297
91203	Naphthalene	167.5077991	0.04153113886
95476	o-Xylene	15.84813866	0.04138505000
95636	1,2,4-Trimethylbenzene	227.23042	0.0258975
100414	Ethyl benzene	310.6840317	2.14611140889
106423	p-Xylene	25.56801364	3.4456092105
106990	1,3-Butadiene	24.465014	0.006076
107028	Acrolein	214.708402	0.07471398162
108383	m-Xylene	25.58237824	0.011750761
108883	Toluene	374.2222915	0.19535321075
108907	Chlorobenzene	0.0225484	0.0000056
110543	Hexane	13420.1811	11.0611792009
115071	Propylene	2375.965331	4.1543094
1330207	Xylenes (mixed)	268.2866722	0.10381098036
7439921	Lead	0.935758871	0.00023240004
7439965	Manganese	0.3495002	0.0000868
7439976	Mercury	0.225484	0.000056
7440020	Nickel	0.439694506	0.00010920010
7440382	Arsenic	0.1803872	0.0000448
7440439	Cadmium	0.169113139	4.2000017E-05
7440473	Chromium	0.0676452	0.0000168
7440508	Copper	0.462244125	0.00011480028
7440666	Zinc	2.525422152	0.0006272002

CAS Number	Pollutant Name	lbs/yr	lbs/hr
7647010	Hydrochloric acid	21.003834	0.0052164
7782492	Selenium	0.2480324	0.0000616
7783064	Hydrogen sulfide	6.047261089	0.00588234216
18540299	Chromium, hexavalent (&	0.0112742	0.0000028

Air Toxics "Hot Spots" Emission Summary

Most recent data as of : ***2012***

Permit Number *41* AERA ENERGY LLC

Device 62 IC ENGINE-PUMP WF1-1

SCC-20200202-INDUSTRIAL-NATURAL GAS-RECIPROCATING

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	4.996416	0.0009034
50000	Formaldehyde	56.761728	0.0102635
71432	Benzene	6.428688	0.0011624
75070	Acetaldehyde	8.275632	0.0014963
91203	Naphthalene	4.54104	0.0008211
100414	Ethyl benzene	0.643632	0.0001163
107028	Acrolein	3.47256	0.0006279
108883	Toluene	2.689008	0.0004862
110543	Hexane	13.2288	0.002392
115071	Propylene	32.229936	0.0058277
1330207	Xylenes (mixed)	0.658896	0.0001191

Device 63 IC ENGINE-PUMP WF1-2

SCC-20200202-INDUSTRIAL-NATURAL GAS-RECIPROCATING

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	6.076616	0.0009034
50000	Formaldehyde	98.689318	0.0146726
71432	Benzene	11.178622	0.0016619
75070	Acetaldehyde	14.390194	0.0021394
91203	Naphthalene	5.52279	0.0008211
100414	Ethyl benzene	1.116934	0.000166
107028	Acrolein	6.039488	0.0008979
108883	Toluene	4.67194	0.0006946
110543	Hexane	16.0888	0.002392
115071	Propylene	56.038528	0.0083315
1330207	Xylenes (mixed)	1.14478	0.0001702

Device 14001 TK REC PUMP

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	6.076E-10	7E-14
71432	Benzene	0.020765	0.00000237

91203	Naphthalene	6.076E-10	7E-14
95476	o-Xylene	0.00178	2.03E-07
100414	Ethyl benzene	0.0054	0.00000062
106423	p-Xylene	0.00178	2.03E-07
108383	m-Xylene	0.00178	2.03E-07
108883	Toluene	0.014119	0.0000016
110543	Hexane	2.23	0.000254
1330207	Xylenes (mixed)	0.005086	0.00000058
7783064	Hydrogen sulfide	0.000705	8.05E-08

Device 14002 LACT REJECT PUMP

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	6.1E-10	7E-14
71432	Benzene	0.020765	0.0000024
91203	Naphthalene	6.1E-10	7E-14
95476	o-Xylene	0.0018	0.0000002
100414	Ethyl benzene	0.0054	0.00000062
106423	p-Xylene	0.0018	0.0000002
108383	m-Xylene	0.0018	0.0000002
108883	Toluene	0.014	0.0000016
110543	Hexane	2.2	0.00025
1330207	Xylenes (mixed)	0.00509	0.00000058
7783064	Hydrogen sulfide	0.000705	0.00000008

Device 14003 OIL SHIP PUMP

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	6.2E-10	7E-14
71432	Benzene	0.0208	0.0000024
91203	Naphthalene	6.2E-10	7E-14
95476	o-Xylene	0.0018	0.0000002
100414	Ethyl benzene	0.0054	0.00000062
106423	p-Xylene	0.0018	0.0000002
108383	m-Xylene	0.0018	0.0000002
108883	Toluene	0.014	0.0000016
110543	Hexane	2.2	0.00025
1330207	Xylenes (mixed)	0.00509	0.00000058
7783064	Hydrogen sulfide	0.000705	0.00000008

Device 14004 WST WTR SHIP PUMP

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	7.2E-10	8E-14
71432	Benzene	0.022	0.0000025
91203	Naphthalene	7.2E-10	8E-14
95476	o-Xylene	0.0086	0.00000098
100414	Ethyl benzene	0.0054	0.00000062
106423	p-Xylene	0.0086	0.00000098
108383	m-Xylene	0.0086	0.00000098
108883	Toluene	0.038	0.0000044
110543	Hexane	2.8	0.00033
1330207	Xylenes (mixed)	0.025	0.0000028
7783064	Hydrogen sulfide	0.000099	1.1E-08

Device 14016 TRANSFER PUMP 1

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	2.03E-10	7.044E-14
71432	Benzene	0.00683	0.00000237
91203	Naphthalene	2.03E-10	7.044E-14
95476	o-Xylene	0.000502	1.742E-07
100414	Ethyl benzene	0.00178	6.177E-07
106423	p-Xylene	0.0005852	2.031E-07
108383	m-Xylene	0.000585	2.03E-07
108883	Toluene	0.00464	0.00000161
110543	Hexane	0.73	0.0002533
1330207	Xylenes (mixed)	0.00167	5.795E-07
7783064	Hydrogen sulfide	0.0007	2.429E-07

Device 14017 TRANSFER PUMP 2

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	6E-10	7E-14
71432	Benzene	0.02	0.000002
91203	Naphthalene	6E-10	7E-14
95476	o-Xylene	0.0018	0.0000002
100414	Ethyl benzene	0.0054	0.0000006
106423	p-Xylene	0.0018	0.0000002
108383	m-Xylene	0.0018	0.0000002
108883	Toluene	0.014	0.0000016

110543	Hexane	2.2	0.00025
1330207	Xylenes (mixed)	0.005	0.0000006
7783064	Hydrogen sulfide	0.0007	0.00000008

Device 14018 TRANSFER PUMP 3

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	2E-10	6.94E-14
71432	Benzene	0.0068	0.00000236
91203	Naphthalene	2E-10	7E-14
95476	o-Xylene	0.000501	0.0000002
100414	Ethyl benzene	0.001776	0.0000006
106423	p-Xylene	0.00058	0.0000002
108383	m-Xylene	0.000585	0.0000002
108883	Toluene	0.0046	0.0000016
110543	Hexane	0.733	0.00025
1330207	Xylenes (mixed)	0.00167	5.795E-07
7783064	Hydrogen sulfide	0.00023	0.00000008

Device 14019 TRANSFER PUMP 4

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	2E-10	7E-14
71432	Benzene	0.0068	0.000002
91203	Naphthalene	2E-10	7E-14
95476	o-Xylene	0.0005	0.0000002
100414	Ethyl benzene	0.0078	0.0000006
106423	p-Xylene	0.000585	0.0000002
108383	m-Xylene	0.000585	0.0000002
108883	Toluene	0.0046	0.0000016
110543	Hexane	0.733	0.00025
1330207	Xylenes (mixed)	0.0017	0.0000006
7783064	Hydrogen sulfide	0.00023	0.00000008

Device 14020 PR WTR TRAN PUMP 1

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	7E-10	8E-14
71432	Benzene	0.02	0.0000025
91203	Naphthalene	7E-10	8E-14
95476	o-Xylene	0.009	0.000001
100414	Ethyl benzene	0.0054	0.0000006

106423	p-Xylene	0.009	0.000001
108383	m-Xylene	0.009	0.000001
108883	Toluene	0.04	0.000004
110543	Hexane	2.9	0.0003
1330207	Xylenes (mixed)	0.02	0.0000028
7783064	Hydrogen sulfide	0.000099	0.00000001

Device 14021 PR WTR TRAN PUMP 2

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	7E-10	8E-14
71432	Benzene	0.02	0.0000025
91203	Naphthalene	7E-10	8E-14
95476	o-Xylene	0.009	0.000001
100414	Ethyl benzene	0.005	0.0000006
106423	p-Xylene	0.009	0.000001
107028	Acrolein	0.003	0.0000007
108383	m-Xylene	0.009	0.000001
108883	Toluene	0.04	0.000004
110543	Hexane	2.9	0.00032
1330207	Xylenes (mixed)	0.02	0.000003
7783064	Hydrogen sulfide	0.0001	0.00000001

Device 14022 PR WTR TRAN PUMP 3

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	7E-10	8E-14
71432	Benzene	0.02	0.000002
91203	Naphthalene	7E-10	8E-14
95476	o-Xylene	0.009	0.000001
100414	Ethyl benzene	0.005	0.0000006
106423	p-Xylene	0.009	0.000001
107028	Acrolein	0.003	0.0000007
108383	m-Xylene	0.009	0.000001
108883	Toluene	0.04	0.000004
110543	Hexane	2.9	0.0003
1330207	Xylenes (mixed)	0.02	0.000003
7783064	Hydrogen sulfide	0.0001	0.00000001

Device 14023 PR WTR TRAN PUMP 4

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	7E-10	7.98E-14
71432	Benzene	0.02	0.00000228
91203	Naphthalene	7E-10	7.98E-14
95476	o-Xylene	0.009	1.026E-06
100414	Ethyl benzene	0.0054	6.156E-07
106423	p-Xylene	0.009	1.026E-06
107028	Acrolein	0.003	3.42E-07
108383	m-Xylene	0.009	1.026E-06
108883	Toluene	0.04	0.00000456
110543	Hexane	2.9	0.0003306
1330207	Xylenes (mixed)	0.02	0.00000228
7783064	Hydrogen sulfide	0.0001	1.14E-08

Device 14024 PR WTR TRAN PUMP 5

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	7E-10	7.98E-14
71432	Benzene	0.02	0.00000228
91203	Naphthalene	7E-10	7.98E-14
95476	o-Xylene	0.009	1.026E-06
100414	Ethyl benzene	0.005	0.00000057
106423	p-Xylene	0.009	1.026E-06
107028	Acrolein	0.003	3.42E-07
108383	m-Xylene	0.009	1.026E-06
108883	Toluene	0.04	0.00000456
110543	Hexane	2.9	0.0003306
1330207	Xylenes (mixed)	0.02	0.00000228
7783064	Hydrogen sulfide	0.0001	1.14E-08

Device 14025 WTR TRAN PUMP A

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	4.8E-10	7.98E-14
71432	Benzene	0.0147	0.00000228
91203	Naphthalene	4.8E-10	7.98E-14
95476	o-Xylene	0.00496	8.432E-07
100414	Ethyl benzene	0.00363	0.00000057
106423	p-Xylene	0.0058	1.026E-06

107028	Acrolein	0.002148	3.42E-07
108383	m-Xylene	0.00578	1.026E-06
108883	Toluene	0.0257	0.00000456
110543	Hexane	1.92	0.0003306
1330207	Xylenes (mixed)	0.0165	0.00000228
7783064	Hydrogen sulfide	0.000067	1.14E-08

Device 14026 WTR TRAN PUMP B

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	4.8E-10	7.98E-14
71432	Benzene	0.0146	0.00000228
91203	Naphthalene	4.8E-10	7.98E-14
95476	o-Xylene	0.00496	8.432E-07
100414	Ethyl benzene	0.0036	0.00000057
106423	p-Xylene	0.0058	1.026E-06
107028	Acrolein	0.0021	3.42E-07
108383	m-Xylene	0.0058	1.026E-06
108883	Toluene	0.026	0.00000456
110543	Hexane	1.92	0.0003306
1330207	Xylenes (mixed)	0.0165	0.00000228
7783064	Hydrogen sulfide	0.000067	1.14E-08

Device 14027 WTR TRAN PUMP C

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	4.8E-10	7.98E-14
71432	Benzene	0.015	0.00000228
91203	Naphthalene	4.8E-10	7.98E-14
95476	o-Xylene	0.00496	8.432E-07
100414	Ethyl benzene	0.0036	0.00000057
106423	p-Xylene	0.0058	1.026E-06
107028	Acrolein	0.0021	3.42E-07
108383	m-Xylene	0.0058	1.026E-06
108883	Toluene	0.026	0.00000456
110543	Hexane	1.92	0.0003306
1330207	Xylenes (mixed)	0.016	0.00000228
7783064	Hydrogen sulfide	0.000067	1.14E-08

Device 14028 WTR SHIP PUMP

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	3.5E-10	7.98E-14
71432	Benzene	0.01	0.00000228
91203	Naphthalene	3.5E-10	7.98E-14
95476	o-Xylene	0.0045	1.026E-06
100414	Ethyl benzene	0.0025	0.00000057
106423	p-Xylene	0.0045	1.026E-06
107028	Acrolein	0.0015	3.42E-07
108383	m-Xylene	0.0045	1.026E-06
108883	Toluene	0.02	0.00000456
110543	Hexane	1.45	0.0003306
1330207	Xylenes (mixed)	0.01	0.00000228
7783064	Hydrogen sulfide	0.00005	1.14E-08

Device 14029 WTR SHIP PUMP

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	3.5E-10	7.98E-14
71432	Benzene	0.01	0.00000228
91203	Naphthalene	3.5E-10	7.98E-14
95476	o-Xylene	0.0045	1.026E-06
100414	Ethyl benzene	0.0025	0.00000057
106423	p-Xylene	0.0045	1.026E-06
107028	Acrolein	0.0015	3.42E-07
108383	m-Xylene	0.0045	1.026E-06
108883	Toluene	0.02	0.00000456
110543	Hexane	1.45	0.0003306
1330207	Xylenes (mixed)	0.01	0.00000228
7783064	Hydrogen sulfide	0.00005	1.14E-08

Device 14030 WTR SHIP PUMP

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	3.5E-10	7.98E-14
71432	Benzene	0.01	0.00000228
91203	Naphthalene	3.5E-10	7.98E-14
95476	o-Xylene	0.0045	1.026E-06
100414	Ethyl benzene	0.0025	0.00000057
106423	p-Xylene	0.0045	1.026E-06

107028	Acrolein	0.0015	3.42E-07
108383	m-Xylene	0.0045	1.026E-06
108883	Toluene	0.02	0.00000456
110543	Hexane	1.45	0.0003306
1330207	Xylenes (mixed)	0.01	0.00000228
7783064	Hydrogen sulfide	0.00005	1.14E-08

Device 14031 WTR SHIP PUMP

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	3.5E-10	7.98E-14
71432	Benzene	0.01	0.00000228
91203	Naphthalene	3.5E-10	7.98E-14
95476	o-Xylene	0.0045	1.026E-06
100414	Ethyl benzene	0.0025	0.00000057
106423	p-Xylene	0.0045	1.026E-06
107028	Acrolein	0.0015	3.42E-07
108383	m-Xylene	0.0045	1.026E-06
108883	Toluene	0.02	0.00000456
110543	Hexane	1.45	0.0003306
1330207	Xylenes (mixed)	0.01	0.00000228
7783064	Hydrogen sulfide	0.00005	1.14E-08

Device 14032 WTR SHIP PUMP

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	3.5E-10	7.98E-14
71432	Benzene	0.01	0.00000228
91203	Naphthalene	3.5E-10	7.98E-14
95476	o-Xylene	0.0045	1.026E-06
100414	Ethyl benzene	0.0025	0.00000057
106423	p-Xylene	0.0045	1.026E-06
107028	Acrolein	0.0015	3.42E-07
108383	m-Xylene	0.0045	1.026E-06
108883	Toluene	0.02	0.00000456
110543	Hexane	1.45	0.0003306
1330207	Xylenes (mixed)	0.01	0.00000228
7783064	Hydrogen sulfide	0.00005	1.14E-08

Device 14043 PIT V139

SCC-31000105-CRUDE OIL PRODN-CRUDE OIL PITS-

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	2.24E-08	2.56E-12
71432	Benzene	0.56	0.000064
91203	Naphthalene	2.24E-08	2.56E-12
95476	o-Xylene	0.056	0.0000064
100414	Ethyl benzene	0.168	0.0000192
106423	p-Xylene	0.056	0.0000064
107028	Acrolein	0.112	0.0000128
108383	m-Xylene	0.056	0.0000064
108883	Toluene	0.448	0.0000512
110543	Hexane	56	0.0064
1330207	Xylenes (mixed)	0.168	0.0000192
7783064	Hydrogen sulfide	0.0224	0.00000256

Device 14046 ATMOS BST COMP #1

SCC-30600819-FUGITIVE HC EMIS-COMPRESSOR SEALS-GAS STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	4E-09	1.04E-12
71432	Benzene	0.098	0.0000254
91203	Naphthalene	4E-09	1.04E-12
95476	o-Xylene	0.01	0.0000026
100414	Ethyl benzene	0.0037	9.62E-07
106423	p-Xylene	0.01	0.0000026
108383	m-Xylene	0.01	0.0000026
108883	Toluene	0.047	0.00001222
110543	Hexane	0.1	0.000026
1330207	Xylenes (mixed)	0.035	0.0000091
7439921	Lead	6E-10	1.56E-13
7440020	Nickel	1.6E-09	4.16E-13
7440439	Cadmium	3E-10	7.8E-14
7440508	Copper	4E-09	1.04E-12
7440666	Zinc	3E-09	7.8E-13
7783064	Hydrogen sulfide	0.009	0.00000234

Device 14047 ATMOS BST COMP #2

SCC-30600819-FUGITIVE HC EMIS-COMPRESSOR SEALS-GAS STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	5E-09	1.1E-12
71432	Benzene	0.1	0.000022

91203	Naphthalene	5E-09	1.1E-12
95476	o-Xylene	0.01	0.0000022
100414	Ethyl benzene	0.004	0.00000088
106423	p-Xylene	0.01	0.0000022
108383	m-Xylene	0.01	0.0000022
108883	Toluene	0.056	0.00001232
110543	Hexane	0.13	0.0000286
1330207	Xylenes (mixed)	0.04	0.0000088
7439921	Lead	7E-10	1.54E-13
7440020	Nickel	2E-09	4.4E-13
7440439	Cadmium	3.8E-10	8.36E-14
7440508	Copper	5E-09	1.1E-12
7440666	Zinc	3.7E-09	8.14E-13
7783064	Hydrogen sulfide	0.01	0.0000022

Device 14048 IC ENGINE-COMP CP2-1

SCC-20200202-INDUSTRIAL-NATURAL GAS-RECIPROCATING

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	3.578408	0.0010802
50000	Formaldehyde	141.205	0.042625
71432	Benzene	15.97894	0.0048235
75070	Acetaldehyde	20.5886	0.006215
91203	Naphthalene	3.25227	0.0009817
100414	Ethyl benzene	1.597894	0.0004823
107028	Acrolein	8.63628	0.002607
108883	Toluene	6.68674	0.0020185
110543	Hexane	9.4744	0.00286
115071	Propylene	80.168	0.0242
1330207	Xylenes (mixed)	1.6398	0.000495

Device 14049 IC ENGINE-COMP CP2-2

SCC-20200202-INDUSTRIAL-NATURAL GAS-RECIPROCATING

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	2.763348	0.0010802
50000	Formaldehyde	100.99586	0.0394795
71432	Benzene	11.43891	0.0044715
75070	Acetaldehyde	14.727069	0.0057568
91203	Naphthalene	2.511495	0.0009817
100414	Ethyl benzene	1.143891	0.0004471
107028	Acrolein	6.17673	0.0024145
108883	Toluene	4.7838	0.00187
110543	Hexane	7.3164	0.00286

115071	Propylene	57.347913	0.0224174
1330207	Xylenes (mixed)	1.173438	0.0004587

Device 14050 TAYLOR

SCC-31000205-NATURAL GAS PRODN-FLARES-

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	2.14368	0.0038934
50000	Formaldehyde	178.99728	0.3250989
71432	Benzene	24.34608	0.0442179
75070	Acetaldehyde	6.58416	0.0119583
91203	Naphthalene	1.68432	0.0030591
100414	Ethyl benzene	221.10528	0.4015764
107028	Acrolein	1.5312	0.002781
108883	Toluene	8.88096	0.0161298
110543	Hexane	4.44048	0.0080649
115071	Propylene	373.6128	0.678564
1330207	Xylenes (mixed)	4.44048	0.0080649

Device 14053 BOOST COMPRESSOR #3

SCC-30600819-FUGITIVE HC EMIS-COMPRESSOR SEALS-GAS STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	5.5E-09	1.14E-12
71432	Benzene	0.121	0.00002508
91203	Naphthalene	5.5E-09	1.14E-12
95476	o-Xylene	0.011	0.00000228
100414	Ethyl benzene	0.0044	9.12E-07
106423	p-Xylene	0.01485	3.078E-06
108383	m-Xylene	0.01485	3.078E-06
108883	Toluene	0.055	0.0000114
110543	Hexane	13.75	0.00285
1330207	Xylenes (mixed)	0.044	0.00000912
7439921	Lead	5.5E-10	1.14E-13
7440020	Nickel	1.98E-09	4.104E-13
7440439	Cadmium	3.85E-10	7.98E-14
7440508	Copper	5.5E-09	1.14E-12
7440666	Zinc	3.85E-09	7.98E-13
7783064	Hydrogen sulfide	0.011	0.00000228

Device 14054 BOOST COMPRESSOR #4

SCC-30600819-FUGITIVE HC EMIS-COMPRESSOR SEALS-GAS STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	4.5E-09	1.14E-12

71432	Benzene	0.099	0.00002508
91203	Naphthalene	4.5E-09	1.14E-12
95476	o-Xylene	0.01215	3.078E-06
100414	Ethyl benzene	0.0036	9.12E-07
106423	p-Xylene	0.01215	3.078E-06
108383	m-Xylene	0.01215	3.078E-06
108883	Toluene	0.04725	0.00001197
110543	Hexane	11.25	0.00285
1330207	Xylenes (mixed)	0.036	0.00000912
7439921	Lead	4.5E-10	1.14E-13
7440020	Nickel	1.8E-09	4.56E-13
7440439	Cadmium	3.15E-10	7.98E-14
7440508	Copper	4.5E-09	1.14E-12
7440666	Zinc	3.15E-09	7.98E-13
7783064	Hydrogen sulfide	0.009	0.00000228

Device 14055 VAC/ATMO COMP #1

SCC-30600819-FUGITIVE HC EMIS-COMPRESSOR SEALS-GAS STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	1E-08	1.14E-12
71432	Benzene	0.22	0.00002508
91203	Naphthalene	1E-08	1.14E-12
95476	o-Xylene	0.027	3.078E-06
100414	Ethyl benzene	0.008	9.12E-07
106423	p-Xylene	0.027	3.078E-06
108383	m-Xylene	0.027	3.078E-06
108883	Toluene	0.105	0.00001197
110543	Hexane	25	0.00285
1330207	Xylenes (mixed)	0.08	0.00000912
7439921	Lead	1E-09	1.14E-13
7440020	Nickel	4E-09	4.56E-13
7440439	Cadmium	7E-10	7.98E-14
7440508	Copper	1E-08	1.14E-12
7440666	Zinc	7E-09	7.98E-13
7783064	Hydrogen sulfide	0.02	0.00000228

Device 14059 LIQUID TRANS PUMP

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	8.4E-11	6.84E-14
71432	Benzene	0.00182	1.482E-06
91203	Naphthalene	8.4E-11	6.84E-14

95476	o-Xylene	0.00028	2.28E-07
100414	Ethyl benzene	0.00007	5.7E-08
106423	p-Xylene	0.00028	2.28E-07
108383	m-Xylene	0.00028	2.28E-07
108883	Toluene	0.000938	7.638E-07
110543	Hexane	0.224	0.0001824
1330207	Xylenes (mixed)	0.0007	0.00000057
7439921	Lead	1.26E-11	1.026E-14
7440020	Nickel	2.8E-11	2.28E-14
7440439	Cadmium	5.6E-12	4.56E-15
7440508	Copper	8.4E-11	6.84E-14
7440666	Zinc	5.6E-11	4.56E-14
7783064	Hydrogen sulfide	0.00014	1.14E-07

Device 14060 TRAN PUMP P-1

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	6E-10	6.84E-14
71432	Benzene	0.01	0.00000114
91203	Naphthalene	6E-10	6.84E-14
95476	o-Xylene	0.002	2.28E-07
100414	Ethyl benzene	0.0005	5.7E-08
106423	p-Xylene	0.002	2.28E-07
108383	m-Xylene	0.002	2.28E-07
108883	Toluene	0.007	7.98E-07
110543	Hexane	1.6	0.0001824
1330207	Xylenes (mixed)	0.005	0.00000057
7439921	Lead	9E-11	1.026E-14
7440020	Nickel	2E-10	2.28E-14
7440439	Cadmium	4E-11	4.56E-15
7440508	Copper	6E-10	6.84E-14
7440666	Zinc	4E-10	4.56E-14
7783064	Hydrogen sulfide	0.001	1.14E-07

Device 14061 PUMP

SCC-30600819-FUGITIVE HC EMIS-COMPRESSOR SEALS-GAS STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	8.4E-11	6.84E-14
71432	Benzene	0.0014	0.00000114
91203	Naphthalene	8.4E-11	6.84E-14
95476	o-Xylene	0.00028	2.28E-07
100414	Ethyl benzene	0.000007	5.7E-09

106423	p-Xylene	0.00028	2.28E-07
108383	m-Xylene	0.00028	2.28E-07
108883	Toluene	0.00098	7.98E-07
110543	Hexane	0.224	0.0001824
1330207	Xylenes (mixed)	0.0007	0.00000057
7439921	Lead	1.26E-11	1.026E-14
7440020	Nickel	2.8E-11	2.28E-14
7440439	Cadmium	5.6E-12	4.56E-15
7440508	Copper	8.4E-11	6.84E-14
7440666	Zinc	5.6E-11	4.56E-14
7783064	Hydrogen sulfide	0.00014	1.14E-07

Device 14062 SUMP PUMP

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	8.4E-11	6.84E-14
71432	Benzene	0.0014	0.00000114
91203	Naphthalene	8.4E-11	6.84E-14
95476	o-Xylene	0.00028	2.28E-07
100414	Ethyl benzene	0.00007	5.7E-08
106423	p-Xylene	0.00028	2.28E-07
108383	m-Xylene	0.00028	2.28E-07
108883	Toluene	0.00098	7.98E-07
110543	Hexane	0.224	0.0001824
1330207	Xylenes (mixed)	0.0007	0.00000057
7439921	Lead	1.26E-11	1.026E-14
7440020	Nickel	2.8E-11	2.28E-14
7440439	Cadmium	5.6E-12	4.56E-15
7440508	Copper	8.4E-11	6.84E-14
7440666	Zinc	5.6E-11	4.56E-14
7783064	Hydrogen sulfide	0.00014	1.14E-07

Device 14063 LIQUID TRANS PUMP

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	8.4E-11	6.84E-14
71432	Benzene	0.0014	0.00000114
91203	Naphthalene	8.4E-11	6.84E-14
95476	o-Xylene	0.00042	3.42E-07
100414	Ethyl benzene	0.00007	5.7E-08
106423	p-Xylene	0.00042	3.42E-07
108383	m-Xylene	0.00042	3.42E-07

108883	Toluene	0.00098	7.98E-07
110543	Hexane	0.224	0.0001824
1330207	Xylenes (mixed)	0.0007	0.00000057
7439921	Lead	1.26E-11	1.026E-14
7440020	Nickel	2.8E-11	2.28E-14
7440439	Cadmium	5.6E-12	4.56E-15
7440508	Copper	8.4E-11	6.84E-14
7440666	Zinc	5.6E-11	4.56E-14
7783064	Hydrogen sulfide	0.00014	1.14E-07

Device 14064 PIT V135A

SCC-31000105-CRUDE OIL PRODN-CRUDE OIL PITS-

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	1.61E-12	6.391E-15
71432	Benzene	0.0000552	2.1912E-07
91203	Naphthalene	1.61E-12	6.391E-15
95476	o-Xylene	0.0000046	1.826E-08
100414	Ethyl benzene	0.0000138	5.478E-08
106423	p-Xylene	0.0000046	1.826E-08
108383	m-Xylene	0.0000046	1.826E-08
108883	Toluene	0.0000368	1.4608E-07
110543	Hexane	0.00598	2.3738E-05
1330207	Xylenes (mixed)	1.357E-05	5.3867E-08
7783064	Hydrogen sulfide	1.84E-06	7.304E-09

Device 14113 SUMP PUMP

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	3.6E-10	6.84E-14
71432	Benzene	0.012	0.00000228
91203	Naphthalene	3.6E-10	6.84E-14
95476	o-Xylene	0.0012	2.28E-07
100414	Ethyl benzene	0.00324	6.156E-07
106423	p-Xylene	0.0012	2.28E-07
108383	m-Xylene	0.0012	2.28E-07
108883	Toluene	0.0084	1.596E-06
110543	Hexane	1.32	0.0002508
1330207	Xylenes (mixed)	0.003	0.00000057
7783064	Hydrogen sulfide	0.00042	7.98E-08

Device 14114 TK REC PUMP

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	6E-10	6.84E-14
71432	Benzene	0.02	0.00000228
91203	Naphthalene	6E-10	6.84E-14
95476	o-Xylene	0.002	2.28E-07
100414	Ethyl benzene	0.0054	6.156E-07
106423	p-Xylene	0.002	2.28E-07
108383	m-Xylene	0.002	2.28E-07
108883	Toluene	0.014	1.596E-06
110543	Hexane	2.2	0.0002508
1330207	Xylenes (mixed)	0.005	0.00000057
7783064	Hydrogen sulfide	0.0007	7.98E-08

Device 14115 SUMP PUMP

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	6E-10	6.84E-14
71432	Benzene	0.02	0.00000228
91203	Naphthalene	6E-10	6.84E-14
95476	o-Xylene	0.002	2.28E-07
100414	Ethyl benzene	0.0054	6.156E-07
106423	p-Xylene	0.002	2.28E-07
108383	m-Xylene	0.002	2.28E-07
108883	Toluene	0.014	1.596E-06
110543	Hexane	2.2	0.0002508
1330207	Xylenes (mixed)	0.005	0.00000057
7783064	Hydrogen sulfide	0.0007	7.98E-08

Device 14116 SUMP PUMP

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	6.2E-10	7.068E-14
71432	Benzene	0.021	2.533E-06
91203	Naphthalene	6.2E-10	7.068E-14
95476	o-Xylene	0.0015	1.71E-07
100414	Ethyl benzene	0.0054	6.156E-07
106423	p-Xylene	0.0018	2.052E-07
108383	m-Xylene	0.0018	2.052E-07
108883	Toluene	0.0114	0.00000149

110543	Hexane	2.23	0.0002682
1330207	Xylenes (mixed)	0.005	5.96E-07
7783064	Hydrogen sulfide	0.0007	7.98E-08

Device 14117 TK BOT CIR PUMP

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	6E-10	6.84E-14
71432	Benzene	0.02	0.00000228
91203	Naphthalene	6E-10	6.84E-14
95476	o-Xylene	0.002	2.28E-07
100414	Ethyl benzene	0.0054	6.156E-07
106423	p-Xylene	0.002	2.28E-07
108383	m-Xylene	0.002	2.28E-07
108883	Toluene	0.01	0.00000114
110543	Hexane	2.2	0.0002508
1330207	Xylenes (mixed)	0.005	0.00000057
7783064	Hydrogen sulfide	0.0007	7.98E-08

Device 14118 TK BOT CIR PUMP

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	6E-10	6.84E-14
71432	Benzene	0.02	0.00000228
91203	Naphthalene	6E-10	6.84E-14
95476	o-Xylene	0.002	2.28E-07
100414	Ethyl benzene	0.0054	6.156E-07
106423	p-Xylene	0.002	2.28E-07
108383	m-Xylene	0.002	2.28E-07
108883	Toluene	0.01	0.00000114
110543	Hexane	2.2	0.0002508
1330207	Xylenes (mixed)	0.005	0.00000057
7783064	Hydrogen sulfide	0.0007	7.98E-08

Device 14119 TK BOT CIR PUMP

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	6E-10	6.84E-14
71432	Benzene	0.02	0.00000228
91203	Naphthalene	6E-10	6.84E-14
95476	o-Xylene	0.002	2.28E-07
100414	Ethyl benzene	0.0054	6.156E-07

106423	p-Xylene	0.002	2.28E-07
108383	m-Xylene	0.002	2.28E-07
108883	Toluene	0.01	0.00000114
110543	Hexane	2.2	0.0002508
1330207	Xylenes (mixed)	0.005	0.00000057
7783064	Hydrogen sulfide	0.0007	7.98E-08

Device 14120 TK BOT CIR PUMP

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	6E-10	6.84E-14
71432	Benzene	0.02	0.00000228
91203	Naphthalene	6E-10	6.84E-14
95476	o-Xylene	0.002	2.28E-07
100414	Ethyl benzene	0.0054	6.156E-07
106423	p-Xylene	0.002	2.28E-07
108383	m-Xylene	0.002	2.28E-07
108883	Toluene	0.01	0.00000114
110543	Hexane	2.2	0.0002508
1330207	Xylenes (mixed)	0.005	0.00000057
7783064	Hydrogen sulfide	0.0007	7.98E-08

Device 14121 TRANSFER PUMP

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	3E-10	6.84E-14
71432	Benzene	0.01	0.00000228
91203	Naphthalene	3E-10	6.84E-14
95476	o-Xylene	0.001	2.28E-07
100414	Ethyl benzene	0.0027	6.156E-07
106423	p-Xylene	0.001	2.28E-07
108383	m-Xylene	0.001	2.28E-07
108883	Toluene	0.005	0.00000114
110543	Hexane	1.1	0.0002508
1330207	Xylenes (mixed)	0.0025	0.00000057
7783064	Hydrogen sulfide	0.00035	7.98E-08

Device 14122 LACT CHG PUMP P-2

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	6E-10	6.84E-14
71432	Benzene	0.02	0.00000228

91203	Naphthalene	6E-10	6.84E-14
95476	o-Xylene	0.002	2.28E-07
100414	Ethyl benzene	0.0054	6.156E-07
106423	p-Xylene	0.002	2.28E-07
108383	m-Xylene	0.002	2.28E-07
108883	Toluene	0.01	0.00000114
110543	Hexane	2.2	0.0002508
1330207	Xylenes (mixed)	0.005	0.00000057
7783064	Hydrogen sulfide	0.0007	7.98E-08

Device 14123 LACT CHG PUMP P-3

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	6E-10	6.84E-14
71432	Benzene	0.02	0.00000228
91203	Naphthalene	6E-10	6.84E-14
95476	o-Xylene	0.002	2.28E-07
100414	Ethyl benzene	0.0054	6.156E-07
106423	p-Xylene	0.002	2.28E-07
108383	m-Xylene	0.002	2.28E-07
108883	Toluene	0.01	0.00000114
110543	Hexane	2.2	0.0002508
1330207	Xylenes (mixed)	0.005	0.00000057
7783064	Hydrogen sulfide	0.0007	7.98E-08

Device 14124 SHIPPING PUMP

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	6E-10	6.84E-14
71432	Benzene	0.02	0.00000228
91203	Naphthalene	6E-10	6.84E-14
95476	o-Xylene	0.002	2.28E-07
100414	Ethyl benzene	0.0054	6.156E-07
106423	p-Xylene	0.002	2.28E-07
108383	m-Xylene	0.002	2.28E-07
108883	Toluene	0.01	0.00000114
110543	Hexane	2.2	0.0002508
1330207	Xylenes (mixed)	0.005	0.00000057
7783064	Hydrogen sulfide	0.0007	7.98E-08

Device 14125 LACT CHG PUMP P-3

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	6E-10	6.84E-14
71432	Benzene	0.02	0.00000228
91203	Naphthalene	6E-10	6.84E-14
95476	o-Xylene	0.002	2.28E-07
100414	Ethyl benzene	0.0054	6.156E-07
106423	p-Xylene	0.002	2.28E-07
108383	m-Xylene	0.002	2.28E-07
108883	Toluene	0.01	0.00000114
110543	Hexane	2.2	0.0002508
1330207	Xylenes (mixed)	0.005	0.00000057
7783064	Hydrogen sulfide	0.0007	7.98E-08

Device 14126 S/PL SHIP PUMP

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	6E-10	6.84E-14
71432	Benzene	0.02	0.00000228
91203	Naphthalene	6E-10	6.84E-14
95476	o-Xylene	0.002	2.28E-07
100414	Ethyl benzene	0.0054	6.156E-07
106423	p-Xylene	0.002	2.28E-07
108383	m-Xylene	0.002	2.28E-07
108883	Toluene	0.01	0.00000114
110543	Hexane	2.2	0.0002508
1330207	Xylenes (mixed)	0.005	0.00000057
7783064	Hydrogen sulfide	0.0007	7.98E-08

Device 14127 PR WATER TRAN PUMP 1

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	2.31E-10	7.98E-14
71432	Benzene	0.0066	0.00000228
91203	Naphthalene	2.31E-10	7.98E-14
95476	o-Xylene	0.00264	9.12E-07
100414	Ethyl benzene	0.001782	6.156E-07
106423	p-Xylene	0.00264	9.12E-07
108383	m-Xylene	0.00264	9.12E-07
108883	Toluene	0.0132	0.00000456

110543	Hexane	0.957	0.0003306
1330207	Xylenes (mixed)	0.00792	2.736E-06
7783064	Hydrogen sulfide	0.000033	1.14E-08

Device 14128 PR WATER TRAN PUMP 2

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	2.31E-10	7.98E-14
71432	Benzene	0.0066	0.00000228
91203	Naphthalene	2.31E-10	7.98E-14
95476	o-Xylene	0.00264	9.12E-07
100414	Ethyl benzene	0.001782	6.156E-07
106423	p-Xylene	0.00264	9.12E-07
108383	m-Xylene	0.00264	9.12E-07
108883	Toluene	0.0132	0.00000456
110543	Hexane	0.957	0.0003306
1330207	Xylenes (mixed)	0.0066	0.00000228
7783064	Hydrogen sulfide	0.000033	1.14E-08

Device 14129 PR WATER TRAN PUMP 3

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	2.31E-10	7.98E-14
71432	Benzene	0.0066	0.00000228
91203	Naphthalene	2.31E-10	7.98E-14
95476	o-Xylene	0.00264	9.12E-07
100414	Ethyl benzene	0.001782	6.156E-07
106423	p-Xylene	0.00264	9.12E-07
108383	m-Xylene	0.00264	9.12E-07
108883	Toluene	0.0132	0.00000456
110543	Hexane	0.957	0.0003306
1330207	Xylenes (mixed)	0.0066	0.00000228
7783064	Hydrogen sulfide	0.000033	1.14E-08

Device 14130 PR WATER TRAN PUMP 4

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	2.31E-10	7.98E-14
71432	Benzene	0.0066	0.00000228
91203	Naphthalene	2.31E-10	7.98E-14
95476	o-Xylene	0.00264	9.12E-07
100414	Ethyl benzene	0.001782	6.156E-07

106423	p-Xylene	0.00264	9.12E-07
108383	m-Xylene	0.00264	9.12E-07
108883	Toluene	0.0132	0.00000456
110543	Hexane	0.957	0.0003306
1330207	Xylenes (mixed)	0.0066	0.00000228
7783064	Hydrogen sulfide	0.000033	1.14E-08

Device 14131 WTR TRANS PUMP

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	3.5E-10	7.98E-14
71432	Benzene	0.01	0.00000228
91203	Naphthalene	3.5E-10	7.98E-14
95476	o-Xylene	0.004	9.12E-07
100414	Ethyl benzene	0.0027	6.156E-07
106423	p-Xylene	0.004	9.12E-07
108383	m-Xylene	0.004	9.12E-07
108883	Toluene	0.02	0.00000456
110543	Hexane	1.45	0.0003306
1330207	Xylenes (mixed)	0.0125	0.00000285
7783064	Hydrogen sulfide	0.00005	1.14E-08

Device 14145 PIT V111A

SCC-31000105-CRUDE OIL PRODN-CRUDE OIL PITS-

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	1.12E-10	1.281E-14
71432	Benzene	0.00464	5.307E-07
91203	Naphthalene	1.12E-10	1.281E-14
95476	o-Xylene	0.00032	3.66E-08
100414	Ethyl benzene	0.00096	1.098E-07
106423	p-Xylene	0.00032	3.66E-08
108383	m-Xylene	0.00032	3.66E-08
108883	Toluene	0.00256	2.928E-07
110543	Hexane	0.416	0.00004758
1330207	Xylenes (mixed)	0.000944	1.0797E-07
7783064	Hydrogen sulfide	0.000128	1.464E-08

Device 14146 PIT V112

SCC-31000105-CRUDE OIL PRODN-CRUDE OIL PITS-

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	6.3E-11	7.21E-15
71432	Benzene	0.00216	2.472E-07

91203	Naphthalene	6.3E-11	7.21E-15
95476	o-Xylene	0.00018	2.06E-08
100414	Ethyl benzene	0.00054	6.18E-08
106423	p-Xylene	0.00018	2.06E-08
108383	m-Xylene	0.00018	2.06E-08
108883	Toluene	0.00144	1.648E-07
110543	Hexane	2.34	0.0002678
1330207	Xylenes (mixed)	0.000531	6.077E-08
7783064	Hydrogen sulfide	0.000072	8.24E-09

Device 14222 SUMP PUMP

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	6.176E-10	7E-14
71432	Benzene	0.020765	2.3704E-06
95476	o-Xylene	0.0015259	1.7419E-07
100414	Ethyl benzene	0.0054038	6.1687E-07
106423	p-Xylene	0.0017802	2.0322E-07
108383	m-Xylene	0.0086175	2.0322E-07
108883	Toluene	0.014119	1.6118E-06
110543	Hexane	2.2299	0.00025455
1330207	Xylenes (mixed)	0.0050863	5.8063E-07
7783064	Hydrogen sulfide	0.0007051	8.0488E-08

Device 14223 SUMP PUMP

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	6.176E-10	7E-14
71432	Benzene	0.020765	2.3704E-06
91203	Naphthalene	6.176E-10	7E-14
95476	o-Xylene	0.0015259	1.7419E-07
100414	Ethyl benzene	0.0054038	6.1687E-07
106423	p-Xylene	0.0017802	2.0322E-07
108383	m-Xylene	0.0017802	2.0322E-07
108883	Toluene	0.014119	1.6118E-06
110543	Hexane	2.2299	0.00025455
1330207	Xylenes (mixed)	0.0050863	5.8063E-07
7783064	Hydrogen sulfide	0.0007051	8.0488E-08

Device 14224 FILT CHG PUMP P-1

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	7.205E-10	8E-14
71432	Benzene	0.021863	2.4958E-06
91203	Naphthalene	7.205E-10	8E-14
95476	o-Xylene	0.0073864	8.432E-07
100414	Ethyl benzene	0.0054038	6.1687E-07
106423	p-Xylene	0.0086175	9.8373E-07
107028	Acrolein	0.0032002	7.3061E-07
108383	m-Xylene	0.0086175	9.8373E-07
108883	Toluene	0.038389	4.382E-06
110543	Hexane	2.862	0.00032671
1330207	Xylenes (mixed)	0.024621	2.8107E-06
7783064	Hydrogen sulfide	9.675E-05	1.1045E-08

Device 14225 FILT CHG PUMP P-2

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	7.205E-10	8E-14
71432	Benzene	0.021863	2.4958E-06
91203	Naphthalene	7.205E-10	8E-14
95476	o-Xylene	0.0073864	8.432E-07
100414	Ethyl benzene	0.0054038	6.1687E-07
106423	p-Xylene	0.0086175	9.8373E-07
107028	Acrolein	0.0032002	7.3061E-07
108383	m-Xylene	0.0086175	9.8373E-07
108883	Toluene	0.038387	4.382E-06
110543	Hexane	2.862	0.00032671
1330207	Xylenes (mixed)	0.024621	2.8107E-06
7783064	Hydrogen sulfide	9.675E-05	1.1045E-08

Device 14226 WTR TRANS PUMP

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
107028	Acrolein	0.000416	3.653E-07
7783064	Hydrogen sulfide	1.258E-05	1.1045E-08

Device 14227 WTR TRANS PUMP

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
107028	Acrolein	0.000416	3.648E-07

7783064	Hydrogen sulfide	1.258E-05	1.1045E-08

Device 14243 FILT CHG PUMP 1

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	5.4E-10	8E-14
71432	Benzene	0.016425	2.4958E-06
91203	Naphthalene	5.4E-10	8E-14
95476	o-Xylene	0.005535	8.413E-07
100414	Ethyl benzene	0.00405	6.1687E-07
106423	p-Xylene	0.00645	9.8373E-07
107028	Acrolein	0.0024	3.648E-07
108383	m-Xylene	0.00645	9.8373E-07
108883	Toluene	0.0285	4.382E-06
110543	Hexane	2.145	0.00032671
1330207	Xylenes (mixed)	0.01875	2.8107E-06
7783064	Hydrogen sulfide	0.0000726	1.1045E-08

Device 14244 FILT CHG PUMP 2

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	5.4E-10	8E-14
71432	Benzene	0.0165	2.4958E-06
91203	Naphthalene	5.4E-10	8E-14
95476	o-Xylene	0.00555	8.432E-07
100414	Ethyl benzene	0.00405	6.1687E-07
106423	p-Xylene	0.00645	9.8373E-07
107028	Acrolein	0.0024	3.648E-07
108383	m-Xylene	0.00645	9.8373E-07
108883	Toluene	0.0285	4.382E-06
110543	Hexane	2.145	0.00032671
1330207	Xylenes (mixed)	0.01875	2.8107E-06
7783064	Hydrogen sulfide	7.275E-05	1.1045E-08

Device 14245 FILT CHG PUMP 3

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	5.4E-10	8E-14
71432	Benzene	0.0165	2.4958E-06
91203	Naphthalene	5.4E-10	8E-14
95476	o-Xylene	0.00555	8.432E-07
100414	Ethyl benzene	0.00405	6.1687E-07

106423	p-Xylene	0.00645	9.8373E-07
107028	Acrolein	0.0024	3.648E-07
108383	m-Xylene	0.00645	9.8373E-07
108883	Toluene	0.0285	4.382E-06
110543	Hexane	2.145	0.00032671
1330207	Xylenes (mixed)	0.01875	2.8107E-06
7783064	Hydrogen sulfide	0.0000726	1.1045E-08

Device 14246 FILT CHG PUMP 4

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	5.4E-10	8E-14
71432	Benzene	0.0165	2.4958E-06
91203	Naphthalene	5.4E-10	8E-14
95476	o-Xylene	0.00555	8.432E-07
100414	Ethyl benzene	0.00405	6.1687E-07
106423	p-Xylene	0.00645	9.8373E-07
107028	Acrolein	0.0024	3.648E-07
108383	m-Xylene	0.00645	9.8373E-07
108883	Toluene	0.0285	4.382E-06
110543	Hexane	2.145	0.00032671
1330207	Xylenes (mixed)	0.01875	2.8107E-06
7783064	Hydrogen sulfide	0.0000726	1.1045E-08

Device 14247 WTR TRAN PUMP

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
107028	Acrolein	0.00192	3.653E-07
7783064	Hydrogen sulfide	5.802E-05	1.1045E-08

Device 14248 WTR TRAN PUMP

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
107028	Acrolein	0.0192	3.653E-07
7783064	Hydrogen sulfide	5.808E-05	1.1045E-08

Device 14249 WTR TRAN PUMP

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
107028	Acrolein	0.00192	3.3653E-07
7783064	Hydrogen sulfide	5.808E-05	1.1045E-08

Device 14250 WTR TRAN PUMP

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
107028	Acrolein	0.00192	3.653E-07
7783064	Hydrogen sulfide	5.808E-05	1.1045E-08

Device 14253 COMPONENT FUGITIVES

SCC-31088801-FUGITIVE EMISSION-NOT CLASSIFIED-OTHER

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	6.119E-07	4.38E-11
71432	Benzene	13.86784	0.0030278
91203	Naphthalene	6.119E-07	4.38E-11
95476	o-Xylene	1.4907928	0.0003254
100414	Ethyl benzene	0.5157103	0.0001125
106423	p-Xylene	1.73348	0.0003784
108383	m-Xylene	1.73348	0.0003784
108883	Toluene	6.673898	0.0014571
110543	Hexane	1599.1353	0.3491478
1330207	Xylenes (mixed)	4.940418	0.0010786
7439921	Lead	8.667E-08	1.892E-11
7440020	Nickel	2.267E-07	4.949E-11
7440439	Cadmium	4.464E-08	9.746E-12
7440508	Copper	6.197E-07	1.353E-10
7440666	Zinc	4.377E-07	9.557E-11
7783064	Hydrogen sulfide	1.3174448	0.0002876

Device 14254 WELL CELLARS

SCC-31000105-CRUDE OIL PRODN-CRUDE OIL PITS-

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	2.469E-07	2.06E-09
71432	Benzene	5.493344	0.0458318
91203	Naphthalene	2.469E-07	2.06E-09
95476	o-Xylene	4.338368	0.0361957
100414	Ethyl benzene	0.20564	0.0017156
106423	p-Xylene	0.691968	0.0057732
108383	m-Xylene	0.691968	0.0057732
108883	Toluene	2.6633984	0.0222211
110543	Hexane	638.44224	5.326626
1330207	Xylenes (mixed)	1.980928	0.0165272
7783064	Hydrogen sulfide	0.5254208	0.0043836

Device 14255 PURCHASED PRODUCTS

SCC-31088801-FUGITIVE EMISSION-NOT CLASSIFIED-OTHER

		Pounds per Year	Pounds per Hour
67561	Methanol	21.674121	0.0024742
67630	Isopropyl alcohol	112.73871	0.0128697
91203	Naphthalene	0.019802	2.261E-06
100414	Ethyl benzene	0.9776235	0.0001116
108883	Toluene	0.956823	0.0001092
1330207	Xylenes (mixed)	29.827917	0.003405

Device 14258 WELL SERVICE RIGS

SCC-20200102-INDUSTRIAL-DIST.OIL/DIESEL-RECIPROCATING

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	6.3022778	0.0015652
9901	Diesel engine exhaust, particulate matter (Diesel PM)	1985.3866	0.49308
9902	Diesel engine exhaust, total organic gas	4227.825	1.05
50000	Formaldehyde	195.04366	0.04844
71432	Benzene	20.970012	0.005208
75070	Acetaldehyde	88.276986	0.021924
91203	Naphthalene	2.2210174	0.0005516
100414	Ethyl benzene	1.2288878	0.0003052
106990	1,3-Butadiene	24.465014	0.006076
107028	Acrolein	3.8219538	0.0009492
108883	Toluene	11.83791	0.00294
108907	Chlorobenzene	0.0225484	0.0000056
110543	Hexane	3.0327598	0.0007532
115071	Propylene	52.650514	0.013076
1330207	Xylenes (mixed)	4.7802608	0.0011872
7439921	Lead	0.9357586	0.0002324
7439965	Manganese	0.3495002	0.0000868
7439976	Mercury	0.225484	0.000056
7440020	Nickel	0.4396938	0.0001092
7440382	Arsenic	0.1803872	0.0000448
7440439	Cadmium	0.169113	0.000042
7440473	Chromium	0.0676452	0.0000168
7440508	Copper	0.4622422	0.0001148
7440666	Zinc	2.5254208	0.0006272
7647010	Hydrochloric acid	21.003834	0.0052164
7782492	Selenium	0.2480324	0.0000616
18540299	Chromium, hexavalent (& compounds)	0.0112742	0.0000028

Device 14478 C-101

SCC-20200202-INDUSTRIAL-NATURAL GAS-RECIPROCATING

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	8.922452	0.0015908
50000	Formaldehyde	790.75458	0.1409886
71432	Benzene	89.54253	0.0159651
75070	Acetaldehyde	115.28316	0.0205545
91203	Naphthalene	8.109255	0.0014458
100414	Ethyl benzene	8.954253	0.0015965
107028	Acrolein	48.378407	0.0086256
108883	Toluene	37.438863	0.0066752
110543	Hexane	32.7096	0.005832
115071	Propylene	448.92563	0.0800417
1330207	Xylenes (mixed)	9.181403	0.001637

Device 14479 C-102

SCC-20200202-INDUSTRIAL-NATURAL GAS-RECIPROCATING

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	6.475308	0.0015908
50000	Formaldehyde	588.71232	0.1446336
71432	Benzene	66.675231	0.0163806
75070	Acetaldehyde	85.843989	0.0210899
91203	Naphthalene	5.885145	0.0014458
100414	Ethyl benzene	6.666534	0.0016378
107028	Acrolein	36.023022	0.00885
108883	Toluene	27.879432	0.0068493
110543	Hexane	20.4414	0.005022
115071	Propylene	334.28283	0.0821259
1330207	Xylenes (mixed)	6.837978	0.0016799

Device 14480 C-103

SCC-20200202-INDUSTRIAL-NATURAL GAS-RECIPROCATING

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	4.690032	0.0015908
50000	Formaldehyde	465.51672	0.1579014
71432	Benzene	52.722264	0.0178831
75070	Acetaldehyde	67.8789	0.0230242
91203	Naphthalene	4.26258	0.0014458
100414	Ethyl benzene	5.272704	0.0017884
107028	Acrolein	28.484064	0.0096616
108883	Toluene	22.043628	0.0074771

110543	Hexane	9.7908	0.003321
115071	Propylene	264.32772	0.0896589
1330207	Xylenes (mixed)	5.406432	0.0018338

Device 14481 C-104

SCC-20200203-INDUSTRIAL-NATURAL GAS-TURBINE-COGENERTN

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	5.161392	0.0015908
50000	Formaldehyde	518.99846	0.1599652
71432	Benzene	58.780476	0.0181172
75070	Acetaldehyde	75.678516	0.0233255
91203	Naphthalene	4.69098	0.0014458
100414	Ethyl benzene	5.878836	0.0018119
107028	Acrolein	31.756752	0.009788
108883	Toluene	24.577056	0.0075751
110543	Hexane	10.7748	0.003321
115071	Propylene	294.70129	0.0908325
1330207	Xylenes (mixed)	6.028632	0.0018581

Device 14482 BOOSTER PLANT 2 C-201

SCC-20200202-INDUSTRIAL-NATURAL GAS-RECIPROCATING

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	2.295916	0.0008838
50000	Formaldehyde	302.03453	0.1162665
71432	Benzene	34.207278	0.0131679
75070	Acetaldehyde	44.042075	0.0169537
91203	Naphthalene	2.086665	0.0008032
100414	Ethyl benzene	3.420494	0.0013167
107028	Acrolein	18.480721	0.007114
108883	Toluene	14.302715	0.0055057
110543	Hexane	5.9619	0.002295
115071	Propylene	171.50399	0.0660195
1330207	Xylenes (mixed)	3.508169	0.0013504

Device 14483 BOOSTER PLANT 2 C-202

SCC-20200202-INDUSTRIAL-NATURAL GAS-RECIPROCATING

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	1.857944	0.0008838
50000	Formaldehyde	255.9403	0.1217475
71432	Benzene	28.988278	0.0137893
75070	Acetaldehyde	37.320646	0.0177529
91203	Naphthalene	1.68861	0.0008032

100414	Ethyl benzene	2.898544	0.0013788
107028	Acrolein	15.66103	0.0074497
108883	Toluene	12.120152	0.0057654
110543	Hexane	29.1368	0.01386
115071	Propylene	145.33398	0.0691335
1330207	Xylenes (mixed)	2.972332	0.0014139

Device 14486 GLYCOL REBOILER

SCC-20200202-INDUSTRIAL-NATURAL GAS-RECIPROCATING

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	0.0024	0.00000032
50000	Formaldehyde	0.102	0.0000136
71432	Benzene	0.048	0.0000064
75070	Acetaldehyde	0.0258	0.00000344
91203	Naphthalene	0.0018	0.00000024
100414	Ethyl benzene	0.057	0.0000076
107028	Acrolein	0.0162	0.00000216
108883	Toluene	0.2196	0.00002928
110543	Hexane	0.0378	0.00000504
115071	Propylene	4.386	0.0005848
1330207	Xylenes (mixed)	0.1632	0.00002176

Device 14487 WHECO HEATER #1

SCC-20200202-INDUSTRIAL-NATURAL GAS-RECIPROCATING

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	0	0
50000	Formaldehyde	0	0
71432	Benzene	0	0
75070	Acetaldehyde	0	0
91203	Naphthalene	0	0
100414	Ethyl benzene	0	0
107028	Acrolein	0	0
108883	Toluene	0	0
110543	Hexane	0	0
115071	Propylene	0	0
1330207	Xylenes (mixed)	0	0

Device 14488 WHECO HEATER #2

SCC-20200202-INDUSTRIAL-NATURAL GAS-RECIPROCATING

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	0.014248	0.00000544
50000	Formaldehyde	0.438126	0.0001672

71432	Benzene	0.206596	0.00007888
75070	Acetaldehyde	0.110422	0.00004216
91203	Naphthalene	0.010686	0.00000408
100414	Ethyl benzene	0.245778	0.00009384
107028	Acrolein	0.096174	0.00003672
108883	Toluene	0.94393	0.0003604
110543	Hexane	0.163852	0.00006256
115071	Propylene	18.8786	0.007208
1330207	Xylenes (mixed)	0.701714	0.0002679

Device 14490 WELL CELLARS

SCC-31000105-CRUDE OIL PRODN-CRUDE OIL PITS-

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	1.835E-07	1.532E-09
71432	Benzene	4.08634	0.034102
91203	Naphthalene	1.835E-07	1.532E-09
95476	o-Xylene	0.443264	0.0036992
100414	Ethyl benzene	0.152372	0.0012716
106423	p-Xylene	0.515987	0.0043061
108383	m-Xylene	0.515987	0.0043061
108883	Toluene	1.984299	0.0165597
110543	Hexane	474.431	3.9593
1330207	Xylenes (mixed)	1.475238	0.0067277

Device 14498 PIT V-127

SCC-31000105-CRUDE OIL PRODN-CRUDE OIL PITS-

		Pounds per Year	Pounds per Hour
107028	Acrolein	0.051068	5.8296E-06
7783064	Hydrogen sulfide	0.0015439	1.7625E-07

Device 14499 GLYCOL VENT

SCC-31088801-FUGITIVE EMISSION-NOT CLASSIFIED-OTHER

		Pounds per Year	Pounds per Hour
71432	Benzene	5.25	0.0010762
95476	o-Xylene	0.045	9.225E-06
100414	Ethyl benzene	1.93	0.0003956
106423	p-Xylene	0.0454	9.307E-06
108383	m-Xylene	0.053	0.00001087
108883	Toluene	2.523	0.0005172
110543	Hexane	851.56	0.1745698
1330207	Xylenes (mixed)	0.151	0.00003096

Device 14500 GLYCOL VENT

SCC-31088801-FUGITIVE EMISSION-NOT CLASSIFIED-OTHER

		Pounds per Year	Pounds per Hour
71432	Benzene	6.7845	0.00077716
95476	o-Xylene	0.058698	6.7238E-06
100414	Ethyl benzene	2.4932	0.0002856
106423	p-Xylene	0.068481	7.8445E-06
108383	m-Xylene	0.068481	7.8445E-06
108883	Toluene	3.2616	0.00037362
110543	Hexane	1100.9	0.12611
1330207	Xylenes (mixed)	0.19566	2.2413E-05

Device 14501 COMPONENT FUGITIVES

SCC-31088801-FUGITIVE EMISSION-NOT CLASSIFIED-OTHER

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	1.227E-06	1.325E-10
71432	Benzene	27.451384	0.0029658
91203	Naphthalene	1.227E-06	1.325E-10
95476	o-Xylene	2.9641654	0.0003202
100414	Ethyl benzene	1.022126	0.0001104
106423	p-Xylene	3.431423	0.0003707
108383	m-Xylene	3.431423	0.0003707
108883	Toluene	13.14162	0.0014198
110543	Hexane	3186.8428	0.3443112
1330207	Xylenes (mixed)	9.856215	0.0010648
7439921	Lead	1.745E-07	1.885E-11
7440020	Nickel	4.527E-07	4.891E-11
7440439	Cadmium	8.907E-08	6.713E-12
7440508	Copper	1.234E-06	1.333E-10
7440666	Zinc	8.688E-07	9.387E-11
7783064	Hydrogen sulfide	2.628324	0.0002839

Device 14502 COMPONENT FUGITIVES-

SCC-31088801-FUGITIVE EMISSION-NOT CLASSIFIED-OTHER

		Pounds per Year	Pounds per Hour
71432	Benzene	0.2711624	0.00008967
100414	Ethyl benzene	4.881935	0.0016144

Device 14503 PURCHASED PRODUCTS

SCC-31088801-FUGITIVE EMISSION-NOT CLASSIFIED-OTHER

		Pounds per Year	Pounds per Hour
50000	Formaldehyde	0.0001406	1.605E-08

67561	Methanol	17.562096	0.0020044
67630	Isopropyl alcohol	129.27654	0.0147552
91203	Naphthalene	0.023647	2.699E-06
100414	Ethyl benzene	0.0367503	4.195E-06
1330207	Xylenes (mixed)	6.870357	0.0007841

Device 14504 VENTURA SOLVENT

SCC-31088801-FUGITIVE EMISSION-NOT CLASSIFIED-OTHER

		Pounds per Year	Pounds per Hour
71432	Benzene	120.80129	0.0137677
91203	Naphthalene	120.80129	0.0137677
95636	1,2,4-Trimethylbenzene	227.23042	0.0258975
108883	Toluene	120.80129	0.0137677
1330207	Xylenes (mixed)	143.32692	0.016335

Device 14507 TRANSFER PUMP #1

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	5.686E-10	7E-14
71432	Benzene	0.0191038	2.3704E-06
91203	Naphthalene	5.686E-10	7E-14
95476	o-Xylene	0.001288	1.7419E-07
100414	Ethyl benzene	0.0045632	6.1687E-07
106423	p-Xylene	0.0014996	2.0322E-07
108383	m-Xylene	0.0014996	2.0322E-07
108883	Toluene	0.011868	1.6118E-06
110543	Hexane	1.886	0.00025455
1330207	Xylenes (mixed)	0.0046828	5.8063E-07
7783064	Hydrogen sulfide	0.0005888	0.00070507

Device 14508 TRANSFER PUMP #2

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	5.244E-10	7E-14
71432	Benzene	0.01748	2.3704E-06
91203	Naphthalene	5.244E-10	7E-14
95476	o-Xylene	0.001288	1.7419E-07
100414	Ethyl benzene	0.0045632	6.1687E-07
106423	p-Xylene	0.001472	2.0322E-07
108383	m-Xylene	0.001472	2.0322E-07
108883	Toluene	0.01196	1.6118E-06
110543	Hexane	1.882872	0.00025455

1330207	Xylenes (mixed)	0.004324	5.8063E-07
7783064	Hydrogen sulfide	0.0005952	8.0488E-08

Device 14509 C-BLOCK CHARGE PUMP1

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	3.6E-10	8.208E-14
71432	Benzene	0.011	2.4958E-06
91203	Naphthalene	3.6E-10	8.208E-14
95476	o-Xylene	0.0037	8.432E-07
100414	Ethyl benzene	0.0027	6.1687E-07
106423	p-Xylene	0.0043	9.8373E-07
107028	Acrolein	0.0016	3.648E-07
108383	m-Xylene	0.0043	9.8373E-07
108883	Toluene	0.019	4.382E-06
110543	Hexane	1.43	0.00032671
1330207	Xylenes (mixed)	0.0123	2.8107E-06
7783064	Hydrogen sulfide	0.0000495	1.1339E-08

Device 14510 C-BLOCK CHARGE PUMP2

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	3.6E-10	8E-14
71432	Benzene	0.011	2.4958E-06
91203	Naphthalene	3.6E-10	8E-14
95476	o-Xylene	0.0037	8.432E-07
100414	Ethyl benzene	0.0027	6.1687E-07
106423	p-Xylene	0.0043	9.8373E-07
107028	Acrolein	0.0016	3.648E-07
108383	m-Xylene	0.0043	9.8373E-07
108883	Toluene	0.019	4.382E-06
110543	Hexane	1.43	0.00032671
1330207	Xylenes (mixed)	0.0125	2.8107E-06
7783064	Hydrogen sulfide	0.0000495	1.1339E-08

Device 14511 C-BLOCK CHARGE PUMP3

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	3.6E-10	8E-14
71432	Benzene	0.011	2.4958E-06
91203	Naphthalene	3.6E-10	8E-14
95476	o-Xylene	0.0037	8.432E-07

100414	Ethyl benzene	0.0027	6.1687E-07
106423	p-Xylene	0.0043	9.8373E-07
107028	Acrolein	0.0016	7.3061E-07
108383	m-Xylene	0.0043	9.8373E-07
108883	Toluene	0.019	4.382E-06
110543	Hexane	1.43	0.00032671
1330207	Xylenes (mixed)	0.0125	2.8107E-06
7783064	Hydrogen sulfide	0.0000495	1.1339E-08

Device 14512 C-BLOCK CHARGE PUMP4

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	**Pounds per Hour**
1150	PAHs, total, with individ. components also reported	3.6E-10	8E-14
71432	Benzene	0.011	2.4958E-06
91203	Naphthalene	3.6E-10	8E-14
95476	o-Xylene	0.0037	8.432E-07
100414	Ethyl benzene	0.0027	6.1687E-07
106423	p-Xylene	0.0043	9.8373E-07
107028	Acrolein	0.0016	7.3061E-07
108383	m-Xylene	0.0043	9.8373E-07
108883	Toluene	0.019	4.382E-06
110543	Hexane	1.43	0.00032671
1330207	Xylenes (mixed)	0.0125	2.8107E-06
7783064	Hydrogen sulfide	0.0000495	1.1339E-08

Device 14513 D-BLOCK CHARGE PUMP1

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	**Pounds per Hour**
1150	PAHs, total, with individ. components also reported	7.205E-10	8E-14
71432	Benzene	0.021863	2.4958E-06
91203	Naphthalene	7.205E-10	8E-14
95476	o-Xylene	0.0073864	8.432E-07
100414	Ethyl benzene	0.0054038	6.1687E-07
106423	p-Xylene	0.0086175	9.8373E-07
107028	Acrolein	0.0032002	7.3061E-07
108383	m-Xylene	0.0086175	9.8373E-07
108883	Toluene	0.038387	4.382E-06
110543	Hexane	2.862	0.00032671
1330207	Xylenes (mixed)	0.024621	2.8107E-06
7783064	Hydrogen sulfide	9.933E-05	1.1339E-08

Device 14518 PLANT 2, PUMP #23

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
107028	Acrolein	0.0032002	3.653E-07
7783064	Hydrogen sulfide	9.675E-05	1.1045E-08

Device 14519 PLANT 2, PUMP #24

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
107028	Acrolein	0.0032002	3.653E-07
7783064	Hydrogen sulfide	9.675E-05	1.1045E-08

Device 14520 PLANT 2, PUMP #25

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
107028	Acrolein	0.0032002	3.653E-07
7783064	Hydrogen sulfide	9.675E-05	1.1045E-08

Device 14521 PLANT 3, PUMP #31

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
107028	Acrolein	0.0032002	3.653E-07
7783064	Hydrogen sulfide	9.675E-05	1.1045E-08

Device 14522 PLANT 3, PUMP #32

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
107028	Acrolein	0.0032002	3.653E-07
7783064	Hydrogen sulfide	9.675E-05	1.1045E-08

Device 14523 PLANT 3, PUMP #33

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
107028	Acrolein	0.0032002	3.653E-07
7783064	Hydrogen sulfide	9.675E-05	1.1045E-08

Device 14524 PLANT 3, PUMP #34

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
107028	Acrolein	0.0032002	3.653E-07
7783064	Hydrogen sulfide	9.675E-05	1.1045E-08

Device 14525 WEMCO PUMP #1

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	7.205E-10	8E-14

71432	Benzene	0.021863	2.4958E-06
91203	Naphthalene	7.205E-10	8E-14
95476	o-Xylene	0.0073864	8.432E-07
100414	Ethyl benzene	0.0054038	6.1687E-07
106423	p-Xylene	0.0086175	9.8373E-07
107028	Acrolein	0.0022002	7.3061E-07
108383	m-Xylene	0.0086175	9.8373E-07
108883	Toluene	0.038387	4.382E-06
110543	Hexane	2.862	0.00032671
1330207	Xylenes (mixed)	0.024621	2.8107E-06
7783064	Hydrogen sulfide	9.933E-05	1.1339E-08

Device 14526 WEMCO PUMP #2

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	7.205E-10	8E-14
71432	Benzene	0.021863	2.4958E-06
91203	Naphthalene	7.205E-10	8E-14
95476	o-Xylene	0.0073864	8.432E-07
100414	Ethyl benzene	0.0054038	6.1687E-07
106423	p-Xylene	0.008675	9.8373E-07
107028	Acrolein	0.0032002	7.3061E-07
108383	m-Xylene	0.0086175	9.8373E-07
108883	Toluene	0.038387	4.382E-06
110543	Hexane	2.862	0.00032671
1330207	Xylenes (mixed)	0.024621	2.8107E-06
7783064	Hydrogen sulfide	9.933E-05	1.1339E-08

Device 14527 WEMCO PUMP #3

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	7.205E-10	8E-14
71432	Benzene	0.021863	2.4958E-06
91203	Naphthalene	7.205E-10	8E-14
95476	o-Xylene	0.0073864	8.432E-07
100414	Ethyl benzene	0.0054038	6.1687E-07
106423	p-Xylene	0.0086175	9.8373E-07
107028	Acrolein	0.0032002	7.3061E-07
108383	m-Xylene	0.0086175	9.8373E-07
108883	Toluene	0.038387	4.382E-06
110543	Hexane	2.862	0.00032671
1330207	Xylenes (mixed)	0.024621	2.8107E-06

7783064	Hydrogen sulfide	9.933E-05	1.1339E-08

Device 14529 D.E. FILTER PUMP #1

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	5.4E-10	8E-14
71432	Benzene	0.0165	2.4958E-06
91203	Naphthalene	5.4E-10	8E-14
95476	o-Xylene	0.00555	8.432E-07
100414	Ethyl benzene	0.00405	6.1687E-07
106423	p-Xylene	0.00645	9.8373E-07
107028	Acrolein	0.0024	7.3061E-07
108383	m-Xylene	0.00645	9.8373E-07
108883	Toluene	0.0285	4.382E-06
110543	Hexane	2.145	0.00032671
1330207	Xylenes (mixed)	0.01875	2.8107E-06
7783064	Hydrogen sulfide	7.425E-05	1.1339E-08

Device 14530 D.E. FILTER PUMP #2

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	5.4E-10	8E-14
71432	Benzene	0.0165	2.4958E-06
91203	Naphthalene	5.4E-10	8E-14
95476	o-Xylene	0.00555	8.432E-07
100414	Ethyl benzene	0.00405	6.1687E-07
106423	p-Xylene	0.00645	9.8373E-07
107028	Acrolein	0.0024	7.3061E-07
108383	m-Xylene	0.00645	9.8373E-07
108883	Toluene	0.0285	4.382E-06
110543	Hexane	2.145	0.00032671
1330207	Xylenes (mixed)	0.01875	2.8107E-06
7783064	Hydrogen sulfide	7.425E-05	1.1339E-08

Device 14531 D.E. FILTER PUMP #3

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	5.4E-10	8E-14
71432	Benzene	0.0165	2.4958E-06
91203	Naphthalene	5.4E-10	8E-14
95476	o-Xylene	0.00555	8.432E-07
100414	Ethyl benzene	0.00405	6.1687E-07

106423	p-Xylene	0.00645	9.8373E-07
107028	Acrolein	0.0024	7.3061E-07
108383	m-Xylene	0.00645	9.8373E-07
108883	Toluene	0.0285	4.382E-06
110543	Hexane	2.145	0.00032671
1330207	Xylenes (mixed)	0.01875	2.8107E-06
7783064	Hydrogen sulfide	7.425E-05	1.1339E-08

Device 14532 D. E. FILTER PUMP #4

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	5.4E-10	8E-14
71432	Benzene	0.0165	2.4958E-06
91203	Naphthalene	5.4E-10	8E-14
95476	o-Xylene	0.00555	8.432E-07
100414	Ethyl benzene	0.00405	6.1687E-07
106423	p-Xylene	0.00645	9.8373E-07
107028	Acrolein	0.0024	7.3061E-07
108383	m-Xylene	0.00645	9.8373E-07
108883	Toluene	0.0285	4.382E-06
110543	Hexane	2.145	0.00032671
1330207	Xylenes (mixed)	0.01875	2.8107E-06
7783064	Hydrogen sulfide	7.425E-05	1.1339E-08

Device 14534 NEW 5M PUMP #2

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	3.6E-10	8E-14
71432	Benzene	0.011	2.4958E-06
91203	Naphthalene	3.6E-10	8E-14
95476	o-Xylene	0.0037	8.432E-07
100414	Ethyl benzene	0.0027	6.1687E-07
106423	p-Xylene	0.0043	9.8373E-07
107028	Acrolein	0.0016	7.3061E-07
108383	m-Xylene	0.0043	9.8373E-07
108883	Toluene	0.019	4.3822E-06
110543	Hexane	1.43	0.00032671
1330207	Xylenes (mixed)	0.0125	2.8107E-06
7783064	Hydrogen sulfide	0.0000495	1.1339E-08

Device 14535 NEW 5M PUMP #3

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	3.6E-10	8E-14
71432	Benzene	0.011	2.4958E-06
91203	Naphthalene	3.6E-10	8E-14
95476	o-Xylene	0.0037	8.432E-07
100414	Ethyl benzene	0.0027	6.1687E-07
106423	p-Xylene	0.0043	9.8373E-07
107028	Acrolein	0.0016	7.3061E-07
108383	m-Xylene	0.0043	9.8373E-07
108883	Toluene	0.019	4.382E-06
110543	Hexane	1.43	0.00032671
1330207	Xylenes (mixed)	0.0125	2.8107E-06
7783064	Hydrogen sulfide	0.0000495	1.1339E-08

Device 14537 OLD 5M PUMP #2

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	3.6E-10	8E-14
71432	Benzene	0.011	2.4958E-06
91203	Naphthalene	3.6E-10	8E-14
95476	o-Xylene	0.0037	8.432E-07
100414	Ethyl benzene	0.0027	6.1687E-07
106423	p-Xylene	0.0043	9.3873E-07
107028	Acrolein	0.0016	7.3061E-07
108383	m-Xylene	0.0043	9.3873E-07
108883	Toluene	0.019	4.382E-06
110543	Hexane	1.43	0.00032671
1330207	Xylenes (mixed)	0.0125	2.8107E-06
7783064	Hydrogen sulfide	0.0000495	1.1339E-08

Device 14538 OLD 5M PUMP #3

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	3.6E-10	8E-14
71432	Benzene	0.011	2.4958E-06
91203	Naphthalene	3.6E-10	8E-14
95476	o-Xylene	0.0037	8.432E-07
100414	Ethyl benzene	0.0027	6.1687E-07
106423	p-Xylene	0.0043	9.8373E-07

107028	Acrolein	0.0016	7.3061E-07
108383	m-Xylene	0.0043	9.8373E-07
108883	Toluene	0.019	4.382E-06
110543	Hexane	1.43	0.00032671
1330207	Xylenes (mixed)	0.0125	2.8107E-06
7783064	Hydrogen sulfide	0.0000495	1.1339E-08

Device 14539 1M CHARGE PUMP #1

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	7.2E-10	8E-14
71432	Benzene	0.022	2.4958E-06
91203	Naphthalene	7.2E-10	8E-14
95476	o-Xylene	0.0074	8.432E-07
100414	Ethyl benzene	0.0054	6.1687E-07
106423	p-Xylene	0.0086	9.8373E-07
108383	m-Xylene	0.0086	9.8373E-07
108883	Toluene	0.038	4.382E-06
110543	Hexane	2.86	0.00032671
1330207	Xylenes (mixed)	0.025	2.8107E-06
7783064	Hydrogen sulfide	0.000099	1.129E-08

Device 14540 1M WATER PUMP #1

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	2.376E-10	8E-14
71432	Benzene	0.00726	2.4958E-06
91203	Naphthalene	2.376E-10	8E-14
95476	o-Xylene	0.002442	8.432E-07
100414	Ethyl benzene	0.001782	6.1687E-07
106423	p-Xylene	12	9.8373E-07
108383	m-Xylene	12	9.8373E-07
108883	Toluene	0.01254	4.382E-06
110543	Hexane	0.9438	0.00032671
1330207	Xylenes (mixed)	0.00825	2.8107E-06
7783064	Hydrogen sulfide	3.267E-05	1.1339E-08

Device 14541 1M WATER PUMP #2

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	2.376E-10	8E-14
71432	Benzene	0.00726	2.4958E-06

91203	Naphthalene	2.376E-10	8E-14
95476	o-Xylene	0.002442	8.432E-07
100414	Ethyl benzene	0.001782	6.1687E-07
106423	p-Xylene	0.002838	9.8373E-07
108383	m-Xylene	0.002838	9.8373E-07
108883	Toluene	0.01254	4.382E-06
110543	Hexane	0.9438	0.00032671
1330207	Xylenes (mixed)	0.00792	2.8107E-06
7783064	Hydrogen sulfide	3.267E-05	1.1339E-08

Device 14542 1M WATER PUMP #3

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	2.376E-10	8E-14
71432	Benzene	0.00726	2.4958E-06
91203	Naphthalene	2.376E-10	8E-14
95476	o-Xylene	0.002442	8.432E-07
100414	Ethyl benzene	0.001782	6.1687E-07
106423	p-Xylene	0.002838	9.8373E-07
108383	m-Xylene	0.002838	9.8373E-07
108883	Toluene	0.01254	4.382E-06
110543	Hexane	0.9438	0.00032671
1330207	Xylenes (mixed)	0.00825	2.8107E-06
7783064	Hydrogen sulfide	3.267E-05	1.1339E-08

Device 14544 FLOAT. CELL PUMP #1

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	7.205E-10	8E-14
71432	Benzene	0.021863	2.4958E-06
91203	Naphthalene	7.205E-10	8E-14
95476	o-Xylene	0.0073864	8.432E-07
100414	Ethyl benzene	0.0054038	6.1687E-07
106423	p-Xylene	0.0086175	9.8373E-07
107028	Acrolein	0.0032002	7.3061E-07
108383	m-Xylene	0.0086175	9.8373E-07
108883	Toluene	0.038387	4.382E-06
110543	Hexane	2.862	0.00032671
1330207	Xylenes (mixed)	0.024621	2.8107E-06
7783064	Hydrogen sulfide	9.933E-05	1.1339E-08

Device 14545 FLOAT. CELL PUMP #2

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	7.205E-10	8E-14
71432	Benzene	0.021863	2.4958E-06
91203	Naphthalene	7.205E-10	8E-14
95476	o-Xylene	0.0073864	8.432E-07
100414	Ethyl benzene	0.0054038	6.1687E-07
106423	p-Xylene	0.0086175	9.8373E-07
107028	Acrolein	0.0032002	7.3061E-07
108383	m-Xylene	0.0086175	9.8373E-07
108883	Toluene	0.038387	4.382E-06
110543	Hexane	2.862	0.00032671
1330207	Xylenes (mixed)	0.024621	0
7783064	Hydrogen sulfide	9.933E-05	1.1339E-05

Device 14546 SOLIDS HANDLING PUMP

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	7.205E-10	8E-14
71432	Benzene	0.021863	2.4958E-06
91203	Naphthalene	7.205E-10	8E-14
95476	o-Xylene	0.0073864	8.432E-07
100414	Ethyl benzene	0.0054038	6.1687E-07
106423	p-Xylene	0.0086175	9.8373E-07
107028	Acrolein	0.0032002	7.3061E-07
108383	m-Xylene	0.0086175	9.8373E-07
108883	Toluene	0.038387	4.382E-06
110543	Hexane	2.862	0.00032671
1330207	Xylenes (mixed)	0.024621	2.8107E-06
7783064	Hydrogen sulfide	9.933E-05	1.1339E-08

Device 14547 LACT PUMP #1

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	6.176E-10	7E-14
71432	Benzene	0.020765	2.3704E-06
91203	Naphthalene	6.176E-10	7E-14
95476	o-Xylene	0.0015259	1.7419E-07
100414	Ethyl benzene	0.0054038	6.1687E-07
106423	p-Xylene	0.0017802	2.0322E-07

108383	m-Xylene	0.0017802	2.0322E-07
108883	Toluene	0.014119	1.6118E-06
110543	Hexane	2.2299	0.00025455
1330207	Xylenes (mixed)	0.0050863	5.8063E-07
7783064	Hydrogen sulfide	0.0007051	8.0488E-08

Device 14548 LACT PUMP #2

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	6.176E-10	7E-14
71432	Benzene	0.020765	2.3704E-06
91203	Naphthalene	6.176E-10	7E-14
95476	o-Xylene	0.0015259	1.7419E-07
100414	Ethyl benzene	0.0054038	6.1687E-07
106423	p-Xylene	0.0017802	2.0322E-07
108383	m-Xylene	0.0017802	2.0322E-07
108883	Toluene	0.014119	1.6118E-06
110543	Hexane	2.2299	0.00025455
1330207	Xylenes (mixed)	0.0050863	5.8063E-07
7783064	Hydrogen sulfide	0.0007051	8.0488E-08

Device 14549 LACT PUMP #3

SCC-30600818-FUGITIVE HC EMIS-PUMP SEALS-HEAVY LIQD STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	6.176E-10	7E-14
71432	Benzene	0.020765	2.3704E-06
91203	Naphthalene	6.176E-10	7E-14
95476	o-Xylene	0.0015259	1.7419E-07
100414	Ethyl benzene	0.0054038	6.1687E-07
106423	p-Xylene	0.0017802	2.0322E-07
108383	m-Xylene	0.0017802	2.0322E-07
108883	Toluene	0.014119	1.6118E-06
110543	Hexane	2.2299	0.00025455
1330207	Xylenes (mixed)	0.0050863	5.8063E-07
7783064	Hydrogen sulfide	0.0007051	8.0488E-08

Device 14550 STANDBY COMPRESSOR

SCC-30600819-FUGITIVE HC EMIS-COMPRESSOR SEALS-GAS STREA

		Pounds per Year	Pounds per Hour
71432	Benzene	0.0219	7.7333E-06
100414	Ethyl benzene	0.39	0.0001382

Device 14551 C-101

SCC-30600819-FUGITIVE HC EMIS-COMPRESSOR SEALS-GAS STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	8.2E-09	1.11E-12
71432	Benzene	0.18147	0.00002491
91203	Naphthalene	8.2E-09	1.11E-12
95476	o-Xylene	0.0196	2.666E-06
100414	Ethyl benzene	0.0068	9.248E-07
106423	p-Xylene	0.023	3.128E-06
108383	m-Xylene	0.023	3.128E-06
108883	Toluene	0.087986	1.1981E-05
110543	Hexane	21.09	0.0028682
1330207	Xylenes (mixed)	0.0655	8.9105E-06
7439921	Lead	1.15E-09	1.6E-13
7440020	Nickel	2.989E-09	4.1E-13
7440439	Cadmium	5.9E-10	8E-14
7440508	Copper	8.15E-09	1.11E-12
7440666	Zinc	5.8E-09	7.9E-13
7783064	Hydrogen sulfide	0.017	2.3634E-06

Device 14552 C-102

SCC-30600819-FUGITIVE HC EMIS-COMPRESSOR SEALS-GAS STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	7.4E-09	1.11E-12
71432	Benzene	0.16486	0.00002471
91203	Naphthalene	7.4E-09	1.11E-12
95476	o-Xylene	0.018	2.6732E-06
100414	Ethyl benzene	0.0062	9.25E-07
106423	p-Xylene	0.021	3.1187E-06
108383	m-Xylene	0.021	3.1187E-06
108883	Toluene	0.08	1.1981E-05
110543	Hexane	19.16	0.0028718
1330207	Xylenes (mixed)	0.059	8.9105E-06
7439921	Lead	1E-09	1.6E-13
7440020	Nickel	2.7E-09	4.1E-13
7440439	Cadmium	5.4E-10	8E-14
7440508	Copper	7.4E-09	1.11E-12
7440666	Zinc	5.2E-09	7.9E-13
7783064	Hydrogen sulfide	0.016	2.3634E-06

Device 14553 C-103

SCC-30600819-FUGITIVE HC EMIS-COMPRESSOR SEALS-GAS STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	7.459E-09	1.11E-12
71432	Benzene	0.16605	0.00002491
91203	Naphthalene	7.459E-09	1.11E-12
95476	o-Xylene	0.017964	2.6732E-06
100414	Ethyl benzene	0.006216	9.25E-07
106423	p-Xylene	0.020958	3.1187E-06
108383	m-Xylene	0.020958	3.1187E-06
108883	Toluene	0.08051	1.1981E-05
110543	Hexane	19.299	0.0028718
1330207	Xylenes (mixed)	0.059879	8.9105E-06
7439921	Lead	1.057E-09	1.6E-13
7440020	Nickel	2.735E-09	4.1E-13
7440439	Cadmium	5.408E-10	8E-14
7440508	Copper	7.459E-09	1.11E-12
7783064	Hydrogen sulfide	0.015882	2.3634E-06

Device 14554 C-104

SCC-30600819-FUGITIVE HC EMIS-COMPRESSOR SEALS-GAS STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	9E-09	1.11E-12
71432	Benzene	0.201	0.00002471
91203	Naphthalene	9E-09	1.11E-12
95476	o-Xylene	0.022	2.6732E-06
100414	Ethyl benzene	0.0075	9.25E-07
106423	p-Xylene	0.025	3.1187E-06
108383	m-Xylene	0.025	3.1187E-06
108883	Toluene	0.097	1.1981E-05
110543	Hexane	23.365	0.0028718
1330207	Xylenes (mixed)	0.072	8.9105E-06
7439921	Lead	1.3E-09	1.6E-13
7440020	Nickel	3.3E-09	4.1E-13
7440439	Cadmium	6.5E-10	8E-14
7440508	Copper	9E-09	1.11E-12
7440666	Zinc	6.4E-09	7.9E-13
7783064	Hydrogen sulfide	0.019	2.3634E-06

Device 14555 C-201

SCC-30600819-FUGITIVE HC EMIS-COMPRESSOR SEALS-GAS STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	4.4E-09	1.11E-12
71432	Benzene	0.099	0.00002471
91203	Naphthalene	4.4E-09	1.11E-12
95476	o-Xylene	0.01	2.6732E-06
100414	Ethyl benzene	0.0037	9.25E-07
106423	p-Xylene	0.0125	3.1187E-06
108383	m-Xylene	0.0125	3.1187E-06
108883	Toluene	0.048	1.1981E-05
110543	Hexane	11.51	0.0028718
1330207	Xylenes (mixed)	0.036	8.9105E-06
7439921	Lead	6.3E-10	1.6E-13
7440020	Nickel	1.6E-09	4.1E-13
7440439	Cadmium	3.2E-10	8E-14
7440508	Copper	4.4E-09	1.11E-12
7440666	Zinc	3.15E-09	7.9E-13
7783064	Hydrogen sulfide	0.0095	2.3634E-06

Device 14556 C-202

SCC-30600819-FUGITIVE HC EMIS-COMPRESSOR SEALS-GAS STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	5.5E-09	1.11E-12
71432	Benzene	0.1216	0.00002471
91203	Naphthalene	5.5E-09	1.11E-12
95476	o-Xylene	0.0132	2.6732E-06
100414	Ethyl benzene	0.00455	9.25E-07
106423	p-Xylene	0.0153	3.1187E-06
108383	m-Xylene	0.0153	3.1187E-06
108883	Toluene	0.059	1.1981E-05
110543	Hexane	14.129	0.0028718
1330207	Xylenes (mixed)	0.044	8.9105E-06
7439921	Lead	7.7E-10	1.6E-13
7440020	Nickel	2E-09	4.1E-13
7440439	Cadmium	4E-10	8E-14
7440508	Copper	5.4E-09	1.11E-12
7440666	Zinc	3.9E-09	7.9E-13
7783064	Hydrogen sulfide	0.012	2.3634E-06

Device 14557 GMV6 SALES

SCC-30600819-FUGITIVE HC EMIS-COMPRESSOR SEALS-GAS STREA

		Pounds per Year	Pounds per Hour
71432	Benzene	0.033965	7.7333E-06
71432	Benzene	0.0431	7.758E-06
100414	Ethyl benzene	0.61137	0.0001392
100414	Ethyl benzene	0.77507	0.0001395

Device 14558 LITTLE LLOYD VRU

SCC-30600819-FUGITIVE HC EMIS-COMPRESSOR SEALS-GAS STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	9.724E-09	1.11E-12
71432	Benzene	0.21646	0.00002471
91203	Naphthalene	9.724E-09	1.11E-12
95476	o-Xylene	0.023417	2.6731E-06
100414	Ethyl benzene	0.008103	9.25E-07
106423	p-Xylene	0.02732	3.1187E-06
108383	m-Xylene	0.02732	3.1187E-06
108883	Toluene	0.10495	1.1981E-05
110543	Hexane	25.157	0.0028718
1330207	Xylenes (mixed)	0.078056	8.9105E-06
7783064	Hydrogen sulfide	0.020703	2.3634E-06

Device 14559 PLANT 2 VRU

SCC-30600819-FUGITIVE HC EMIS-COMPRESSOR SEALS-GAS STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	9.736E-09	1.11E-12
71432	Benzene	0.21646	0.00002471
91203	Naphthalene	9.724E-09	1.11E-12
95476	o-Xylene	0.023417	2.6732E-06
100414	Ethyl benzene	0.008103	9.25E-07
106423	p-Xylene	0.02732	3.1187E-06
108383	m-Xylene	0.02732	3.1187E-06
108883	Toluene	0.10495	1.1981E-05
110543	Hexane	25.157	0.0028718
1330207	Xylenes (mixed)	0.078056	8.9105E-06
7783064	Hydrogen sulfide	0.020703	2.3634E-06

Device 14560 LLOYD DEHY VRU #3A

SCC-30600819-FUGITIVE HC EMIS-COMPRESSOR SEALS-GAS STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	2.64E-10	1.109E-12

71432	Benzene	0.0058712	0.00002471
91203	Naphthalene	2.64E-10	1.109E-12
95476	o-Xylene	0.0006325	2.6732E-06
100414	Ethyl benzene	0.00022	9.25E-07
106423	p-Xylene	0.0007425	3.1187E-06
108383	m-Xylene	0.0007425	3.1187E-06
108883	Toluene	0.00286	1.1981E-05
110543	Hexane	0.682	0.0028718
1330207	Xylenes (mixed)	0.00209	8.778E-06
7783064	Hydrogen sulfide	0.0005626	2.363E-06

Device 14561 LLOYD DEHY VRU #3B

SCC-30600819-FUGITIVE HC EMIS-COMPRESSOR SEALS-GAS STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	2.64E-10	1.11E-12
71432	Benzene	0.005885	0.00002471
95476	o-Xylene	0.0006325	2.6732E-06
100414	Ethyl benzene	0.00022	9.25E-07
106423	p-Xylene	0.0007425	3.1187E-06
108383	m-Xylene	0.0007425	3.1187E-06
108883	Toluene	0.00286	1.1981E-05
110543	Hexane	0.682	0.0028718
1330207	Xylenes (mixed)	0.00209	8.9105E-06
7783064	Hydrogen sulfide	0.00055	2.3634E-06

Device 14562 75 TANKS VRU

SCC-30600819-FUGITIVE HC EMIS-COMPRESSOR SEALS-GAS STREA

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	9.724E-09	1.11E-12
71432	Benzene	0.21646	0.00002471
91203	Naphthalene	9.724E-09	1.11E-12
95476	o-Xylene	0.023417	2.6732E-06
100414	Ethyl benzene	0.008103	9.25E-07
106423	p-Xylene	0.02732	3.1187E-06
108383	m-Xylene	0.02732	3.1187E-06
108883	Toluene	0.10495	1.1981E-05
110543	Hexane	25.157	0.0028718
1330207	Xylenes (mixed)	0.078056	8.9105E-06
7783064	Hydrogen sulfide	0.020703	2.3634E-06

Device 14567 GAS PLANT FLARE

SCC-31000205-NATURAL GAS PRODN-FLARES-

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	0.23282	0.014
50000	Formaldehyde	19.44047	1.169
71432	Benzene	2.64417	0.159
75070	Acetaldehyde	0.71509	0.043
91203	Naphthalene	0.18293	0.011
100414	Ethyl benzene	24.01372	1.444
107028	Acrolein	0.1663	0.01
108883	Toluene	0.96454	0.058
110543	Hexane	0.48227	0.029
115071	Propylene	40.5772	2.44
1330207	Xylenes (mixed)	0.48227	0.029

Device 14568 GAS PLANT FLARE

SCC-31000205-NATURAL GAS PRODN-FLARES-

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	0.00574	0.0027328
50000	Formaldehyde	0.47929	0.2281888
71432	Benzene	0.06519	0.0310368
75070	Acetaldehyde	0.01763	0.0083936
91203	Naphthalene	0.00451	0.0021472
100414	Ethyl benzene	0.59204	0.2818688
107028	Acrolein	0.0041	0.001952
108883	Toluene	0.02378	0.0113216
110543	Hexane	0.01189	0.0056608
115071	Propylene	1.0004	0.476288
1330207	Xylenes (mixed)	0.01189	0.0056608

Device 14571 PIT V111B

SCC-31000105-CRUDE OIL PRODN-CRUDE OIL PITS-

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	6.3E-11	7.189E-15
71432	Benzene	0.00216	2.4648E-07
91203	Naphthalene	6.3E-11	7.189E-15
95476	o-Xylene	0.000153	1.7459E-08
100414	Ethyl benzene	0.000558	6.3674E-08
106423	p-Xylene	0.00018	2.054E-08
108383	m-Xylene	0.00018	2.054E-08
108883	Toluene	0.001458	1.6637E-07

110543	Hexane	0.2313	2.6394E-05
1330207	Xylenes (mixed)	0.0005274	6.0182E-08
7783064	Hydrogen sulfide	0.0000729	8.3187E-09

Device 14572 PIT V134

SCC-31000105-CRUDE OIL PRODN-CRUDE OIL PITS-

		Pounds per Year	Pounds per Hour
1150	PAHs, total, with individ. components also reported	1.574E-10	1.799E-14
71432	Benzene	0.0053952	6.168E-07
91203	Naphthalene	1.574E-10	1.799E-14
95476	o-Xylene	0.0003956	4.5232E-08
100414	Ethyl benzene	0.0013938	1.5934E-07
106423	p-Xylene	0.0004608	5.2685E-08
108383	m-Xylene	0.0004608	5.2685E-08
108883	Toluene	0.0035968	4.112E-07
110543	Hexane	0.577736	6.6049E-05
1330207	Xylenes (mixed)	0.0013038	1.4906E-07
7783064	Hydrogen sulfide	0.0001821	2.0817E-08

Device 14591 AG GAS TANK

SCC-40600141-TANK CARS/TRUCKS-GASOLINE-SUBMERGE-LOAD-B

		Pounds per Year	Pounds per Hour
1110	Gasoline vapors	19.656	0.72

SCC-40600144-TANK CARS/TRUCKS-GASOLINE-SPLASH-LOAD-BALA

		Pounds per Year	Pounds per Hour
1110	Gasoline vapors	53.235	0.065

Ventura GHG PTE Calculation Description

The potential to emit of greenhouse gases for Aera Energy's Ventura permit 0041 were calculated as required for the Title V permit reissuance application instructions. The calculations are based on California Code of Regulations Title 17, Division 3, Chapter 1, Subchapter 10 *Regulation For The Mandatory Reporting Of Greenhouse Gas Emissions*. The maximum equipment use was determined by the throughput Limits listed in Table No. 3 of Aera's Permit to Operate. For the diesel emergency engine, the appropriate hourly fuel consumption rate was applied to the hour per year Throughput Limit to express that limit in terms of gallons/year. The default heat content and emissions factors from the Code of Federal Regulations Title 40, Part 98 were used to determine metric tonnes of each of the three greenhouses gases produced by combustion. The Global Warming Potentials from Table A-1 of 40 CFR Part 98 were used to convert all three gases to the CO2 equivalent (CO2e) basis. The Central Compressor Plant Emergency Standby Engine was not included in the calculation because it is designated in the permit as "Out of Service" and therefore currently has no potential to emit.

Aera Ventura Permit to Operate 0041
Permitted Combustion Equipment
Greenhouse Gas Potential to Emit

Location	Equipment Name	Throughput Permit Limit		Diesel engine consumption rate, gallons/hr	Default Heat Content		Default CO2 emission factor, kg CO2/MMBtu	Default CH4 emission factor, kg CH4/MMBtu	Default N2O emission factor, kg N2O/MMBtu	Potential to Emit, metric tonnes CO2	Potential to Emit, metric tonnes CH4	Potential to Emit, metric tonnes N2O	Potential to Emit, metric tonnes CO2e	Potential to Emit, short tons CO2e
Waterflood Plant No. 1	IC Engine WF 1-1 OOS	52.1	MMCF/Yr		1026	Btu/scf	53.1	0.001	0.0001	2,836.30	0.05	0.01	2,839	3,130
Waterflood Plant No. 1	IC Engine WF 1-2 OOS	52.1	MMCF/Yr		1026	Btu/scf	53.1	0.001	0.0001	2,836.30	0.05	0.01	2,839	3,130
Compressor Plant No. 2	Low Pressure Flare	104.0	MMCF/Yr		1026	Btu/scf	53.1	0.001	0.0001	5,661.71	0.11	0.01	5,668	6,247
Compressor Plant No. 2	IC Engine CP2-1	24.0	MMCF/Yr		1026	Btu/scf	53.1	0.001	0.0001	1,306.55	0.02	0.00	1,308	1,442
Compressor Plant No. 2	IC Engine CP2-2	24.0	MMCF/Yr		1026	Btu/scf	53.1	0.001	0.0001	1,306.55	0.02	0.00	1,308	1,442
Gas Plant No. 2	IC Engine C-201	50.1	MMCF/Yr		1026	Btu/scf	53.1	0.001	0.0001	2,727.42	0.05	0.01	2,730	3,010
Gas Plant No. 2	IC Engine C-202	50.1	MMCF/Yr		1026	Btu/scf	53.1	0.001	0.0001	2,727.42	0.05	0.01	2,730	3,010
Gas Plant No. 7	Heater 601A	71.4	MMCF/Yr		1026	Btu/scf	53.1	0.001	0.0001	3,886.98	0.07	0.01	3,891	4,289
Gas Plant No. 7	Heater 602 OOS	78.9	MMCF/Yr		1026	Btu/scf	53.1	0.001	0.0001	4,295.28	0.08	0.01	4,300	4,740
Gas Plant No. 7	6" Flare & John Zink Hydra 8" Flare	86.5	MMCF/Yr		1026	Btu/scf	53.1	0.001	0.0001	4,709.02	0.09	0.01	4,714	5,196
Gas Plant No. 7	Emergency Standby Engine	20.0	hr/yr	32	0.138	MMBtu/gal	74.0	0.003	0.0006	6.53	0.00	0.00	7	7
Central Compressor Plant	IC Engine C-101OOS	75.8	MMCF/Yr		1026	Btu/scf	53.1	0.001	0.0001	4,126.52	0.08	0.01	4,131	4,553
Central Compressor Plant	IC Engine C-102 OOS	75.8	MMCF/Yr		1026	Btu/scf	53.1	0.001	0.0001	4,126.52	0.08	0.01	4,131	4,553
Central Compressor Plant	IC Engine C-103 OOS	75.8	MMCF/Yr		1026	Btu/scf	53.1	0.001	0.0001	4,126.52	0.08	0.01	4,131	4,553
													44,726	49,301

Ventura County Air Pollution Control District

PART 70 PERMIT APPLICATION FORM

Compliance Plan - Reissuance

Form TVAF35

A Compliance Plan is a description of the compliance status of the source with respect to all applicable requirements. See Rule 33.2.A.7 for further information. Review the current Part 70 Permit Table 1, "Periodic Monitoring Summary" and Table 2, "Permitted Equipment and Applicable Requirements." These requirements include all applicable VCAPCD Rules (specific and general), California ARB ATCMs, and/or federal NSPS or NESHAP regulations. As directed in the Reissuance Instructions, provide changes to these tables as necessary.

1. Current Requirements: Is the source operating in compliance with all applicable requirements as listed and/or referenced in the current Part 70 Permit Table 1 and Table 2?

   ☒ Yes ☐ No

   Will the stationary source continue to comply with all applicable requirements as listed and/or referenced in the current Part 70 Permit Table 1 and Table 2?

   ☒ Yes ☐ No

2. Requirements with a future effective date : Are there any applicable requirements that will become effective during the Part 70 Permit five year term?

   ☐ Yes ☒ No

   If yes, provide a narrative of such requirement(s) and a statement that the source will meet such requirements on a timely basis.

3. Current Requirements - not in compliance:
   Are there any applicable requirements for which the stationary source is not operating in compliance?

   ☐ Yes ☒ No

   If yes, provide a narrative description of the compliance status and how compliance will be achieved.

Certification by Responsible Official

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this Compliance Plan (with references to the current Part 70 Permit Tables 1 and 2) are true, accurate, and complete.

Signature and Title of Responsible Official:	Date:
Signature: [signature] Title: Manager of Operations	9/24/2018

Compliance Certification

To satisfy the reissuance application compliance certification requirement, please refer to Aera Energy LLC's Annual Title V Compliance Certification for Period Beginning April 1, 2017 through March 31, 2018, Permit to Operate No. 00041. This document was certified by the Responsible Official on May 10, 2018 and received by the VCAPCD on May 15, 2018. To date, there have been no submittals that supplemented the compliance certification.

Ventura County Air Pollution Control District

PART 70 PERMIT APPLICATION FORM

Compliance Certification - Reissuance

Form TVAF45

A Compliance Certification shall identify each applicable requirement or condition of the Part 70 Permit, the compliance status of the stationary source, whether the compliance was continuous or intermittent since the last certification, and the method(s) used to determine compliance. In addition, the certification shall indicate the stationary source's compliance status with any applicable enhanced monitoring and compliance certification requirement of the federal Clean Air Act. (Rule 33.9.B)

A reference to a Compliance Certification that has been submitted to the District Compliance Division no more than 18 months prior and no less than 6 months prior to the expiration date of the current permit may be submitted to fulfill this requirement.

☒ This application references the most recent Compliance Certification for the stationary source that was submitted to the VCAPCD Compliance Division. The most recent Compliance Certification was submitted on:

05/15/2018 (Most recent Compliance Certification submittal date)

Certification by Responsible Official

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this Compliance Certification Cover Sheet are true, accurate, and complete.

Signature and Title of Responsible Official:	Date:
Signature: [signature] Title: Manager of Operations	8/24/2018

Insignificant Activities List

The Ventura County Air Pollution Control District "Insignificant Activities List (Exempt Equipment)" for Permit to Operate No. 00041 has been reviewed and the revised list is provided in this application.

Ventura County Air Pollution Control District

INSIGNIFICANT ACTIVITIES (EXEMPT EQUIPMENT)

Part 70 Permit No. 00041

INSIGNIFICANT ACTIVITIES (EXEMPT EMISSION UNITS)	BASIS FOR EXEMPTION (Size/Production Rate)	RULE 23 CITATION
2 – Gasoline-Driven Pumps, 5.5 BHP	Max. design rating < 50 BHP	23.D.6
1 – Gasoline-Driven Pump, 8 BHP	Max. design rating < 50 BHP	23.D.6
1 – Gasoline-Driven Pump, 13 BHP	Max. design rating < 50 BHP	23.D.6
1 – Gasoline-Driven Pump, 18 BHP	Max. design rating < 50 BHP	23.D.6
1 – Gasoline-Driven Air Compressor, 12.5 BHP	Max. design rating < 50 BHP	23.D.6
2 – Gasoline-Driven Air Compressors, 13 BHP	Max. design rating < 50 BHP	23.D.6
1 – Gasoline-Driven Air Compressor, 18 BHP	Max. design rating < 50 BHP	23.D.6
2 – Gasoline-Driven Air Compressors, 21 BHP	Max. design rating < 50 BHP	23.D.6
1 – Gasoline-Driven Generator, 8 BHP	Max. design rating < 50 BHP	23.D.6
1 – Gasoline-Driven Generator, 9 BHP	Max. design rating < 50 BHP	23.D.6
1 – Gasoline-Driven Generator, 11 BHP	Max. design rating < 50 BHP	23.D.6
1 – Gasoline-Driven Generator, 13 BHP	Max. design rating < 50 BHP	23.D.6
1 – Gasoline-Driven Pressure Washer, 6 BHP	Max. design rating < 50 BHP	23.D.6
1 – Gasoline-Driven Pressure Washer, 7 BHP	Max. design rating < 50 BHP	23.D.6
1 – Gasoline-Driven Pressure Washer, 13 BHP	Max. design rating < 50 BHP	23.D.6
2 – Gasoline-Driven Pressure Washers, 16 BHP	Max. design rating < 50 BHP	23.D.6
1 – Gasoline-Driven Pressure Washer, 20 BHP	Max. design rating < 50 BHP	23.D.6
2 – Natural Gas-Driven Compressors, 49 BHP	Max. design rating < 50 BHP	23.D.6
1 – Gasoline-Driven Welding Machine, 22 BHP	Max. design rating < 50 BHP	23.D.6

INSIGNIFICANT ACTIVITIES (EXEMPT EMISSION UNITS)	BASIS FOR EXEMPTION (Size/Production Rate)	RULE 23 CITATION
1 – Gasoline-Driven Lube Oil Pump, 13 BHP	Max. design rating < 50 BHP	23.D.6
1 – Gasoline-Driven Chainsaw, 3 BHP	Max. design rating < 50 BHP	23.D.6
4 – Diesel-Fired Steam Cleaners	Steam Cleaning Equipment < 1 MMBTU/hr	23.C.2
1 – Natural Gas Heater, 0.060 MMBTU/hr	Heat Transfer Equipment < 1 MMBTU/hr	23.C.1
1 – Natural Gas Heater, 0.080 MMBTU/hr	Heat Transfer Equipment < 1 MMBTU/hr	23.C.1
2 – Natural Gas Heaters, 0.106 MMBTU/hr	Heat Transfer Equipment < 1 MMBTU/hr	23.C.1
2 – Natural Gas Heaters, 0.110 MMBTU/hr	Heat Transfer Equipment < 1 MMBTU/hr	23.C.1
1 – Natural Gas Heater, 0.125 MMBTU/hr	Heat Transfer Equipment < 1 MMBTU/hr	23.C.1
2 – Natural Gas Heaters, 0.250 MMBTU/hr	Heat Transfer Equipment < 1 MMBTU/hr	23.C.1
3 – Natural Gas Water Heaters, 0.040 MMBTU/hr	Heat Transfer Equipment < 1 MMBTU/hr	23.C.1
Solvent Wipe Cleaning	Certified SCAQMD Clean Air Solvent or solvent with ROC content < 25 mg/l	23.F.10.a or 23.F.10.b
1 – Safety Kleen Stand, rental	Non-convey. Degreaser using solvent w/BP > 302°F & liq surface area < 1 m^2, and < 1000 lb ROC emitted during 12 month period	23.F.10.c
Various Chemical Tanks	Tank Capacity < 5000 gal	23.F.21 (71.2A)

Aera Energy LLC

Compliance Assurance Monitoring Plan

Ventura Area Operations
Ventura Avenue Oilfield

Prepared By:

Aera Energy LLC
3382 N. Ventura Avenue
Ventura, CA 93001

August 23, 2018

1. APPLICABILITY

1.1 Control Technology: Non-Selective Catalytic Reduction (NSCR).
1.2 Pollutant: Nitrogen Oxides (NOx).
1.3 Process Emission Units:
- Compressor Plant No. 2 - Two Waukesha rich-burn, natural gas-fired, internal combustion engines used to compress natural gas for transportation.

2. MONITORING SYSTEM AND PROGRAM DESCRIPTION

2.1 Indicators Monitored: Exhaust gas nitrogen oxides concentrations using remote sensing systems.
2.2 Rationale for Monitoring Approach: The sensing system provides direct measure of nitrogen oxides emissions concentrations.
2.3 Monitoring Locations: Each engine's exhaust stack as specified by the sensing system manufacturer.
2.4 Analytical Devices Needed: Nitrogen oxides sensors and sensor control system.
2.5 Data Acquisition and Measurement System Operations:
- Frequency of measurement: Once per day
- Reporting units: Parts per million by volume (ppm) nitrogen oxides
- Recording process: Results to be stored in a computerized database

2.6 Data Requirements:
- Correlation of remote sensors and instrumentation with standard nitrogen oxide source testing.

2.7 Specific QA / QC Procedures:
- Calibrate, maintain and operate instrumentation using procedures prescribed by systems' manufacturers.
- Biennial re-correlation of remote sensors and instrumentation with standard source testing.

2.8 References:
- Ventura County Air Pollution Control District, "Compliance Assurance Monitoring (CAM), CAM Plan Instructions", undated.
- U. S. Environmental Protection Agency, "Title 40, Part 64", October 22, 1997.
- U. S. Environmental Protection Agency, "Technical Guidance Document: Compliance Assurance Monitoring", August, 1998.

APPENDIX A
I.C. ENGINE INVENTORY
AERA ENERGY LLC

Location	PTO No.	Engine I.D.	Model	HP	Type	Original PTO Issued Before 9/5/89?
Taylor Lease Compressor Plant 2	0041	CP2-1	Waukesha L579OGU	748	Rich Burn with Johnson/Matthey catalyst NSCR and automatic air/fuel ratio controller	No
Taylor Lease Compressor Plant 2	0041	CP2-2	Waukesha L579OGU	748	Rich Burn with Johnson/Matthey catalyst NSCR and automatic air/fuel ratio controller	No

Part 70 Permit Oil Well List

The Ventura County Air Pollution Control District "Oil Well List" for Permit to Operate No. 00041 has been reviewed and is correct to the best of our knowledge.

Ventura County Air Pollution Control District

OIL WELL LIST

Permit to Operate No. 00041

Total Number of Wells on Permit: 856

Taylor Lease Wells

Taylor No. 11	Taylor No. 152	Taylor No. 229	Taylor No. 313
Taylor No. 13	Taylor No. 153	Taylor No. 230	Taylor No. 315
Taylor No. 29	Taylor No. 154	Taylor No. 231	Taylor No. 317
Taylor No. 34	Taylor No. 157	Taylor No. 235	Taylor No. 319
Taylor No. 37	Taylor No. 162	Taylor No. 236	Taylor No. 320
Taylor No. 42	Taylor No. 164	Taylor No. 240	Taylor No. 324
Taylor No. 43	Taylor No. 165	Taylor No. 241	Taylor No. 325
Taylor No. 48	Taylor No. 166	Taylor No. 242	Taylor No. 326
Taylor No. 59	Taylor No. 168	Taylor No. 245	Taylor No. 329
Taylor No. 69	Taylor No. 173	Taylor No. 247	Taylor No. 330
Taylor No. 77	Taylor No. 176	Taylor No. 249	Taylor No. 331
Taylor No. 78	Taylor No. 180	Taylor No. 250	Taylor No. 333
Taylor No. 81	Taylor No. 181	Taylor No. 251	Taylor No. 335
Taylor No. 84	Taylor No. 183	Taylor No. 254	Taylor No. 339
Taylor No. 89	Taylor No. 184	Taylor No. 256	Taylor No. 344
Taylor No. 91	Taylor No. 188	Taylor No. 260	Taylor No. 345
Taylor No. 94	Taylor No. 191	Taylor No. 261	Taylor No. 346
Taylor No. 98	Taylor No. 192	Taylor No. 264	Taylor No. 347
Taylor No. 103	Taylor No. 194	Taylor No. 265	Taylor No. 348
Taylor No. 106	Taylor No. 196	Taylor No. 268	Taylor No. 351
Taylor No. 108	Taylor No. 198	Taylor No. 269	Taylor No. 352
Taylor No. 110	Taylor No. 201	Taylor No. 276	Taylor No. 353
Taylor No. 109	Taylor No. 202	Taylor No. 278	Taylor No. 354
Taylor No. 113R	Taylor No. 204	Taylor No. 286	Taylor No. 356
Taylor No. 115R	Taylor No. 205	Taylor No. 290	Taylor No. 357
Taylor No. 117	Taylor No. 208	Taylor No. 291	Taylor No. 358
Taylor No. 124	Taylor No. 212	Taylor No. 292	Taylor No. 359
Taylor No. 134	Taylor No. 213	Taylor No. 297	Taylor No. 361
Taylor No. 135	Taylor No. 214	Taylor No. 298	Taylor No. 363
Taylor No. 137	Taylor No. 216	Taylor No. 300	Taylor No. 365
Taylor No. 141	Taylor No. 218	Taylor No. 305	Taylor No. 367
Taylor No. 147	Taylor No. 219	Taylor No. 309	Taylor No. 369
Taylor No. 149	Taylor No. 226	Taylor No. 310	Taylor No. 370
Taylor No. 150	Taylor No. 227	Taylor No. 311	Taylor No. 371

No. of Wells on This Page: 136

Taylor Lease Wells (Continued)

Taylor No. 372
Taylor No. 374
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Taylor No. 632

No. of Wells on This Page: 156

Taylor Lease Wells (Continued)

Taylor No. 634
Taylor No. 636
Taylor No. 637
Taylor No. 644
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Taylor No. 834
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Taylor No. 836
Taylor No. 837
Taylor No. 843

No. of Wells on This Page: 98

Lloyd Lease Wells

LLOYD 25
LLOYD 28
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LLOYD 303

No. of Wells on This Page: 145

Lloyd Corporation Lease Wells

LLOYD CORPORATION 8
LLOYD CORPORATION 12
LLOYD CORPORATION 13
LLOYD CORPORATION 17
LLOYD CORPORATION 16
LLOYD CORPORATION 18
LLOYD CORPORATION 20
LLOYD CORPORATION 21
LLOYD CORPORATION 23
LLOYD CORPORATION 26
LLOYD CORPORATION 27
LLOYD CORPORATION 29A
LLOYD CORPORATION 30
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LLOYD CORPORATION 92
LLOYD CORPORATION 99
LLOYD CORPORATION 801
LLOYD CORPORATION SL1
LLOYD CORPORATION SL2
LLOYD CORPORATION SL3

V.L. & W. Lease Wells

VL&W 1
VL&W 6
VL&W 9A
VL&W 10
VL&W 12
VL&W 19
VL&W 20
VL&W 23
VL&W 27
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VL&W 32
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No. of Wells on This Page: 133

McGonigle Lease Wells

McGONIGLE 4	McGONIGLE 17	McGONIGLE 34
McGONIGLE 5	McGONIGLE 18	McGONIGLE 35
McGONIGLE 7	McGONIGLE 20	McGONIGLE 37
McGONIGLE 10	McGONIGLE 22	McGONIGLE 38
McGONIGLE 11	McGONIGLE 27	McGONIGLE 39
McGONIGLE 12	McGONIGLE 28	McGONIGLE 55
McGONIGLE 14	McGONIGLE 31	McGONIGLE 58
McGONIGLE 15	McGONIGLE 33	McGONIGLE 61

Barnard Lease Wells

Barnard No. 5A	Barnard No. 21	Barnard No. 35
Barnard No. 9	Barnard No. 26	Barnard No. 37
Barnard No. 11	Barnard No. 28	Barnard No. 38
Barnard No. 15A	Barnard No. 32	Barnard No. 39
Barnard No. 16	Barnard No. 33	Barnard No. 41
Barnard No. 19	Barnard No. 34	

Citrus Lease Wells

Citrus No. 1	Citrus No. 3	Citrus No. 5
Citrus No. 2	Citrus No. 4	Citrus No. 6

Edison Lease Wells

Edison No. 4	Edison No. 31	Edison No. 47	Edison No. 64
Edison No. 8	Edison No. 32	Edison No. 49	Edison No. 65
Edison No. 11	Edison No. 33	Edison No. 50	Edison No. 66
Edison No. 14	Edison No. 35	Edison No. 51	Edison No. 67
Edison No. 16	Edison No. 36	Edison No. 52	Edison No. 68
Edison No. 17	Edison No. 37	Edison No. 53	Edison No. 69
Edison No. 19	Edison No. 38	Edison No. 54	Edison No. 70
Edison No. 23	Edison No. 39	Edison No. 55	Edison No. 72
Edison No. 25	Edison No. 41	Edison No. 56	Edison No. 77
Edison No. 26	Edison No. 42	Edison No. 57	Edison No. 78
Edison No. 27	Edison No. 43	Edison No. 59	Edison No. 81
Edison No. 29	Edison No. 44	Edison No. 60	Edison No. 82
Edison No. 30	Edison No. 45	Edison No. 61	Edison No. 84

No. of Wells on This Page: 99

Foster Lease Wells

Foster No. 3

Gosnell Lease Wells

Gosnell No. 12
Gosnell No. 24
Gosnell No. 34
Gosnell No. 35
Gosnell No. 36
Gosnell No. 39
Gosnell No. 40
Gosnell No. 41
Gosnell No. 42
Gosnell No. 45
Gosnell No. 46
Gosnell No. 47
Gosnell No. 48
Gosnell No. 50
Gosnell No. 56

Gulf Barnard Lease Wells

Gulf Barnard No. 1

Orton Lease Wells

Orton No. 4
Orton No. 5
Orton No. 9
Orton No. 10
Orton No. 11

Willett Lease Wells

Willett No. 2

No. of Wells on This Page: 23

Hartman Lease Wells

HARTMAN 4 (HTM4)
HARTMAN 5 (HTM5)
HARTMAN 8 (HTM8)
HARTMAN 16 (HTM16
HARTMAN 17 (HTM17)
HARTMAN 21 (HTM21)
HARTMAN 22 (HTM22)
HARTMAN 23 (HTM23)
HARTMAN 25 (HTM25)
HARTMAN 26 (HTM26)
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HARTMAN 71 (HTM71)
HARTMAN 73 (HTM73)
HARTMAN 76 (HTM76)
HARTMAN 78 (HTM78)
HARTMAN 80 (HTM80)
HARTMAN 82 (HTM82)
HARTMAN 84 (HTM84)
HARTMAN 85 (HTM85)
HARTMAN 86 (HTM86)
HARTMAN 87 (HTM87)

Hartman-Barnard-Hartman Lease Wells

Hartman-Barnard No. 1 (HBU1)
Hartman-Barnard No. 2 (HBU2)
Hartman-Barnard No. 3 (HBU3)
Hartman-Barnard No. 4 (HBU4)
Hartman No. 3 (RBH3)
Hartman No. 6 (RBH6)
Hartman No. 8 (HAR8)
Hartman No. 12 (HAR12)
Hartman No. 14 (HAR14)
Hartman No. 15 (HAR15)
Hartman No. 18 (HAR18)
Hartman No. 22 (HAR22)
Hartman No. 24 (RBH24)
Hartman No. 28 (HAR28)
Hartman No. 31 (HAR31)
Hartman No. 32 (HAR32)
Hartman No. 34 (HAR34)

Hartman Ranch Lease Wells

Hartman No. 5 (HRT5)
Hartman No. 6 (HRT6)
Hartman No. 7 (HRT7)
Hartman No. 12 (HRT12)
Hartman No. 16 (HRT16)
Hartman No. 17 (HRT17)
Hartman No. 19 (HRT19)
Hartman No. 20 (HRT20)

No. of Wells on This Page: 66