San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

DEC 2 7 2017

Ms. Melinda Hicks
Kern Oil & Refining Co.
7724 E Panama Ln
Bakersfield, CA 93307-9210

Re: Notice of Final Action - Title V Permit Renewal
Facility Number: S-37
Project Number: S-1160714

Dear Ms. Hicks:

The District has issued the Final Renewed Title V Permit for Kern Oil & Refining Co. (see enclosure). The preliminary decision for this project was made on July 26, 2017. A summary of the comments and the District's response to each comment is included as an attachment to the engineering evaluation. These permits address all deficiencies cited by the EPA.

The public notice for issuance of the Final Title V Permit will be published approximately three days from the date of this letter.

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Leonard Scandura, Permit Services Manager, at (661) 392-5500.

Sincerely,

Arnaud Marjollet
Director of Permit Services

Enclosures

cc: Tung Le, CARB (w/enclosure) via email
cc: Gerardo C. Rios, EPA (w/enclosure) via email

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AIR POLLUTION CONTROL DISTRICT

Final Title V Permit Renewal Evaluation
Kern Oil & Refining Company
S-37

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TITLE V PERMIT RENEWAL EVALUATION

Petroleum Refinery

Engineer: Homero Ramirez
Date: December 6, 2017

Facility Number: S-37
Facility Name: Kern Oil & Refining Co.
Mailing Address: 7724 E Panama Ln
Bakersfield, CA 93307-9210
Contact Name: Melinda Hicks, Environmental, Health and Safety Manager
Phone: (661) 845-0761

Responsible Official: David A. McCoy
Title: Vice President - Refining

Project #: S-1160714
Deemed Complete: February 29, 2016

I. PROPOSAL

Kern Oil & Refining Co. was issued a Title V Permit on January 31, 2003. As required by District Rule 2520, the applicant is requesting a permit renewal. The existing Title V Permit shall be reviewed and modified to reflect all applicable District and federal rules updated, removed, or added since the last renewal of the Title V Permit, which occurred on January 19, 2012.

The purpose of this evaluation is to provide the legal and factual basis for all updated applicable requirements and to determine if the facility will comply with these updated requirements. It also specifically identifies all additions, deletions, and/or changes made to permit conditions or equipment descriptions.

II. FACILITY LOCATION

The facility is located at 7724 E. Panama Lane in Bakersfield, CA.

III. EQUIPMENT LISTING

A detailed facility printout listing all permitted equipment at the facility is included as Attachment C.

IV. GENERAL PERMIT TEMPLATE USAGE

The applicant does not propose to use any model general permit templates.

V. SCOPE OF EPA AND PUBLIC REVIEW

Certain segments of the proposed Renewed Operating Permit are based on model general permit templates that have been previously subject to EPA and public review. The terms and conditions from the model general permit templates are included in the proposed permit and are not subject to further EPA and public review.

For permit applications utilizing model general permit templates, public and agency comments on the District's proposed actions are limited to the applicant's eligibility for model general permit template, applicable requirements not covered by the model general permit template, and the applicable procedural requirements for issuance of Title V Operating Permits.

The applicant is not requesting any model general permit templates. Therefore, all federally enforceable conditions in this current Title V permit will be subject to EPA and public review.

VI. FEDERALLY ENFORCEABLE REQUIREMENTS

A. Rules Updated Since January 19, 2012

- District Rule 2020, Exemptions
  (Amended December 18, 2014)

- District Rule 2201, New and Modified Stationary Source Review Rule
  (Amended February 18, 2016)

- District Rule 4307, Boilers, Steam Generators, and Process Heaters – 2.0 MMBtu/hr to 5.0 MMBtu/hr
  (Amended April 21, 2016)

- District Rule 4621, Gasoline Transfer Into Stationary Storage Containers, Delivery Vessels, And Bulk Plants
  (Amended December 19, 2013)

- District Rule 4622, Gasoline Transfer into Motor Vehicle Fuel Tanks
  (Amended December 19, 2013)

- District Rule 4625, Wastewater Separators
  (Amended December 15, 2011[1])

- District Rule 4702, Internal Combustion Engines
  (Amended November 14, 2013)

- 40 CFR Part 60, Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units
  (Amended February 16, 2012, February 27, 2014)

- 40 CFR Part 60 Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units
  (Amended February 16, 2012)

- 40 CFR Part 60 Subpart J, Standards of Performance for Petroleum Refineries
  (Amended September 12, 2012, December 1, 2015)

- 40 CFR Part 60 Subpart Ja, Standards of Performance for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007
  (Amended September 12, 2012, December 19, 2013, December 1, 2015)

- 40 CFR Part 60 Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
  (Amended February 27, 2014)

- 40 CFR Part 60 Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
  (Amended February 27, 2014)

- 40 CFR Part 63 Subpart CC, National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries
  (Amended June 20, 2013, December 1, 2015, July 13, 2016)

- 40 CFR Part 63 Subpart UUU, National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units
  (Amended December 1, 2015, July 13, 2016)

[1] Since Rule 4625 was amended a few weeks prior to the last Title V renewal, it was not discussed in the last Title V renewal project evaluation. Therefore, that rule will be included in this list.

- 40 CFR Part 63 Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (Amended February 27, 2014)

- 40 CFR Part 63, Subpart JJJJJJ, National Emissions Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers Area Sources (Amended February 1, 2013, September 14, 2016)

- 40 CFR Part 82 Subpart B, Stratospheric Ozone (Amended June 25, 2013)

- 40 CFR Part 82 Subpart F, Stratospheric Ozone (Amended June 25, 2013)

- 40 CFR Part 64, Compliance Assurance Monitoring

B. Rules Removed

There are no applicable rules that were removed since the last Title V renewal.

C. Rules Added Since January 19, 2012

- District Rule 2410, Prevention of Significant Deterioration (Adopted June 16, 2011, Effective November 26, 2012)

D. Rules Not Updated Since January 19, 2012

- District Rule 1070, Inspections (Amended December 17, 1992)

- District Rule 1080, Stack Monitoring (Amended December 17, 1992)

- District Rule 1081, Source Sampling (Amended December 17, 1992)

- District Rule 1100, Equipment Breakdown (Amended December 17, 1992)

- District Rule 1160, Emission Statements (Amended November 18, 1992)

- District Rule 2010, Permits Required
  (Amended December 17, 1992)
- District Rule 2031, Transfer of Permits
  (Amended December 17, 1992)
- District Rule 2040, Applications
  (Amended December 17, 1992)
- District Rule 2070, Standards for Granting Applications
  (Amended December 17, 1992)
- District Rule 2080, Conditional Approval
  (Amended December 17, 1992)
- District Rule 2250, Permit Exempt Equipment Registration
  (Amended October 19, 2006)
- District Rule 2520, Federally Mandated Operating Permits
  (Amended June 21, 2001)
- District Rule 4101, Visible Emissions
  (Amended February 17, 2005)
- District Rule 4201, Particulate Matter Concentration
  (Amended December 17, 1992)
- District Rule 4301, Fuel Burning Equipment
  (Amended December 17, 1992)
- District Rule 4305, Boilers, Steam Generators, and Process Heaters–Phase 2
  (Amended August 21, 2003)
- District Rule 4306, Boilers, Steam Generators and Process Heaters – Phase 3
  (Amended October 16, 2008)
- District Rule 4311, Flares
  (Amended June 18, 2009)
- District Rule 4320, Advanced Emissions Reduction Options for Boiler, Steam Generators, and Process Heaters Greater Than 5.0 MMBtu/hr
  (Adopted October 16, 2008)

- District Rule 4351, Boilers Steam Generators, and Process Heaters – Phase 1 (Amended August 21, 2003)
- District Rule 4453, Refinery Vacuum Producing Devices or Systems (Amended December 17, 1992)
- District Rule 4454, Refinery Process Unit Turnaround (Amended December 17, 1992)
- District Rule 4455, Components at Petroleum Refineries, Gas Liquids Processing Facilities, and Chemical Plants (Adopted April 20, 2005)
- District Rule 4601, Architectural Coatings (Amended December 17, 2009)
- District Rule 4623, Storage of Organic Liquids (Amended May 19, 2005)
- District Rule 4624, Transfer of Organic Liquid (Amended December 20, 2007)
- District Rule 4701, Internal Combustion Engines – Phase 1 (Amended August 21, 2003)
- District Rule 4703, Stationary Gas Turbines (Amended September 20, 2007)
- District Rule 4801, Sulfur Compounds (Amended December 17, 1992)
- District Rule 8011, Fugitive Dust General Requirements (Amended August 19, 2004)
- District Rule 8021, Fugitive Dust Requirements for Control of Fine Particulate Matter (PM10) from Construction, Demolition, Excavation, and Extraction Activities (Amended August 19, 2004)
- District Rule 8031, Fugitive Dust Requirements for Control of Fine Particulate Matter (PM10) from Handling and Storage of Bulk Materials Amended August 19, 2004)

- District Rule 8041, Fugitive Dust Requirements for Control of Fine Particulate Matter (PM10) from Carryout and Trackout
(Amended August 19, 2004)

- District Rule 8051, Fugitive Dust Requirements for Control of Fine Particulate Matter (PM10) from Open Area
(Amended August 19, 2004)

- District Rule 8061, Fugitive Dust Requirements for Control of Fine Particulate Matter (PM10) from Paved and Unpaved Roads
(Amended August 19, 2004)

- District Rule 8071, Fugitive Dust Requirements for Control of Fine Particulate Matter (PM10) from Unpaved Vehicle/Equipment Areas
(Amended September 16, 2004)

- 40 CFR Part 60 Subpart K, Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978
(Amended October 17, 2000)

- 40 CFR Part 60 Subpart Ka, Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978 and Prior to July 23, 1984
(Amended December 14, 2000)

- 40 CFR Part 60 Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984
(Amended October 15, 2003)

- 40 CFR Part 60 Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced After January 5, 1981, and on or Before November 7, 2006
(Amended June 2, 2008)

- 40 CFR Part 60 Subpart VVa, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced After November 7, 2006
(Amended June 2, 2008)

- 40 CFR Part 60 Subpart GGG, Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for which Construction, Reconstruction, or Modification Commenced After January 4, 1983, and on or Before November 7, 2006
  (Amended June 2, 2008)

- 40 CFR Part 60 Subpart GGGa, Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006
  (Amended June 2, 2008)

- 40 CFR Part 61 Subpart M, National Emission Standard for Asbestos
  (Amended July 20, 2004)

- 40 CFR 60 Subpart QQQ, Standards of Performance for VOC Emissions from Petroleum Refinery Wastewater Systems
  (Amended October 17, 2000)

- 40 CFR Part 72, Acid Rain Program
  (Amended March 28, 2011)

VII. REQUIREMENTS NOT FEDERALLY ENFORCEABLE

For each Title V source, the District issues a single permit that contains both the federally enforceable requirements as well as District-only requirements. The District-only requirements are not a part of the Title V Operating Permits. The terms and conditions that are part of the facility's Title V Permit are designated as "Federally Enforceable through Title V Permit".

For this facility, the following are not federally enforceable and will not be discussed in further detail:

A. Rules Added/Updated

None

B. Rules Not Updated

District Rule 4102, Nuisance (as amended December 17, 1992)

a. S-37-2
   Condition 3 on the proposed Permit to Operate will ensure continued compliance with the requirements of this rule.

b. S-37-5
Condition 2 on the proposed Permit to Operate will ensure continued compliance with the requirements of this rule.

c. S-37-77
Condition 1 on the proposed Permit to Operate will ensure continued compliance with the requirements of this rule.

d. S-37-78
Condition 3 on the proposed Permit to Operate will ensure continued compliance with the requirements of this rule.

e. S-37-111
Condition 1 on the proposed Permit to Operate will ensure continued compliance with the requirements of this rule.

f. S-37-116
Condition 9 on the proposed Permit to Operate will ensure continued compliance with the requirements of this rule.

g. S-37-123
Condition 1 on the proposed Permit to Operate will ensure continued compliance with the requirements of this rule.

h. S-37-139
Condition 1 on the proposed Permit to Operate will ensure continued compliance with the requirements of this rule.

i. S-37-140
Condition 1 on the proposed Permit to Operate will ensure continued compliance with the requirements of this rule.

j. S-37-147
Condition 2 on the proposed Permit to Operate will ensure continued compliance with the requirements of this rule.

k. S-37-148
Condition 2 on the proposed Permit to Operate will ensure continued compliance with the requirements of this rule.

l. S-37-149
Conditions 2 and 4 on the proposed Permit to Operate will ensure continued compliance with the requirements of this rule.

VIII. PERMIT REQUIREMENTS

The purpose of this evaluation is to review changes to federally enforceable requirements; therefore, this section will address rules and permit conditions that have been amended or added since the issuance of the initial Title V Permit or most recent renewal of the Title V permit.

A. District Rule 2020, Exemptions

District Rule 2020 lists equipment that is exempt from obtaining permits and specifies recordkeeping requirements to verify such exemptions. The amendments to this rule do not have any effect on current permit requirements and will therefore not be addressed in this evaluation.

B. District Rule 2201, New and Modified Stationary Source Review (NSR) Rule

District Rule 2201 has been amended since this facility's initial Title V permit was issued. However, the requirements of this rule are only triggered at the time the source undergoes a modification. All applicable requirements from any NSR permit actions have already been incorporated into the current Title V permit.

C. District Rule 2410, Prevention of Significant Deterioration

District Rule 2410 has been newly adopted since this Title V permit was last renewed. However the requirements of this rule are only triggered at the time the source undergoes a modification. All applicable requirements from any PSD permit actions have already been incorporated into the current Title V permit.

D. District Rule 2520, Federally Mandated Operating Permits

No changes to this Rule have occurred since issuance of the previous Title V permit; however, greenhouse gas emissions will be addressed under Rule 2520 during this renewal.

Greenhouse Gas Discussion

There are no federally applicable Greenhouse Gas (GHG) requirements for this source. It should be noted that the Mandatory Greenhouse Gas Reporting rule (40 CFR Part 98) is not included in the definition of an applicable requirement within Title V (per 40 CFR 71.2). Therefore, there will be no further discussion of GHG in this evaluation.

E. District Rule 4307, Boilers, Steam Generators, and Process Heaters – 2.0 MMBtu/hr to 5.0 MMBtu/hr

The purpose of this rule is to limit NOx, CO, SO2, and PM10 from boilers, steam generators, and process heaters. This rule applies to any gaseous fuel or liquid fuel fired boiler, steam generator, or process heater with a total rated heat input of 2.0 MMBtu/hr up to and including 5.0 MMBtu/hr.

The facility has one unit that is subject to this rule, a 3.75 MMBtu/hr fire tube heater (H-1) under permit S-37-38. Project S-11627746 was recently evaluated resulting in the issuance of Authority to Construct (ATC) S-37-38-12 on 7/11/17. Although the ATC was for the addition of a second process heater, the project evaluated existing fire tube heater (H-1), which was not being modified, and determined that H-1 already complies with the rule. Compliance with Rule 4307 for H-1 is discussed below.

Section 5.1 NOx and CO Emission Limits:

Existing heater H-1 meets the emissions limit requirements of the Rule for NOx and CO (30 ppmv @ 3% O2 NOx, 400 ppmv @ 3% O2 CO)

- the proposed NO_x emission factor is 30 ppmvd @ 3% O_2 (0.0146 lb/MMBtu), and
- the proposed CO emission factor is 400 ppmvd @ 3% O_2 (0.0188 lb/MMBtu).

The following condition, which was established in ATC S-37-38-12, will be added to S-37-38:

- Emissions from the natural gas-fired heater H-1 shall not exceed any of the following limits: 30 ppmvd NOx @ 3% O2 (equivalent to 0.036 lb-NOx/MMBtu), 0.005 lb-PM10/MMBtu, 400 ppmvd CO @ 3% O2 (equivalent to 0.3 lb-CO/MMBtu), or 0.0055 lb-VOC/MMBtu. [District Rules 2201 and 4307]

Section 5.3 Particulate Matter Control Requirements:

Heater H-1 meets the particulate control requirements of Section 5.3 and will combust gas containing no more than 5 gr S/100 scf.

The following condition will be added to S-37-38:

- Gas combusted by heater H-1 shall contain no more than 5 gr S/100scf. [District Rule 4307]

5.4 Start-Up and Shutdown Requirements:

Special startup and shutdown provisions have not been proposed.

5.5 Monitoring Provisions

Monthly monitoring and NOx, CO, and O2 concentrations has been proposed.

The following condition will be added to S-37-38:

- The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rule 4307]

- If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4307]

- All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute

period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4307]

- The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4307]

6.3 Compliance Demonstration

Section 6.3 lists the applicable source testing that is required to demonstrate compliance.

Heater H-1 has been recently source tested and shown to comply with the applicable requirements.

Therefore, compliance with the rule is expected.

F. District Rule 4455, Components at Petroleum Refineries, Gas Liquids Processing Facilities, and Chemical Plants

The purpose of this rule is to limit VOC emissions from leaking components at petroleum refineries, gas liquids processing facilities, and chemical plants. This rule shall apply to components containing or contacting VOC at petroleum refineries, gas liquids processing facilities, and chemical plants.

This rule has not been amended since the last permit renewal. The applicant has request that Rule 4455 Leak Detection and Repair conditions be consolidated in the facility-wide permit S-37-0. A set of conditions that containing these Rule 4455 requirements is already found in the facility-wide permit S-37-0. However, some or all of the same conditions that are found on S-37-0 are also found certain individual permits. Instead of repeating the same conditions on individual permits that are already found on S-37-0, those duplicate conditions on the individual permits will be removed and the following condition will be added to them:

- This unit is subject to Rule 4455 Leak Detection and Repair Conditions on the facility wide permit S-37-0. [District Rule 4455]

The above permit condition was added to the following permits:

a. S-37-1
The above condition was added as condition #10 to ensure continued compliance with the requirements of this rule.

b. S-37-2
The above condition was added as condition #5 to ensure continued compliance with the requirements of this rule.

c. S-37-3
The above condition was added as condition #37 to ensure continued compliance with the requirements of this rule.

d. S-37-4
The above condition was added as condition #36 to ensure continued compliance with the requirements of this rule.

e. S-37-5
The above condition was added as condition #3 to ensure continued compliance with the requirements of this rule.

f. S-37-6
The above condition was added as condition #31 to ensure continued compliance with the requirements of this rule.

g. S-37-7
The above condition was added as condition #31 to ensure continued compliance with the requirements of this rule.

h. S-37-8
The above condition was added as condition #28 to ensure continued compliance with the requirements of this rule.

i. S-37-9
The above condition was added as condition #10 to ensure continued compliance with the requirements of this rule.

j. S-37-77
The above condition was added as condition #40 to ensure continued compliance with the requirements of this rule.

k. S-37-78
The above condition was added as condition #14 to ensure continued compliance with the requirements of this rule.

l. S-37-94
The above condition was added as condition #20 to ensure continued compliance with the requirements of this rule.

m. S-37-118
The above condition was added as condition #39 to ensure continued compliance with the requirements of this rule.

n. S-37-119
The above condition was added as condition #33 to ensure continued compliance with the requirements of this rule.

o. S-37-120
The above condition was added as condition #7 to ensure continued compliance with the requirements of this rule.

p. S-37-121
The above condition was added as condition #17 to ensure continued compliance with the requirements of this rule.

G. District Rule 4621, Gasoline Transfer Into Stationary Storage Containers, Delivery Vessels, and Bulk Plants

The purpose of this rule is to limit VOC emissions from stationary storage containers, delivery vessels, and bulk plants and to provide the administrative requirements for determining compliance with this rule. The rule applies to applies to gasoline storage containers located at bulk plants with capacities greater than 250 gallons and less than 19,800 gallons; to other stationary gasoline storage containers with capacities greater than 250 gallons; to those gasoline storage containers that are not subject to the control requirements of District Rule 4623 (Storage of Organic Liquids); and to gasoline delivery vessels.

This rule was amended on December 19, 2013. The amended rule removed ARB certification requirements for aviation gasoline bulk loading operations. Instead of ARB certifications, these operations would be required to be equipped with a vapor recovery system that would meet a minimum volumetric control of 90% as required by ARB's Certification Procedure (CP-202) for Vapor Recovery Systems of Bulk Plants (March 17, 1999). The rule was also amended to incorporate these testing requirements and eliminate the ARB certification requirement.

Permits S-37-8, '-43, '-46, '-71, and '-127 at the facility are currently subject to Rule 4621, but none of the equipment is used as aviation gasoline bulk

loading operations. Therefore, none of the operations were affected by the rule amendment. Therefore, continued compliance with the rule is expected.

H. District Rule 4622, Transfer of Gasoline Into Vehicle Fuel Tanks

The purpose of this rule is to limit emissions of gasoline vapors from the transfer of gasoline into motor vehicle fuel tanks. District Rule 4622 applies to any gasoline storage and dispensing operation or mobile fueler from which gasoline is transferred into motor vehicle fuel tanks, except certain exemptions identified in Section 4.0 of the rule.

This rule was amended December 19, 2013. There were new definitions added, provisions added for E85 fuel, revisions to inspection frequency, requirements for liquid condensate traps, requirements for in-station diagnostic systems (ISD), and revised testing requirements.

The facility maintains one non-retail aboveground gasoline storage tanks, permit unit S-37-127. The permit was modified in 2014 to upgrade Phase I vapor recovery system. Therefore, the permit meets any requirements imposed by amendments to this rule.

I. District Rule 4625, Wastewater Separators

The purpose of this rule is to limit VOC emissions from wastewater separators by requiring vapor loss control devices, recordkeeping, inspection, and test methods.

This rule applies to wastewater separators including air flotation units as defined in this rule. The requirements of this rule only apply to the separation of crude oil and water after custody transfer. Permit unit S-37-9 (Oil/water separation operation with API separator and corrugated plate separator) is subject to this rule.

The rule was amended on December 15, 2011. The rule was amended to increase the VOC control efficiency from 90 to 95% (in Section 5.1.3 as one of the options to comply with section 5.1), remove the exemption and outdated language, add definitions, and add recordkeeping and maintenance requirements.

The change to section 5.1.3 will not affect the units subject to this rule, the API separator or the corrugated plate separator on permit unit S-37-9, as they both will continue to comply with Section 5.1.1 (and thus in compliance with Section 5.1). Section 5.1.1, which has not changed, requires units subject to this rule to be equipped with solid cover with all openings sealed and totally enclosing the liquid contents of the compartment, except for such

breathing vents as are structurally necessary. The API separator or the corrugated plate separator on permit unit S-37-9 are both equipped with solid covers. Therefore, continued compliance with this rule is expected.

a. S-37-9
Conditions #5-8 on the proposed Permit to Operate will ensure continued compliance with the requirements of this rule. Conditions #5 and 8 will be modified to reflect the current 95% control efficiency requirements for the vapor control system.

J. District Rule 4702, Internal Combustion Engines

The purpose of this rule is to limit the emissions of nitrogen oxides (NOx), carbon monoxide (CO), volatile organic compounds (VOC), and sulfur oxides (SOx) from internal combustion engines. This rule was amended November 14, 2013. The amended involved including a waste gas fueled category of lean-burn engine and associated emissions requirements. No permits at this facility were affected by the rule amendment.

K. 40 CFR Part 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

The requirements of this Subpart apply to any "steam generating unit" which commenced construction, reconstruction, or modification after June 9, 1989, and that has a heat input rating greater than or equal to 10 MMBtu/hr but less than or equal to 100 MMBtu/hr.

A "steam generating unit" means a device that combusts any fuel and produces steam or heats water or heats any heat transfer medium. This term includes any duct burner that combusts fuel and is part of a combined cycle system. This term does not include process heaters as defined in this subpart. Subpart Dc requirements had been included for several process heater permits for facility S-37. Since process heaters are not considered "steam generating units", reference to those Subpart Dc requirements will be removed from the various process heater permits conditions that previously referenced them. Reference to Subpart Dc will be removed from the following permits: S-37-1, '-3, '-4, '-77, '-116, '-118, '-119, and '-122.

L. 40 CFR Part 60, Subpart J, Standards of Performance for Petroleum Refineries

The requirements of this Subpart apply to specified affected units located at a petroleum refinery, including fluid catalytic cracking unit catalyst regenerators, fuel gas combustion devices, and Claus sulfur recovery plants.

The affected units at this facility commenced construction after June 11, 1973 and are subject to the standards of this Subpart.

This subpart was amended on 9/12/12 and 12/1/15.

The 9/12/12 amendment revised wording in the applicability section which designated "affected facility", allowed owners to comply with subpart Ja to satisfy subpart J, revised the definition of "fuel gas" and revised test method wording. No change to the permits is required as a result of the amendments; therefore, continued compliance with this regulation is expected.

The 12/1/15 amendment revised sections pertaining to fuel gas testing. No change to the permits is required as a result of the amendments; therefore, continued compliance with this regulation is expected.

a. S-37-1
Condition 6 on the proposed Permit to Operate will ensure continued compliance with the requirements of this Subpart.

b. S-37-3
Conditions 2, 3, and 10 on the proposed Permit to Operate will ensure continued compliance with the requirements of this Subpart.

c. S-37-4
Conditions 2, 3, and 10 on the proposed Permit to Operate will ensure continued compliance with the requirements of this Subpart.

d. S-37-38
Conditions 9, 10, 19, and 20 on the proposed Permit to Operate will ensure continued compliance with the requirements of this Subpart.

e. S-37-77
Conditions 2 to 5 on the proposed Permit to Operate will ensure continued compliance with the requirements of this Subpart.

f. S-37-78
Condition 4 on the proposed Permit to Operate will ensure continued compliance with the requirements of this Subpart.

g. S-37-103
Condition 3 on the proposed Permit to Operate will ensure continued compliance with the requirements of this Subpart.

h. S-37-116
Condition 2 on the proposed Permit to Operate will ensure continued compliance with the requirements of this Subpart.

i. S-37-118
Conditions 3 to 6 on the proposed Permit to Operate will ensure continued compliance with the requirements of this Subpart.

j. S-37-119
Conditions 36 to 39 on the proposed Permit to Operate will ensure continued compliance with the requirements of this Subpart.

M. 40 CFR Part 60, Subpart Ja, Standards of Performance for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007

§60.100a (Applicability, designation of affected facility, and reconstruction)

Pursuant to §60.100a paragraph (a), the provisions of this subpart apply to the following affected facilities in petroleum refineries: fluid catalytic cracking units (FCCU), fluid coking units (FCU), delayed coking units, fuel gas combustion devices, (including process heaters), flares, and sulfur recovery plants.

§60.100a paragraph (b) states that for flares the provisions of this subpart apply only to flares which commence construction, modification, or reconstruction, after June 24, 2008.

§60.100a paragraph (c) states that for the purposes of this subpart, a modification to a flare commences when a project that includes any of the activities in paragraphs (c)(1) or (2) of this section is commenced, which are: (1) Any new piping from a refinery process unit, including ancillary equipment, or a fuel gas system is physically connected to the flare; and (2) A flare is physically altered to increase the flow capacity of the flare.

The flare under permit S-37-7 is subject to this subpart because of connections made to it after May 14, 2007. As per §60.100a(c), new connections made to a flare triggers Subpart Ja applicability. Therefore, the following condition will be added to S-37-7:

- This flare is subject to the New Source Performance Standards (NSPS) for Petroleum Refineries, 40 CFR 60 Subpart Ja and applicable requirements of the General Provisions, 40 CFR 60 Subpart A. The provisions of 40 CFR 60.14 pertaining to modifications are

superseded by the provisions of 40 CFR 60.100a(c)(1) or (2), as applicable. [40 CFR 60.100a]

§60.102a (Emissions limitations)

§60.102a does not list any emissions limits that apply to flares.

§60.103a (Design, equipment, work practice or operational standards)

Pursuant to §60.103a paragraph (a), each owner or operator that operates a flare that is subject to this subpart shall develop and implement a written flare management plan no later than the date specified in paragraph (b) of this section. The flare management plan must include the information described in paragraphs (a)(1) through (7) of this section.

§60.103a paragraph (b) states the flare management plan must submit the plan to the Administrator by no later than November 11, 2015 or upon startup of the modified flare, whichever is later. The plan should be updated periodically to account for changes in the operation of the flare. The owner or operator must comply with the updated plan as submitted. All versions of the plan submitted to the Administrator shall also be submitted to the following address: U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Sector Policies and Programs Division, U.S. EPA Mailroom (E143-01), Attention: Refinery Sector Lead, 109 T.W. Alexander Drive, Research Triangle Park, NC 27711. Electronic copies in lieu of hard copies may also be submitted to refinerynsps@epa.gov.

Therefore, the following conditions will be added to S-37-7 to ensure compliance with this section:

- Permittee shall develop and implement a written Flare Management Plan by November 11, 2015. The flare management plan must include the information described in 40 CFR 60.103a(a)(1) through (7). [40 CFR 60.103a(a)]

- Permittee shall submit the Flare Management Plan to EPA Region 9 and the District by November 11, 2015. [40 CFR 60.103a(b)]

- The Flare Management Plan shall be submitted, updated and/or resubmitted as required by 40 CFR 60.103a(b)(2) and (3). [40 CFR 60.103a(b)(2) and (3)]

- Permittee shall comply with the submitted Flare Management Plan and any revisions at all times. [40 CFR 60.103a(b)(2)]

§60.103a paragraph (c) states that each owner or operator that operates a fuel gas combustion device, flare or sulfur recovery plant subject to this subpart shall conduct a root cause analysis and a corrective action analysis for each of the conditions specified in paragraphs (c)(1) through (3) of this section.

§60.103a paragraph (c)(1) states that for a flare, a root cause analysis and a corrective action analysis must be conducted for the following: (i) any time the SO2 emissions exceed 500 lb in any 24-hour period; or (ii) any discharge to the flare in excess of 500,000 standard cubic feet (scf) above the baseline, determined in paragraph (a)(4) of this section, in any 24-hour period; or (iii) if the monitoring alternative in §60.107a(g) is elected, any period when the flare gas line pressure exceeds the water seal liquid depth, except for periods attributable to compressor staging that do not exceed the staging time specified in paragraph (a)(3)(vii)(C) of this section. Paragraphs (c)(2) and (c)(3) do not apply as they lists the requirement for fuel gas combustion devices and sulfur recovery plants, respectively.

Therefore, the following conditions will be added to S-37-7 to ensure compliance with this section:

- Permittee shall conduct a Root Cause Analysis and a Corrective Action Analysis: (1) Any time the SO2 emissions exceed 500 lb in any 24-hour period; or (2) When discharge to the flare is in excess of 500,000 standard cubic feet (scf) above the baseline, as determined under 40 CFR 60.103a(a)(4), in any 24- hour period. [40 CFR 60.103a(c)(1)]

§60.103a paragraph (d) states that a root cause analysis and corrective action analysis must be completed as soon as possible, but no later than 45 days after a discharge meeting one of the conditions specified in paragraphs (c)(1) through (3) of this section. Special circumstances affecting the number of root cause analyses and/or corrective action analyses are provided in paragraphs (d)(1) through (5) of this section.

Therefore, the following condition will be added to S-37-7 to ensure compliance with this section:

- The Root Cause Analysis and Corrective Action Analysis must be completed as soon as possible, but no later than 45 days after a discharge meeting one of the conditions triggering the required analysis occurs. The special circumstances affecting the number of root cause analyses and/or corrective action analyses required are provided in 40 CFR 60.103a(d)(1) through (5). [40 CFR 60.103a(d)]

§60.103a paragraph (e) states that each owner or operator of a fuel gas combustion device, flare or sulfur recovery plant subject to this subpart shall implement the corrective action(s) identified in the corrective action analysis conducted pursuant to paragraph (d) of this section in accordance with the applicable requirements in paragraphs (e)(1) through (3) of this section.

Therefore, the following condition will be added to S-37-7 to ensure compliance with this section:

- Permittee shall implement the corrective action(s) identified in the Corrective Action Analysis in accordance with the applicable requirements in 40 CFR 60.103a(e)(1) through (3). [40 CFR 60.103a(e)]

§60.103a paragraph (g) only applies to flares located in the Bay Area Air Quality Management District (BAAQMD) or South Coast Air Quality Management District (SCAQMD).

§60.103a paragraph (h) states that each owner or operator shall not burn in any affected flare any fuel gas that contains H2S in excess of 162 ppmv determined hourly on a 3-hour rolling average basis. The combustion in a flare of process upset gases or fuel gas that is released to the flare as a result of relief valve leakage or other emergency malfunctions is exempt from this limit.

Therefore, the following conditions will be added to S-37-7 to ensure compliance with this section:

- Permittee shall not burn in the flare any fuel gas that contains H2S in excess of 162 ppmv determined hourly on a 3-hour rolling average basis. The combustion in a flare of process upset gases or fuel gas that is released to the flare as a result of relief valve leakage or other emergency malfunctions is exempt from this limit. [40 CFR 60.103a(h)]

- Periods of excess emissions are defined as specified in 40 CFR 60.107a(i)(2). [40 CFR 60.107a(i)(2)]

- Permittee shall install, operate, calibrate and maintain an instrument for continuously monitoring and recording the concentration by volume (dry basis) of H2S in the fuel gases before being burned in the flare. Such instrument shall comply with the requirements contained in 40 CFR 60.107a(a)(2)(i) though (vi). [40 CFR 60.107a(a)(2)]

§60.103a paragraph (i) only applies to delayed coking units.

§60.103a paragraph (j) allows each owner or operator subject to the provisions of this section may apply to the Administrator for a determination of equivalence for any means of emission limitation that achieves a reduction in emissions of a specified pollutant at least equivalent to the reduction in emissions of that pollutant achieved by the controls required in this section.

§60.104a (Performance tests)

Pursuant to §60.104a paragraph (a), the owner or operator shall conduct a performance test for each flare to demonstrate initial compliance with the H2S concentration requirement in §60.103a(h) according to the requirements of §60.8. The notification requirements of §60.8(d) apply to the initial performance test and to subsequent performance tests required by paragraph (b) of this section (or as required by the Administrator), but does not apply to performance tests conducted for the purpose of obtaining supplemental data because of continuous monitoring system breakdowns, repairs, calibration checks and zero and span adjustments.

§60.104a paragraph (c) states that in conducting the performance tests required by this subpart (or as requested by the Administrator), the owner or operator shall use the test methods in 40 CFR part 60, Appendices A-1 through A-8 or other methods as specified in this section, except as provided in §60.8(b).

§60.104a paragraphs (d) through (i) do not apply to flares as they are applicable to FCCU, FCU, sulfur recovery units, or fuel gas combustion devices.

§60.104a paragraph (j) states that the owner or operator shall determine compliance with the applicable H2S emissions limit in §60.102a(g)(1) for a fuel gas combustion device or the concentration requirement in §60.103a(h) for a flare according to the following test methods and procedures specified in §60.104a(j)(4).

Therefore, the following condition will be added to S-37-7 to ensure compliance with this section:

- Permittee shall conduct a performance test for the flare to demonstrate initial compliance with 40 CFR 60.8. All required performance tests shall be conducted in accordance with the provisions of 40 CFR 60.104a(c) and (j). [40 CFR 60.104a(c) and (j)]

§60.105a (Monitoring of emissions and operations for fluid catalytic cracking units (FCCU) and fluid coking units (FCU))

§60.105a does not apply to flares.

§60.106a (Monitoring of emissions and operations for sulfur recovery plants)

§60.106a does not apply to flares.

§60.107a (Monitoring of emissions and operations for fuel gas combustion devices and flares)

Pursuant to §60.107a paragraph (a), the owner or operator of flare that is subject to the H2S concentration requirement in §60.103a(h) shall comply with paragraph (a)(2) of this section. The flare is subject to the H2S concentration requirement, so paragraph (a)(2) applies.

Paragraph (a)(2) states that the owner or operator of a flare shall install, operate, calibrate and maintain an instrument for continuously monitoring and recording the concentration by volume (dry basis) of H2S in the fuel gases before being burned in any fuel gas combustion device or flare. Such instrument shall comply with the requirements contained in 40 CFR 60.107a(a)(2)(i) though (vi), which are listed as follows:

Therefore, the following condition will be added to S-37-7 to ensure compliance with this section:

- Permittee shall install, operate, calibrate and maintain an instrument for continuously monitoring and recording the concentration by volume (dry basis) of H2S in the fuel gases before being burned in the flare. Such instrument shall comply with the requirements contained in 40 CFR 60.107a(a)(2)(i) though (vi). [40 CFR 60.107a(a)(2)]

§60.107a paragraph (b) provides an exemption from the H2S monitoring requirements in paragraph (a)(2) of this section for a fuel gas stream that is inherently low in sulfur content.

§60.107a paragraphs (c) and (d) apply to process heaters.

Previously, an alternative to the sulfur and flow monitoring requirements of §60.107a paragraphs (e) and (f), the owner or operator of the flare complied with the alternative monitoring option of §60.107a(g)(7) for certain flare equipped with water seals.

Pursuant to §60.107a paragraph (g)(7) this alternative monitoring option may be elected only for flares with four or fewer pressure exceedances required to be reported under §60.108a(d)(5) ("reportable pressure exceedances") in any 365 consecutive calendar days. Following the fifth reportable pressure exceedance in a 365-day period, the owner or operator must comply with the sulfur and flow monitoring requirements of paragraphs (e) and (f) of this section as soon as practical, but no later than 180 days after the fifth reportable pressure exceedance in a 365-day period.

The flare under permit S-37-7 exceeded the four pressure exceedances within a 365-day period (on December 2, 2015 according to the permittee), and as such was required to install has installed a sulfur monitoring and flow monitoring equipment within 180 days (i.e. by May 30, 2016) as required by §60.107a paragraphs (e) and (f). According to the permittee, sulfur and flow monitoring equipment in according with paragraphs (e) and (f) has been installed.

§60.107a paragraph (e) (Sulfur monitoring for assessing root cause analysis threshold for affected flares), states that except as described in paragraphs (e)(4) and (h) of this section, the owner or operator of an affected flare subject to §60.103a(c) through (e) shall determine the total reduced sulfur concentration for each gas line directed to the affected flare in accordance with either paragraph (e)(1), (e)(2) or (e)(3) of this section. Different options may be elected for different gas lines. If a monitoring system is in place that is capable of complying with the requirements related to either paragraph (e)(1) [total monitoring for assessing root cause analysis threshold for affected flares], (e)(2) [H2S monitoring requirements] or (e)(3) [SO2 monitoring requirements] of this section, the owner or operator of a modified flare must comply with the requirements related to either paragraph (e)(1), (e)(2) or (e)(3) of this section upon startup of the modified flare. If a monitoring system is not in place that is capable of complying with the requirements related to either paragraph (e)(1), (e)(2) or (e)(3) of this section, the owner or operator of a modified flare must comply with the requirements related to either paragraph (e)(1), (e)(2) or (e)(3) of this section no later than November 11, 2015 or upon startup of the modified flare, whichever is later.

The permittee has installed a system that complies with paragraph (e)(1).

Therefore, the following conditions will be added to S-37-7 to ensure compliance with this section:

- Permittee shall determine the total reduced sulfur concentration for each gas line directed to the flare in accordance with the monitoring requirements contained in 40 CFR 60.107a(e)(1). [40 CFR 60.107a(e)].

§60.107a paragraph (e)(4) provides an exemption from sulfur monitoring requirements listed above in paragraphs (e)(1) through (3) for those flares identified in paragraphs (e)(4)(i) through (iv) of this section. The exemption applies to the following: (i) flares that can only receive fuel gas streams that are inherently low in sulfur content either (A) as described in paragraph (a)(3)(i) through (iv) of this section; and/or (B) for which the owner or operator has applied for an exemption from the H2S monitoring requirements as described in paragraph (b) of this section; (ii) emergency flares, , provided that for each such flare, the owner or operator complies with the monitoring alternative in paragraph (g) of this section; (iii) flares equipped with flare gas recovery systems designed, sized and operated to capture all flows except those resulting from startup, shutdown or malfunction, provided that for each such flare, the owner or operator complies with the monitoring alternative in paragraph (g) of this section; or secondary flares that receive gas diverted from the primary flare.

Flare S-37-7 does not qualify for the exemption listed in paragraph (e)(4).

Pursuant to §60.107a paragraph (f) (Flow monitoring for flares), except as provided in paragraphs (f)(2) and (h) of this section, the owner or operator of an affected flare subject to §60.103a(c) through (e) shall install, operate, calibrate and maintain, in accordance with the specifications in paragraph (f)(1) of this section, a CPMS to measure and record the flow rate of gas discharged to the flare. If a flow monitor is not already in place, the owner or operator of a modified flare shall comply with the requirements of this paragraph by no later than November 11, 2015 or upon startup of the modified flare, whichever is later.

Therefore, the following condition will be added to S-37-7 to ensure compliance with this section:

- The permittee shall install, operate, calibrate and maintain, in accordance with the specifications contained in paragraph 40 CFR 60.107a(f)(1), a CPMS to measure and record the flow rate of gas discharged to the flare. [40 CFR 60.107a(f)]

§60.107a paragraph (h) provides alternative monitoring for flare located in the BAAQMD or SCAQMD, so these requirements do not apply to flare S-37-7.

§60.107a paragraph (i) fines excess emissions for flares subject to the concentration requirement in §60.103a(h) for the purpose of reports required by §60.7(c).

The following condition will be added to S-37-7 to ensure compliance with this section:

- Periods of excess emissions are defined as specified in 40 CFR 60.107a(i)(2). [40 CFR 60.107a(i)(2)]

§60.108a (Recordkeeping and reporting requirements)

Paragraphs (a) and (b) do not apply to the flare as they only apply to equipment subject to the emission limitations in §60.102a.

Paragraph (c) requires the owner or operator to maintain several records. For flares the applicable records are: (1) a copy of the flare management plan; (6) records of discharges greater than 500 lb SO2 in any 24-hour period from any affected flare and discharges to an affected flare in excess of 500,000 scf above baseline in any 24-hour period as required by §60.103a(c); and (7) if the owner or operator elects to comply with §60.107a(e)(2) for a flare, records of the H2S and total sulfur analyses of each grab or integrated sample, the calculated daily total sulfur-to-H2S ratios, the calculated 10-day average total sulfur-to-H2S ratios and the 95-percent confidence intervals for each 10-day average total sulfur-to-H2S ratio.

The following conditions will be added to S-37-7 to ensure compliance with this section:

- The permittee shall maintain a copy of the flare management plan on site. [40 CFR 108a(c)(1)]

- The permittee shall maintain records of discharges greater than 500 lb SO2 in any 24-hour period from the flare, and discharges to the flare in excess of 500,000 scf above baseline in any 24-hour period. For any such discharge, the information specified in 40 CFR 108a(c)(6)(i) through (xi) shall be recorded no later than 45 days following the end of a discharge exceeding these thresholds. Such records shall be maintained on site. [40 CFR 108a(c)(6)]

Paragraph (d) states that each owner or operator subject to this subpart shall submit an excess emissions report for all periods of excess emissions according to the requirements of §60.7(c) except that the report shall contain the information specified in paragraphs (d)(1) through (7) of this section

The following condition will be added to S-37-7 to ensure compliance with this section:

- The permittee shall submit an excess emissions report for all periods of excess emissions according to the requirements of 40 CFR 60.7(c), except that the report shall contain the information specified in 40 CFR 108a(d)(1) through (7). [40 CFR 108a(d)]

Based on the foregoing, compliance with this subpart is expected.

N. 40 CFR Part 60, Subpart K, Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19,1978

O. 40 CFR Part 60, Subpart Ka, Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978 and Prior to July 23, 1984

P. 40 CFR Part 60, Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984

Subparts K, Ka, and Kb have not been modified since the last permit renewal, but the applicant has proposed changes and correction to some of its permits regarding the applicability related to Subpart K, Ka, or Kb.

Subpart K applies to each storage vessel for petroleum liquids which has a storage capacity greater than 151,412 liters (40,000 gallons) that processes petroleum after custody transfer and which:

(1) Has a capacity greater than 151, 416 liters (40,000 gallons), but not exceeding 246,052 liters (65,000 gallons), and commences construction or modification after March 8, 1974, and prior to May 19, 1978.
(2) Has a capacity greater than 246,052 liters (65,000 gallons) and commences construction or modification after June 11, 1973, and prior to May 19, 1978.

Subpart Ka applies is each storage vessel with a storage capacity greater than 151,416 liters (40,000 gallons) that is used to store petroleum liquids for which construction is commenced after May 18, 1978, which:

(1) Has a capacity greater than 151, 416 liters (40,000 gallons), but not exceeding 246,052 liters (65,000 gallons), and commences construction or modification after March 8, 1974, and prior to May 19, 1978.

(2) Has a capacity greater than 246,052 liters (65,000 gallons) and commences construction or modification after June 11, 1973, and prior to May 19, 1978.

Subpart Kb applies to each storage vessel with a capacity greater than or equal to 75 cubic meters (m3) that is used to store volatile organic liquids (VOL) for which construction, reconstruction, or modification is commenced after July 23, 1984.

The following changes described below related to Subparts K, Ka, and/or Kb were made to the permits:

a. S-37-23
Permit condition #18 was modified to also include a permit shield from Subpart K (in addition to Ka and Kb) because the tank commenced construction, modification, or reconstruction before June 11, 1973 (in 1956).

b. S-37-24
Permit condition #14 was added to include a permit shield from Subpart K, Ka, and Kb because the tank commenced construction, modification, or reconstruction before June 11, 1973.

c. S-37-43
Permit condition #18 was added to also include a permit shield from Subpart K, Ka, and Kb because the tank commenced construction, modification, or reconstruction before June 11, 1973 (in 1953).

d. S-37-44
Permit condition #12 was modified to also include a permit shield from Subpart K (in addition to Ka and Kb) because the tank commenced construction, modification, or reconstruction before June 11, 1973 (in 1953).

e. S-37-51
Permit condition #18 was modified to also include a permit shield from Subpart K (in addition to Ka and Kb) because the tank commenced construction, modification, or reconstruction before June 11, 1973 (in 1963).

f. S-37-52
Permit condition #18 was modified to also include a permit shield from Subpart K (in addition to Ka and Kb) because the tank commenced construction, modification, or reconstruction before June 11, 1973 (in 1952).

g. S-37-53
Permit condition #18 was modified to also include a permit shield from Subpart K (in addition to Ka and Kb) because the tank commenced construction, modification, or reconstruction before June 11, 1973 (in 1968).

h. S-37-57
Conditions requiring compliance with Subpart Kb were removed since the tank the tank commenced construction, modification, or reconstruction after May 18, 1978 and prior to July 23, 1984 (in 1981). Permit condition #19 was modified to also include a permit shield from Subpart Kb. Permit condition #20 was added to the proposed Permit to Operate to ensure compliance with the requirements of Subpart Ka.

i. S-37-59
Permit condition #17 was modified to also include a permit shield from Subpart K (in addition to Ka and Kb) because the tank commenced construction, modification, or reconstruction before June 11, 1973 (in 1962).

j. S-37-95
Permit condition #33 was modified to also include also permit shield from Subpart Kb (in addition to K and Ka) because the tank commenced construction, modification, or reconstruction before June 11, 1973 (in 1947).

k. S-37-96
Permit condition #33 was modified to also include a permit shield from Subpart Kb (in addition to K and Ka) because the tank commenced construction, modification, or reconstruction before June 11, 1973 (in 1947).

l. S-37-97
Permit condition #18 was modified to also include a permit shield from Subpart Kb (in addition to K and Ka) because the tank commenced construction, modification, or reconstruction before June 11, 1973 (in 1947).

m. S-37-102
Conditions requiring compliance with Subpart Kb were removed since the tank the tank commenced construction, modification, or reconstruction after May 18, 1978 and prior to July 23, 1984 (in 1980). Permit condition #21 was modified to also include a permit shield from Subpart Kb. Permit condition #22 was added to the proposed Permit to Operate to ensure compliance with the requirements of Subpart Ka.

n. S-37-111
Conditions requiring compliance with Subpart Kb were removed since the tank the tank commenced construction, modification, or reconstruction after June 11, 1973, and prior to May 19, 1978. Permit condition #27 was modified to also include a permit shield from Subpart Kb (in addition to Ka). Permit condition #28 was added to require compliance with Subpart K.

o. S-37-125
Conditions requiring compliance with Subpart Kb were removed since the tank the tank commenced construction, modification, or reconstruction after June 11, 1973, and prior to May 19, 1978. Permit condition #16 was modified to also include a permit shield from Subpart Kb (in addition to Ka). Permit condition #17 was added to require compliance with Subpart K.

Q. 40 CFR Part 60, Subpart GGG, Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for which Construction, Reconstruction, or Modification Commenced After January 4, 1983, and on or Before November 7, 2006

The provisions of this subpart apply to affected facilities in petroleum refineries. A compressor is an affected facility. Any affected facility that commences construction, reconstruction, or modification after January 4, 1983, and on or before November 7, 2006, is subject to the requirements of this subpart. Facilities subject to subpart VV, subpart VVa, or subpart KKK of this part are excluded from this subpart.

This Subpart has not been amended since the last permit renewal. A set of conditions that contain Subpart GGG requirements is found in the facility-wide permit S-37-0. However, some or all of the same conditions that are found on S-37-0 are also found certain individual permits. Instead of repeating the same conditions on individual permits that are already found on S-37-0, those duplicate conditions on the individual permits will be removed and the following condition will be added to them:

- Permit unit shall comply with applicable District Rule 4001 (NSPS, Subpart GGG) requirements on facility wide permit S-37-0. [District Rule 4001]

The above permit condition was added to the following permits:

a. S-37-3
The above condition was added as condition #35 to ensure continued compliance with the requirements of this rule.

b. S-37-4
The above condition was added as condition #37 to ensure continued compliance with the requirements of this rule.

c. S-37-7
The above condition was added as condition #32 to ensure continued compliance with the requirements of this rule.

d. S-37-38
The above condition was added as condition #25 to ensure continued compliance with the requirements of this rule.

e. S-37-77
The above condition was added as condition #36 to ensure continued compliance with the requirements of this rule.

f. S-37-118
The above condition was added as condition #38 to ensure continued compliance with the requirements of this rule.

g. S-37-119
The above condition was added as condition #32 to ensure continued compliance with the requirements of this rule.

h. S-37-120
The above condition was added as condition #4 to ensure continued compliance with the requirements of this rule.

i. S-37-121
The above condition was added as condition #5 to ensure continued compliance with the requirements of this rule.

j. S-37-122
The above condition was added as condition #4 to ensure continued compliance with the requirements of this rule.

R. 40 CFR Part 60, Subpart GGGa, Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006

The provisions of this subpart apply to affected facilities in petroleum refineries. A compressor is an affected facility. Any affected facility that commences construction, reconstruction, or modification after November 7, 2006, is subject to the requirements of this subpart. Facilities subject to subpart VV, subpart VVa, or subpart KKK of this part are excluded from this subpart.

This Subpart has not been amended since the last permit renewal. A set of conditions that contain Subpart VVVa / GGGa requirements is found in the facility-wide permit S-37-0. However, some or all of the same conditions that are found on S-37-0 are also found certain individual permits. Instead of repeating the same conditions on individual permits that are already found on S-37-0, those duplicate conditions on the individual permits will be removed and the following condition will be added to them:

- This unit is subject to 40 CFR 60 Subpart VVa / GGGa requirements on the facility wide permit S-37-0. [40 CFR 60.480a]
- (For S-37-1 and -7:) The compressors associate with Skids C-02 and C-03 are subject to Rule 4001 (NSPS, Subpart GGGa) requirements identified in the facility-wide permit. [District Rule 4001]
- (For S-37-71:) The rack is subject to Rule 4001 (NSPS, Subpart GGGa) requirements identified in the facility-wide permit. [District Rule 4001]

The above permit condition was added to the following permits:

a. S-37-1
The above condition was added as condition #11 to ensure continued compliance with the requirements of this rule.

b. S-37-7
The above condition was added as condition #33 to ensure continued compliance with the requirements of this rule.

c. S-37-71
The above condition was added as condition #17 to ensure continued compliance with the requirements of this rule.

d. S-37-149
The above condition was added as condition #16 to ensure continued compliance with the requirements of this rule.

S. 40 CFR Part 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

This subpart applies to owners and operators of stationary compression ignition (CI) internal combustion engines (ICEs) that commence construction, modify, or reconstruct their stationary CI ICEs after July 11, 2005.

The facility does not have any CI ICE that are subject to this subpart and the 2/27/14 amendment does not affect applicability of this regulation.

T. 40 CFR Part 60, Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

This subpart applies to owners and operators of stationary spark ignition (SI) internal combustion engines (ICEs) that commence construction, modify, or reconstruct their stationary SI ICEs after June 12, 2006.

The facility does not have any SI ICEs that are subject to this subpart, so the 2/27/14 amendment does not affect applicability of this regulation.

U. 40 CFR Part 63, Subpart CC, National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries

This subpart applies to petroleum refining process units and to related emissions points that are specified in paragraphs (c)(1) through (9) of this section that are located at a plant site that: (1) are located at a plant site that is a major source as defined in section 112(a) of the Clean Air Act; and (2) emit or have equipment containing or contacting one or more of the hazardous air pollutants listed in table 1 of this subpart.

A major source under section 112 of the Clean Air Act is facility that emits or has 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. The applicant has submitted verification that the facility is not a major source of HAP. That verification is found in Appendix C.

The facility's total stationary source HAP emissions are limited by permit condition of the facility-wide permit S-37-0-3 to 10 tons in any consecutive 12 month period of any HAP (as defined in 40 CFR 63.2) and 25 tons in any consecutive 12 month period of any combination of HAPs.

Therefore, the facility is not subject to the requirements of this rule.

V. 40 CFR Part 60, Subpart QQQ, Standards of Performance for VOC Emissions from Petroleum Refinery Wastewater Systems

This subpart has not been modified since the last permit renewal. However, the applicant has indicated that equipment under permits S-37-7, -9, -118, -119, -122, and -149 are also subject to the provisions of this rule and has proposed the addition of Subpart QQQ conditions.

The provisions of this subpart apply to affected facilities located in petroleum refineries for which construction, modification, or reconstruction is commenced after May 4, 1987.

a. S-37-7
Conditions 34-42 were added to the proposed Permit to Operate to ensure compliance with the requirements this Subpart.

b. S-37-9
Conditions 12-20 were added to the proposed Permit to Operate to ensure compliance with the requirements of this Subpart.

c. S-37-118
Conditions 40-48 were added to the proposed Permit to Operate to ensure compliance with the requirements of this Subpart.

d. S-37-119
Conditions 40-48 were added to the proposed Permit to Operate to ensure compliance with the requirements of this Subpart.

e. S-37-121
Conditions 6-14 on the proposed Permit to Operate will ensure continued compliance with the requirements of this rule.

f. S-37-122
Conditions 39-47 were added to the proposed Permit to Operate to ensure compliance with the requirements of this Subpart.

g. S-37-149
Conditions 7-15 were added to the proposed Permit to Operate to ensure compliance with the requirements of this Subpart.

W. 40 CFR Part 63, Subpart UUU, National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units

This subpart establishes national emission standards for hazardous air pollutants (HAP) emitted from petroleum refineries. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and work practice standards. The rule was amended in February 9, 2005

§63.1561(a) This subpart applies to a petroleum refinery that is located at a major source of hazardous air pollutant (HAP) emissions.

A major source of HAP is facility that emits or has 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. The applicant has submitted verification that the facility is not a major source of HAP. That verification is found in Appendix C.

The facility's total stationary source HAP emissions are limited by permit condition of the facility-wide permit S-37-0-3 to 10 tons in any consecutive 12 month period of any HAP (as defined in 40 CFR 63.2) and 25 tons in any consecutive 12 month period of any combination of HAPs.

Therefore, the facility is not subject to the requirements of this rule.

X. 40 CFR Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

This national emission standard for hazardous air pollutants (NESHAP) is intended to regulate emissions of HAP from stationary reciprocating IC engines. Subpart ZZZZ applies to both new and existing stationary IC engines, so units S-37-80 through '-85, '-87, '-88, '-92, '-100, '-101, '-123 are all subject to the requirements of this Subpart.

The 2/27/14 amendment included revisions to clarify that a heated probe is not necessary when using ASTM D6522 to measure oxygen or carbon dioxide concentrations. The requirement to use Method 1 or 1A for sampling site and sampling point selection in testing gaseous emissions from engines

with smaller ducts is deleted, and single- or three-point sampling, depending on duct size, is added.

These amendments do not affect the facility's IC engines. The applicable requirements of Subpart ZZZZ are already incorporated in the existing permits. There have been no modifications to any of the emergency engines to affect compliance with Subpart ZZZZ and continued compliance is expected.

Y. 40 CFR Part 63,Subpart JJJJJJ, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

This Subpart applies to boilers located at any area source of HAP emissions. However, this Subpart does not apply to gas-fired boilers, which it defines to include boilers fired on natural gas, refinery gas, and process gas. All the boilers at this facility are fired on natural gas and refinery gas, so they are not subject to this Subpart.

Z. 40 CFR Part 82, Subparts B and F, Stratospheric Ozone

These regulations apply to servicing motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC). Sections of this regulation were amended in 2013, and conditions 27 and 28 of S-37-0-3 assure compliance with the requirements.

AA. 40 CFR Part 64, Compliance Assurance Monitoring (CAM)

40 CFR Part 64 requires Compliance Assurance Monitoring for units that meet the following three criteria:

1) the unit must have an emission limit for the pollutant;
2) the unit must have add-on controls for the pollutant; these are devices such as flue gas recirculation (FGR), baghouses, and catalytic oxidizers; and
3) the unit must have a pre-control potential to emit of greater than the major source thresholds.

Pollutant	Major Source Threshold (lb/year)
NO_X	20,000
SO_X	140,000
PM_{10}	140,000
CO	200,000
VOC	20,000

§64.1 defines a control device as equipment, other than inherent process equipment, that is used to destroy or remove air pollutants prior to discharge to the atmosphere.

There are two groups of equipment at the facility with add-on controls and emission limits for the controlled pollutants: (1) the full-time gas-fired IC engines with SCR and (2) the turbine.

S-37-84, '-85, '-86: Three 165 bhp full-time gas fired IC engines:

S-37-84, '-85, '-86 are equipped with Non-Selective Catalytic Reduction (NSCR) to control NOx, CO, and VOC emissions and has emission limits for these pollutants. To determine if S-37-84, '-85, '-86 are subject to CAM, the pre-control potential to emit must be calculated. The pre-control emission factors for NOx, CO, and VOC will be taken from AP-42, Table 3.2-3, Uncontrolled Emissions for a 4-Stroke Rich Burn Engine.

AP-42, Table 3.2-3, Uncontrolled Emissions for a 4-Stroke Rich Burn Engine		
Pollutant	Uncontrolled emission factor (EF) lb/MMBtu $_{input}$	Uncontrolled emission factor (EF) lb/bhp-hr*
NOx	2.27	0.0165
CO	3.72	0.0270
VOC	0.0296	0.000215

*lb/bhp-hr = (lb/MMBtu $_{input}$) x (1 MMBtu/393.24 bhp-hr) x (1/0.35) $_{thermal\ efficiency}$

Using the uncontrolled emission factors calculated above, the following table shows the estimated uncontrolled potential to emit of S-37-84, '-85, '-86:

Annual "Uncontrolled" Emissions for S-37-84, '-85, and '-86								
NO_X	0.0165	(lb/hp-hr) x	165	(hp) x	8,760	(hr/yr) =	23,849	(lb/yr)
CO	0.0270	(lb/hp-hr) x	165	(hp) x	8,760	(hr/yr) =	39,026	(lb/yr)
VOC	0.000215	(lb/hp-hr) x	165	(hp) x	8,760	(hr/yr) =	310	(lb/yr)

The table shows that the uncontrolled emissions for NOx are greater than the Major Source threshold for NOx. Therefore, S-37-84 and '-85 and '-86 are subject to CAM requirements for NOx.

The following condition on permits S-37-84, '-85, and '-86 ensures continued compliance with this subpart:

- The Permittee shall begin the daily recording of the inlet temperature to the catalyst bed by June 26, 2012 in order to ensure compliance with the requirements of 40 CFR 64, Compliance Assurance Monitoring (CAM). [District Rule 2520, 9.4.2 and 40 CFR 64]

S-37-92, '-100, and '-101: Three 180 bhp full time gas-fired IC engines

S-37-92, '-100, '-101 are equipped with Non-Selective Catalytic Reduction (NSCR) to control NOx, CO, and VOC emissions and has emission limits for these pollutants. To determine if S-37-84, '-85, '-86 are subject to CAM, the pre-control potential to emit must be calculated. The pre-control emission factors for NOx, CO, and VOC will be taken from AP-42, Table 3.2-3, Uncontrolled Emissions for a 4-Stroke Rich Burn Engine.

AP-42, Table 3.2-3, Uncontrolled Emissions for a 4-Stroke Rich Burn Engine		
Pollutant	Uncontrolled emission factor (EF) lb/MMBtu $_{input}$	Uncontrolled emission factor (EF) lb/bhp-hr*
NOx	2.27	0.0165
CO	3.72	0.0270
VOC	0.0296	0.000215

*lb/bhp-hr = (lb/MMBtu $_{input}$) x (1 MMBtu/393.24 bhp-hr) x (1/0.35) $_{thermal\ efficiency}$

Using the uncontrolled emission factors calculated above, the following table shows the estimated uncontrolled potential to emit of S-37-92, '-100, '-101:

Annual "Uncontrolled" Emissions for S-37-92, '-100, and '-101								
NO_x	0.0165	(lb/hp-hr) x	180	(hp) x	8,760	(hr/yr) =	26,017	(lb/yr)
CO	0.0270	(lb/hp-hr) x	180	(hp) x	8,760	(hr/yr) =	42,574	(lb/yr)
VOC	0.000215	(lb/hp-hr) x	180	(hp) x	8,760	(hr/yr) =	339	(lb/yr)

The table shows that the uncontrolled emissions for NOx are greater than the Major Source threshold for NOx. Therefore, S-37-92, '-100, and '-101 are subject to CAM requirements for NOx.

The following condition on permits S-37-92, '-100, and '-101 ensures continued compliance with this subpart:

- The Permittee shall begin the daily recording of the inlet temperature to the catalyst bed by June 26, 2012 in order to ensure compliance with the requirements of 40 CFR 64, Compliance Assurance Monitoring (CAM). [District Rule 2520, 9.4.2 and 40 CFR 64]

S-37-87 and '-88: two 120 bhp full-time gas-fired IC engines:

S-37-87 and '-88 are equipped with Non-Selective Catalytic Reduction (NSCR) to control NOx, CO, and VOC emissions and has emission limits for these pollutants. To determine if S-87-87 and '-88 is subject to CAM, the pre-control potential to emit must be calculated. The pre-control emission factors for NOx, CO, and VOC will be taken from AP-42, Table 3.2-3, Uncontrolled Emissions for a 4-Stroke Rich Burn Engine.

AP-42, Table 3.2-3, Uncontrolled Emissions for a 4-Stroke Rich Burn Engine		
Pollutant	Uncontrolled emission factor (EF) lb/MMBtu $_{input}$	Uncontrolled emission factor (EF) lb/bhp-hr*
NOx	2.27	0.0165
CO	3.72	0.0270
VOC	0.0296	0.000215

*lb/bhp-hr = (lb/MMBtu $_{input}$) x (1 MMBtu/393.24 bhp-hr) x (1/0.35) $_{thermal\ efficiency}$

Using the uncontrolled emission factors calculated above, the following table shows the estimated uncontrolled potential to emit of S-37-87 and '-88.

Annual "Uncontrolled" Emissions for S-37-87 and '-88								
NO_x	0.0165	(lb/hp-hr) x	120	(hp) x	8,760	(hr/yr) =	17,345	(lb/yr)
CO	0.0270	(lb/hp-hr) x	120	(hp) x	8,760	(hr/yr) =	28,382	(lb/yr)
VOC	0.000215	(lb/hp-hr) x	120	(hp) x	8,760	(hr/yr) =	226	(lb/yr)

The table above shows that the uncontrolled emissions for NOx, CO, and VOC are not greater than the Major Source thresholds for these pollutants. Therefore, S-37-87 and S-37-88 are not subject to CAM requirements for NOx, CO, and VOC.

S-37-114-2: 4.968 MW Gas Turbine Engine

The gas turbine engine is equipped with a selective catalytic reduction (SCR) system and an oxidation catalyst. It also has emission limits for NOx, CO, and VOC.

The uncontrolled emissions can be calculated from AP-42 emission factors and the permitted heat input to the turbine and duct burner.

AP-42, Tables 3.1-1 and 3.1-2a, Uncontrolled Emissions for a Gas Fired Turbine and Duct Burner	
Pollutant	Uncontrolled emission factor (EF) for natural gas (lb/MMBtu)
NOx	0.32
CO	0.082
VOC	0.0021

Permitted Heat Input of Turbine and Duct Burner	
Maximum heat input combined (MMBtu/yr) – Permit Condition	674,520

The uncontrolled potential to emit will be based on the maximum permitted use of natural gas.

Annual "Uncontrolled" Emissions for S-37-114						
NO_x	0.32	(lb/MMBtu) x	674,520	(MMBtu/yr) =	215,846	(lb/yr)
CO	0.082	(lb/MMBtu) x	674,520	(MMBtu/yr) =	55,311	(lb/yr)
VOC	0.0021	(lb/MMBtu) x	674,520	(MMBtu/yr) =	1,416	(lb/yr)

Turbine and Duct Burner Emissions				
Pollutant	Annual Uncontrolled Potential to Emit (Calculated based on AP-42) (lb/yr)	Annual Controlled Potential to Emit (permitted emissions limits) (lb/yr)	Major Source Threshold (lb/yr)	CAM applicable?
NOx	215,846	12,411	20,000	Yes
CO	55,311	15,109	200,000	No
VOC	1,416	5,396	20,000	No

The table shows that the uncontrolled emissions for NOx is greater than the Major Source threshold for NOx. Therefore, S-37-114 is subject to CAM requirements for NOx.

The condition listed below was added to permit S-37-114-2 to ensure compliance with this subpart during the last Title V renewal in project.

- In order to ensure compliance with the requirements of 40 CFR 64, Compliance Assurance Monitoring (CAM), Authority to Construct (ATC) S-37-114-4 shall be fully implemented within six months of the finalized Title V permit renewal for this facility. [District Rule 2520, 9.4.2 and 40 CFR 64]

With the implementation of Authority to Construct S-37-114-5 (in Project S-1120301), kerosene firing was removed from this permit unit bringing its controlled emissions below the 20,000 lb-NOx/yr major source limit. Therefore, compliance with CAM is expected for this unit.

IX. PERMIT SHIELD

A permit shield legally protects a facility from enforcement of the shielded regulations when a source is in compliance with the terms and conditions of the Title V Permit. Compliance with the terms and conditions of the Operating Permit is considered compliance with all applicable requirements upon which those conditions are based, including those that have been subsumed.

A. Requirements Addressed by Model General Permit Templates

The applicant does not propose to use any additional model general permit templates.

B. Requirements not Addressed by Model General Permit Templates

Existing permit shields (e.g. for Subpart K, Ka, and Kb) will be retained to indicate which subpart is applicable, if any, to a given tank. There were changes to the applicability of K, Ka, and Kb as discussed in those sections that resulted in changes to some permit shields.

C. Obsolete Permit Shields From Existing Permit Requirements

No obsolete permit shields were removed from permit as a result of amended rules.

X. CALIFORNIA ENVIRONMENTAL QUALITY ACT

The purpose of the Title V permit renewal is to update the permit to ensure that any changes to regulations since the issuance of the initial Title V permit or most recent renewal of the Title V permit are incorporated as permit requirements.

Per the California Environmental Quality Act (CEQA) Statute §21080.24, and CEQA Guidelines §15281, the issuance, modification, amendment, or renewal of any permit by an air pollution control district or air quality management district pursuant to Title V is exempt from CEQA, unless the issuance, modification, amendment, or renewal authorizes a physical or operational change to a source or facility. There will be no physical or operational change to the source or facility nor will the Title V permit renewal authorize a physical or operational change to the source or facility. Therefore, this project, a Title V permit renewal, is subject to a ministerial action that is exempt from CEQA.

XI. PERMIT CONDITIONS

See Attachment A for the Final Renewed Title V Operating Permit.

XII. ATTACHMENTS

A. Draft Renewal Title V Operating Permit
B. Previous Title V Operating Permit
C. 2014 Actual HAP Emissions
D. Detailed Facility List
E. Summary of Comments and the District's Response

ATTACHMENT A

Draft Renewed Title V Operating Permit

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

Permit to Operate

FACILITY: S-37 **EXPIRATION DATE:** 08/31/2022

LEGAL OWNER OR OPERATOR: KERN OIL & REFINING CO
MAILING ADDRESS: 7724 E PANAMA LN
BAKERSFIELD, CA 93307-9210

FACILITY LOCATION: PANAMA LN & WEEDPATCH HWY
BAKERSFIELD, CA 93307-9210

FACILITY DESCRIPTION: PETROLEUM REFINING

The Facility's Permit to Operate may include Facility-wide Requirements as well as requirements that apply to specific permit units.

This Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require prior District approval. This permit shall be posted as prescribed in District Rule 2010.

Seyed Sadredin
Executive Director / APCO

Arnaud Marjollet
Director of Permit Services

Dec 11 2017 4:06PM – RAMIREZH

San Joaquin Valley
Air Pollution Control District

FACILITY: S-37-0-3 **EXPIRATION DATE:** 08/31/2022

FACILITY-WIDE REQUIREMENTS

1. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
2. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
3. The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
4. Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (12/20/07). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
5. The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.8.1 and 9.13.1] Federally Enforceable Through Title V Permit
6. A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit
7. Every application for a permit required under Rule 2010 (12/17/92) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit
8. The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit
9. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

10. The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.5.1] Federally Enforceable Through Title V Permit

11. Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520 (6/21/01). [District Rules 2520, 9.5.2 and 1100, 7.0] Federally Enforceable Through Title V Permit

12. If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit. [District Rule 2520, 9.7] Federally Enforceable Through Title V Permit

13. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.8.2] Federally Enforceable Through Title V Permit

14. The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.8.3] Federally Enforceable Through Title V Permit

15. The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.8.4] Federally Enforceable Through Title V Permit

16. 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 permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.8.5] Federally Enforceable Through Title V Permit

17. The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.9] Federally Enforceable Through Title V Permit

18. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 2520, 9.13.2.1] Federally Enforceable Through Title V Permit

19. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.13.2.2] Federally Enforceable Through Title V Permit

20. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.13.2.3] Federally Enforceable Through Title V Permit

21. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.13.2.4] Federally Enforceable Through Title V Permit

22. No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (02/17/05). If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and County Rules 401 (in all eight counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

23. No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating with a VOC content in excess of the corresponding limit specified in Table of Standards 1 effective until 12/30/10 or Table of Standards 2 effective on and after 1/1/11 of District Rule 4601 (12/17/09) for use or sale within the District. [District Rule 4601, 5.1] Federally Enforceable Through Title V Permit

24. All VOC-containing materials subject to Rule 4601 (12/17/09) shall be stored in closed containers when not in use. [District Rule 4601, 5.4] Federally Enforceable Through Title V Permit

25. The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.3 (12/17/09). [District Rule 4601, 6.1 and 6.3] Federally Enforceable Through Title V Permit

26. With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.13.1 and 10.0] Federally Enforceable Through Title V Permit

27. If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR Part 82, Subpart F. [40 CFR 82 Subpart F] Federally Enforceable Through Title V Permit

28. If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR Part 82, Subpart B. [40 CFR Part 82, Subpart B] Federally Enforceable Through Title V Permit

29. Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8021] Federally Enforceable Through Title V Permit

30. Outdoor handling, storage and transport of any bulk material which emits dust shall comply with the requirements of District Rule 8031, unless specifically exempted under Section 4.0 of Rule 8031 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8031] Federally Enforceable Through Title V Permit

31. An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8041] Federally Enforceable Through Title V Permit

32. Whenever open areas are disturbed, or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8051] Federally Enforceable Through Title V Permit

33. Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8061] Federally Enforceable Through Title V Permit

34. Any unpaved vehicle/equipment area that anticipates more than 50 Average annual daily Trips (AADT) shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 150 vehicle trips per day (VDT) shall comply with the requirements of Section 5.1.2 of District Rule 8071. On each day that 25 or more VDT with 3 or more axles will occur on an unpaved vehicle/equipment traffic area, the owner/operator shall comply with the requirements of Section 5.1.3 of District Rule 8071. On each day when a special event will result in 1,000 or more vehicles that will travel/park on an unpaved area, the owner/operator shall comply with the requirements of Section 5.1.4 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (9/16/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8071] Federally Enforceable Through Title V Permit

35. Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M] Federally Enforceable Through Title V Permit

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36. The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.16] Federally Enforceable Through Title V Permit

37. The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2] Federally Enforceable Through Title V Permit

38. When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permits shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit

39. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Rule 401 (Madera, Fresno, Kern, Kings, San Joaquin, Stanislaus, Tulare and Merced), Rule 110 (Fresno, Stanislaus, San Joaquin), Rule 109 (Merced), Rule 113 (Madera), Rule 111 (Kern, Tulare, Kings), and Rule 202 (Fresno, Kern, Tulare, Kings, Madera, Stanislaus, Merced, San Joaquin). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

40. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (2/17/05); 4601 (12/17/09); 8021 (8/19/2004); 8031 (8/19/2004); 8041 (8/19/2004); 8051 (8/19/2004); 8061 (8/19/2004); and 8071 (9/16/2004). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

41. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin January 1 of each year, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days of the end of the reporting period. [District Rule 2520] Federally Enforceable Through Title V Permit

42. 40 CFR 60 SUBPART GGG CONDITION: The owner or operator may apply to the Administrator for a determination of equivalency for any means of emission limitation that achieves a reduction in emissions of VOC at least equivalent to the reduction in emissions of VOC achieved by the controls required in Subpart GGG. In doing so the owner or operator shall comply with the requirements of 40 CFR 60.484. [40 CFR 60.592(c)] Federally Enforceable Through Title V Permit

43. 40 CFR 60 SUBPART GGG CONDITION: Each Subpart GGG pump in light liquid service (PLLS) shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485(b), except as provided in 40 CFR 60.482-1(c) and 40 CFR 60.482-2(d), (e), and (f). Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. A leak is detected if an instrument reading of 10,000 ppm or greater is measured or if there are indications of liquids dripping from the pump seal. [40 CFR 60.482-2(a) and (b)] Federally Enforceable Through Title V Permit

44. 40 CFR 60 SUBPART GGG CONDITION: When a leak is detected for each PLLS, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. [40 CFR 60.482-2(c)] Federally Enforceable Through Title V Permit

45. 40 CFR 60 SUBPART GGG CONDITION: Any Subpart GGG PLLS equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of 40 CFR 60.482-2(a) provided the requirements specified in 40 CFR 60.482-2(d)(1) through (6) are met. [40 CFR 60.482(d)] Federally Enforceable Through Title V Permit

46. 40 CFR 60 SUBPART GGG CONDITION: Any Subpart GGG PLLS that is designated, as described in 40 CFR 60.486(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 60.482-2(a), (c), and (d) if the pump meets the requirements specified in 40 CFR 60.482-2(e)(1), (2), and (3). [40 CFR 60.482-2(e)] Federally Enforceable Through Title V Permit

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47. 40 CFR 60 SUBPART GGG CONDITION: If any Subpart GGG PLLS is equipped with a closed vent system capable of capturing and transporting leakage from the seal or seals to a control device that complies with the requirements of 40 CFR 60.482-10, it is exempt from the requirements of 40 CFR 60.482-2(a) through (e). [40 CFR 60.482-2(f)] Federally Enforceable Through Title V Permit

48. 40 CFR 60 SUBPART GGG CONDITION: Any Subpart GGG pump in PLLS that is designated, as described in 40 CFR 60.486(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of 40 CFR 60.482-2(a) and 40 CFR 60.482-2(d)(4) through (6) if: 1). The owner or operator of the pump demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-2(a); and 2) The owner or operator of the pump has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in 40 CFR 60.482-2(c) if a leak is detected. [40 CFR 60.482-2(g)] Federally Enforceable Through Title V Permit

49. 40 CFR 60 SUBPART GGG CONDITION: Except during pressure releases, each Subpart GGG pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in 40 CFR 60.485(c). [40 CFR 60.482-4(a)] Federally Enforceable Through Title V Permit

50. 40 CFR 60 SUBPART GGG CONDITION: After each pressure release, the Subpart GGG pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in 40 CFR 60.482-9. No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in 40 CFR 60.485(c). [40 CFR 60.482-4(b)] Federally Enforceable Through Title V Permit

51. 40 CFR 60 SUBPART GGG CONDITION: Any Subpart GGG pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in 40 CFR 60.482-10 is exempted from the requirements of 40 CFR 60.482-4(a) and (b). [40 CFR 60.482-4(c)] Federally Enforceable Through Title V Permit

52. 40 CFR 60 SUBPART GGG CONDITION: Any pressure relief device that is equipped with a rupture disk upstream of the Subpart GGG pressure relief device is exempt from the 40 CFR 60.482-4(a) and (b), provided the owner or operator complies with the requirements in 40 CFR 60.482-4(d)(2) of this section. After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 60.482-9. [40 CFR 60.482-4(d)] Federally Enforceable Through Title V Permit

53. 40 CFR 60 SUBPART GGG CONDITION: Except for in-situ sampling systems and sampling systems without purges, each Subpart GGG sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR 60.482-1(c). Each closed-purge, closed-loop, or closed-vent system shall comply with the requirements specified in 40 CFR 60.482-5(b)(1), (2), (3), and (4). [40 CFR 60.482-5(a), (b), and (c)] Federally Enforceable Through Title V Permit

54. 40 CFR 60 SUBPART GGG CONDITION: Each Subpart GGG open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR 60.482-1(c). The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line. When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with this condition at all other times. [40 CFR 60.482-6(a) and (c)] Federally Enforceable Through Title V Permit

55. 40 CFR 60 SUBPART GGG CONDITION: Each Subpart GGG open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed. [40 CFR 60.482-6(b)] Federally Enforceable Through Title V Permit

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56. 40 CFR 60 SUBPART GGG CONDITION: Subpart GGG open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of 40 CFR 60.482-6(a), (b) and (c). [40 CFR 60.482-6(d)] Federally Enforceable Through Title V Permit

57. 40 CFR 60 SUBPART GGG CONDITION: Subpart GGG open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in 40 CFR 60.482-6(a) through (c) are exempt from the requirements of 40 CFR 60.482-6(a) through (c). [40 CFR 60.482-6(e)] Federally Enforceable Through Title V Permit

58. 40 CFR 60 SUBPART GGG CONDITION: Each Subpart GGG valve in gas/vapor service and in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485(b) and shall comply with 40 CFR 60.482-7(b) through (e), except as provided in 40 CFR 60.482-7(f), (g), and (h), 40 CFR 60.483-1, 40 CFR 60.483-2, and 40 CFR 60.482-1(c). A leak is detected if an instrument reading of 10,000 ppm or greater is measured. [40 CFR 60.482-7(a) and (b)] Federally Enforceable Through Title V Permit

59. 40 CFR 60 SUBPART GGG CONDITION: Any Subpart GGG valve in gas/vapor service or in light liquid service for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected. If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months. [40 CFR 60.482-7(c)] Federally Enforceable Through Title V Permit

60. 40 CFR 60 SUBPART GGG CONDITION: When a leak is detected for any Subpart GGG valve in gas/vapor service or in light liquid service, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices specified in 40 CFR 60.482-7(e)(1), (2), (3), and (4), where practicable. [40 CFR 60.482-7(d) and (e)] Federally Enforceable Through Title V Permit

61. 40 CFR 60 SUBPART GGG CONDITION: Any Subpart GGG valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 60.482-7(a) if the valve meets the requirements specified in 40 CFR 60.482-7(f)(1), (2), and (3). [40 CFR 60.482-7(f)] Federally Enforceable Through Title V Permit

62. 40 CFR 60 SUBPART GGG CONDITION: Any Subpart GGG valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7(a) if: 1) The owner or operator of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-7(a); and 2) The owner or operator of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times. [40 CFR 60.482-7(g)] Federally Enforceable Through Title V Permit

63. 40 CFR 60 SUBPART GGG CONDITION: Any Subpart GGG valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(f)(2), as a difficult-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7(a) if: 1) The owner or operator of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface; 2) The process unit within which the valve is located either becomes an affected facility through 40 CFR 60.14 or 40 CFR 60.15 or the owner or operator designates less than 3.0 percent of the total number of valves as difficult-to-monitor; and 3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year. [40 CFR 60.482-7(h)] Federally Enforceable Through Title V Permit

64. 40 CFR 60 SUBPART GGG CONDITION: The owner or operator may elect to comply with the applicable provisions for Subpart GGG valves in gas/vapor service and in light liquid service as specified in 40 CFR 60.483-1 and 60.483-2. [40 CFR 60.592(b)] Federally Enforceable Through Title V Permit

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65. 40 CFR 60 SUBPART GGG CONDITION: If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and Subpart GGG valves in heavy liquid service, Subpart GGG pressure relief devices in light liquid or heavy liquid service, and Subpart GGG connectors, the owner or operator shall follow either one of the following procedures: 1) The owner or operator shall monitor the equipment within 5 days by the method specified in 40 CFR 60.485(b) and shall comply with the requirements of 40 CFR 60.482-8(b) through (d); or 2) The owner or operator shall eliminate the visual, audible, olfactory, or other indication of a potential leak. A leak is detected if an instrument reading of 10,000 ppm or greater is measured. [40 CFR 60.482-8(a) and (b)] Federally Enforceable Through Title V Permit

66. 40 CFR 60 SUBPART GGG CONDITION: When a leak is detected in Subpart GGG pumps and valves in heavy liquid service, Subpart GGG pressure relief devices in light liquid or heavy liquid service, and Subpart GGG connectors, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices described under 40 CFR 60.482-7(e). [40 CFR 60.482-8(c) and (d)] Federally Enforceable Through Title V Permit

67. 40 CFR 60 SUBPART GGG CONDITION: Delay of Subpart GGG leak repair will be allowed if the repair is technologically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown. Delay of repair is allowed for equipment which is isolated from the process and which does not remain in VOC service. Delay of repair beyond a process unit shutdown will be allowed for a valve, if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown. [40 CFR 60.482-9(a)(b)(e)] Federally Enforceable Through Title V Permit

68. 40 CFR 60 SUBPART GGG CONDITION: Delay of Subpart GGG leak repair for valves will be allowed if the owner or operator demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair and when repair procedures are effected and when repair procedures ar effected, the purged material is collected and destroyed or recovered in a control device complying with 40 CFR 60.482-10. Delay of leak repair for pumps will be allowed if the repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and repair is completed as soon as practicable, but no later than 6 months after the leak was detected. [40 cfr 60.482-9(c)(d)] Federally Enforceable Through Title V Permit

69. 40 CFR 60 SUBPART GGG CONDITION: For Subpart GGG closed vent systems and control devices, vapor recovery systems shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, whichever is less stringent. [40 CFR 60.482-10(b)] Federally Enforceable Through Title V Permit

70. 40 CFR 60 SUBPART GGG CONDITION: For Subpart GGG closed vent systems and control devices, enclosed combustion devices shall be designed and operated to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816 degrees C. [40 CFR 60.482-10(c)] Federally Enforceable Through Title V Permit

71. 40 CFR 60 SUBPART GGG CONDITION: Except as provided in 40 CFR 60.482-10(i) through (k), each Subpart GGG closed vent system used to comply with the provisions of Subpart GGG shall be inspected according to the procedures and schedule specified in 40 CFR 60.482-10(f)(1) and (f)(2). Leaks, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, shall be repaired as soon as practicable except as provided in 40 CFR 60.482-10(h). A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. Repair shall be completed no later than 15 calendar days after the leak is detected. [40 CFR 60.482-10(f) and (g)] Federally Enforceable Through Title V Permit

72. 40 CFR 60 SUBPART GGG CONDITION: Delay of repair of a Subpart GGG closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown. [40 CFR 60.482-10(h)] Federally Enforceable Through Title V Permit

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73. 40 CFR 60 SUBPART GGG CONDITION: If a Subpart GGG vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2). [40 CFR 60.482-10(i)] Federally Enforceable Through Title V Permit

74. 40 CFR 60 SUBPART GGG CONDITION: Any parts of the Subpart GGG closed vent system that are designated, as described in 40 CFR 60.482-10(l)(1), as unsafe to inspect are exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR 60.482-10 (j)(1) and (j)(2). [40 CFR 60.482-10(j)] Federally Enforceable Through Title V Permit

75. 40 CFR 60 SUBPART GGG CONDITION: Any parts of the Subpart GGG closed vent system that are designated, as described in 40 CFR 60.482-10(l)(2), as difficult to inspect are exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR 60.482-10(k)(1) through (k)(3). [40 CFR 60.482-10(k)] Federally Enforceable Through Title V Permit

76. 40 CFR 60 SUBPART GGG CONDITION: The owner or operator shall record the following information: 1) Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment; 2) Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment; 3) For each inspection during which a leak is detected, a record of the information specified in 40 CFR 60.486(c); 4) For each inspection conducted in accordance with 40 CFR 60.485(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected; and 5) For each visual inspection conducted in accordance with 40 CFR 60.482-10(f)(1)(ii) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected. [40 CFR 60.482-10(l)] Federally Enforceable Through Title V Permit

77. 40 CFR 60 SUBPART GGG CONDITION: Closed vent systems and control devices used to comply with provisions Subpart GGG shall be operated at all times when emissions may be vented to them. [40 CFR 60.482-10(m)] Federally Enforceable Through Title V Permit

78. 40 CFR 60 SUBPART GGG CONDITION: In conducting the Subpart GGG performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in 40 CFR 60, Appendix A or other methods and procedures as specified in 40 CFR 60.485, except as provided in 40 CFR 60.8(b). [40 CFR 60.485(a)] Federally Enforceable Through Title V Permit

79. 40 CFR 60 SUBPART GGG CONDITION: The owner or operator shall determine compliance with the standards in 40 CFR 60.482, 60.483, and 60.484 as follows: Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21. The following calibration gases shall be used: (i) Zero air (less than 10 ppm of hydrocarbon in air); and (ii) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [40 CFR 60.485(b)] Federally Enforceable Through Title V Permit

80. 40 CFR 60 SUBPART GGG CONDITION: The owner or operator shall determine compliance with the no detectable emission standards in 40 CFR 60.482-2(e), 60.482-3(i), 60.482-4, 60.482-7(f), and 60.482-10(e) as follows: 1) The requirements of 40 CFR 60.485(b) shall apply. 2) Method 21 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance. [40 CFR 60.485(c)] Federally Enforceable Through Title V Permit

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81. 40 CFR 60 SUBPART GGG CONDITION: The owner or operator shall test each piece of Subpart GGG equipment unless demonstrated that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used: 1) Procedures that conform to the general methods in ASTM E260-73, 91, or 96, E168-67, 77, or 92, E169-63, 77, or 93 (incorporated by reference as seen in 40 CFR 60.17) shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment; 2) Organic compounds that are considered by the Administrator to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid; and 3) Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Administrator disagrees with the judgment, the previous two procedures as specified in 40 CFR 60.485(d)(1) and (2) shall be used to resolve the disagreement. [40 CFR 60.485(d)] Federally Enforceable Through Title V Permit

82. 40 CFR 60 SUBPART GGG CONDITION: The owner or operator shall demonstrate that the Subpart GGG equipment is in light liquid service by showing that all the following conditions apply: 1) The vapor pressure of one or more of the components is greater than 0.3 kPa at 20 øC (1.2 in. H2O at 68 degrees F). Standard reference texts or ASTM D2879-83, 96, or 97 (incorporated by reference as seen in 40 CFR 60.17) shall be used to determine the vapor pressures; 2) The total concentration of the pure components having a vapor pressure greater than 0.3 kPa at 20 degrees Celsius is equal to or greater than 20 percent by weight; and 3) The fluid is a liquid at operating conditions. [40 CFR 60.485(e)] Federally Enforceable Through Title V Permit

83. 40 CFR 60 SUBPART GGG CONDITION: Samples used in conjunction with 40 CFR 60.485(d), (e), and (g) shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare. [40 CFR 60.485(f)] Federally Enforceable Through Title V Permit

84. 40 CFR 60 SUBPART GGG CONDITION: An owner or operator of more than one affected facility subject to the provisions Subpart GGG may comply with the recordkeeping requirements for these facilities in one recordkeeping system if the system identifies each record by each facility. [40 CFR 60.486(a)] Federally Enforceable Through Title V Permit

85. 40 CFR 60 SUBPART GGG CONDITION: When each Subpart GGG leak is detected as specified in 40 CFR 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following requirements apply: 1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment; 2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR 60.482-7(c) and no leak has been detected during those 2 months; and 3) The identification on equipment except on a valve, may be removed after it has been repaired. [40 CFR 60.486(b)] Federally Enforceable Through Title V Permit

86. 40 CFR 60 SUBPART GGG CONDITION: When each Subpart GGG leak is detected as specified in 40 CFR 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following information shall be recorded in a log and shall be kept for 5 years in a readily accessible location: 1) The instrument and operator identification numbers and the equipment identification number; 2) The date the leak was detected and the dates of each attempt to repair the leak; 3) Repair methods applied in each attempt to repair the leak; 4) ``Above 10,000" if the maximum instrument reading measured by the methods specified in 40 CFR 60.485(a) after each repair attempt is equal to or greater than 10,000 ppm; 5) ``Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak; 6) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown; 7) The expected date of successful repair of the leak if a leak is not repaired within 15 days; 8) Dates of process unit shutdown that occur while the equipment is unrepaired; and 9) The date of successful repair of the leak. [40 CFR 60.486(c) and District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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87. 40 CFR 60 SUBPART GGG CONDITION: The following information pertaining to the design requirements for Subpart GGG closed vent systems and control devices described in 40 CFR 60.482-10 shall be recorded and kept in a readily accessible location: 1) Detailed schematics, design specifications, and piping and instrumentation diagrams; 2) The dates and descriptions of any changes in the design specifications; 3) A description of the parameter or parameters monitored, as required in 40 CFR 60.482-10(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring; 4) Periods when the closed vent systems and control devices required in 40 CFR 60.482-2, 60.482-3, 60.482-4, and 60.482-5 are not operated as designed, including periods when a flare pilot light does not have a flame; and 5) Dates of startups and shutdowns of the closed vent systems and control devices required in 40 CFR 60.482-2, 60.482-3, 60.482-4, and 60.482-5. [40 CFR 60.486(d)] Federally Enforceable Through Title V Permit

88. 40 CFR 60 SUBPART GGG CONDITION: The following information pertaining to all equipment subject to the requirements in 40 CFR 60.482-1 to 60.482-10 shall be recorded in a log that is kept in a readily accessible location: 1) A list of identification numbers for equipment subject to the requirements of Subpart GGG; 2) (i) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 40 CFR 60.482-2(e), 60.482-3(i) and 60.482-7(f). (ii) The designation of equipment as subject to the requirements of 40 CFR 60.482-2(e), 60.482-3(i) and 60.482-7(f) shall be signed by the owner or operator; 3) A list of equipment identification numbers for pressure relief devices required to comply with 60.482-4; 4) (i) The dates of each compliance test as required in 40 CFR 60.482-2(e), 60.482-3(i), 60.482-4, and 60.482-7(f). (ii) The background level measured during each compliance test. (iii) The maximum instrument reading measured at the equipment during each compliance test; and 5) A list of identification numbers for equipment in vacuum service. [40 CFR 60.486(e)] Federally Enforceable Through Title V Permit

89. 40 CFR 60 SUBPART GGG CONDITION: The following information pertaining to all Subpart GGG valves subject to the requirements of 40 CFR 60.482-7(g) and (h) and to all Subpart GGG pumps subject to the requirements of 40 CFR 60.482-2(g) shall be recorded in a log that is kept in a readily accessible location: 1) A list of identification numbers for valves and pumps that are designated as unsafe-to-monitor, an explanation for each valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump; and 2) A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve. [40 CFR 60.486(f)] Federally Enforceable Through Title V Permit

90. 40 CFR 60 SUBPART GGG CONDITION: The following information shall be recorded for Subpart GGG valves complying with 40 CFR 60.483-2: 1) A schedule of monitoring; 2) The percent of valves found leaking during each monitoring period. [40 CFR 60.486(g)] Federally Enforceable Through Title V Permit

91. 40 CFR 60 SUBPART GGG CONDITION: The following information shall be recorded in a log that is kept in a readily accessible location: 1) Design criterion required in 40 CFR 60.482-2(d)(5) and 60.482-3(e)(2) and explanation of the design criterion; and 2) Any changes to this criterion and the reasons for the changes. [40 CFR 60.486(h)] Federally Enforceable Through Title V Permit

92. 40 CFR 60 SUBPART GGG CONDITION: The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in 40 CFR 60.480(d): 1) An analysis demonstrating the design capacity of the affected facility; 2) A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol; and 3) An analysis demonstrating that equipment is not in VOC service. [40 CFR 60.486(i)] Federally Enforceable Through Title V Permit

93. 40 CFR 60 SUBPART GGG CONDITION: Information and data used to demonstrate that a piece of equipment is not in Subpart GGG VOC service shall be recorded in a log that is kept in a readily accessible location. [40 CFR 60.486(j)] Federally Enforceable Through Title V Permit

94. 40 CFR 60 SUBPART GGG CONDITION: The provisions of 40 CFR 60.7 (b) and (d) do not apply to affected facilities subject to Subpart GGG. [40 CFR 60.486(k)] Federally Enforceable Through Title V Permit

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95. 40 CFR 60 SUBPART GGG CONDITION: All Subpart GGG semiannual reports to the Administrator shall include the following information, summarized from the information in 40 CFR 60.486: 1) Process unit identification; 2) For each month during the semiannual reporting period, i) Number of valves for which leaks were detected as described in 40 CFR 60.482-7(b) or 40 CFR 60.483-2, (ii) Number of valves for which leaks were not repaired as required in 40 CFR 60.482-7(d)(1), (iii) Number of pumps for which leaks were detected as described in 40 CFR 60.482-2(b) and (d)(6)(i), (iv) Number of pumps for which leaks were not repaired as required in 40 CFR 60.482-2(c)(1) and (d)(6)(ii), (v) Number of compressors for which leaks were detected as described in 40 CFR 60.482-3(f), (vi) Number of compressors for which leaks were not repaired as required in 40 CFR 60.482-3(g)(1), and (vii) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible; 3) Dates of process unit shutdowns which occurred within the semiannual reporting period; 4) Revisions to items reported in the semiannual report if changes have occurred since the initial report, as required in 40 CFR 60.487 (a) and (b), or subsequent revisions to the initial report. [40 CFR 60.487(c)] Federally Enforceable Through Title V Permit

96. 40 CFR 60 SUBPART GGG CONDITION: An owner or operator electing to comply with the provisions of 40 CFR 60.483-1 and 60.483-2 shall notify the Administrator of the alternative standard selected 90 days before implementing either of the provisions. [40 CFR 60.487(d)] Federally Enforceable Through Title V Permit

97. 40 CFR 60 SUBPART GGG CONDITION: An owner or operator shall report the results of all performance tests in accordance with 40 CFR 60.8 of the General Provisions. The provisions of 40 CFR 60.8(d) do not apply to affected facilities subject to the provisions of Subpart GGG except that an owner or operator must notify the Administrator of the schedule for the initial performance tests at least 30 days before the initial performance tests. [40 CFR 60.487(e)] Federally Enforceable Through Title V Permit

98. 40 CFR 60 SUBPART GGG CONDITION: The Subpart GGG semiannual reporting requirements of 40 CFR 60.487(a), (b), and (c) remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with the requirements of 40 CFR 60.487(a), (b), and (c), provided that they comply with the requirements established by the State. [40 CFR 60.487(f)] Federally Enforceable Through Title V Permit

99. 40 CFR 60 SUBPART GGG CONDITION: Compressors are exempt from the standards of Subpart GGG if the owner or operator demonstrates that a compressor is in hydrogen service. Each compressor is presumed not to be in hydrogen service unless an owner or operator demonstrates that the piece of equipment is in hydrogen service. For a piece of equipment to be considered in hydrogen service, it must be determined that the percent hydrogen content can be reasonably expected always to exceed 50 percent by volume. For purposes of determining the percent hydrogen content in the process fluid that is contained in or contacts a compressor, procedures that conform to the general method described in ASTM E-260, E-168, or E-169 shall be used. An owner or operator may use engineering judgment to demonstrate that the percent content exceeds 50 percent by volume, provided the engineering judgment demonstrates that the content clearly exceeds 50 percent by volume. When an owner or operator and the Administrator do not agree on whether a piece of equipment is in hydrogen service, however, the procedures that conform to the general method described in ASTM E-260, E-168, or E-169 shall be used to resolve the disagreement. If an owner or operator determines that a piece of equipment is in hydrogen service, the determination can be revised only after following the procedures that conform to the general method described in ASTM E-260, E-168, or E-169. [40 CFR 60.593(b)] Federally Enforceable Through Title V Permit

100. 40 CFR 60 SUBPART GGG CONDITION: For compliance with Subpart GGG, an owner or operator may use the following provision in addition to 40 CFR 60.485(e): Equipment is in light liquid service if the percent evaporated is greater than 10 percent at 150 øC as determined by ASTM Method D86-78, 82, 90, 95, or 96. [40 CFR 60.593(d)] Federally Enforceable Through Title V Permit

101. 40 CFR 60 SUBPART GGG CONDITION: Equipment that is in vacuum service is excluded from the requirements of 40 CFR 60.482-2 to 40 CFR 60.482-10 if it is identified as required in 40 CFR 60.486(e)(5). [40 CFR 60.482-1(d)] Federally Enforceable Through Title V Permit

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102. RULE 4455 LEAK DETECTION AND REPAIR CONDITION: Except for complying with the applicable requirements of Sections 6.1 and 7.3, the requirements of this rule shall not apply to 1) components subject to Rule 4623 (adopted 5/19/05), 2) pressure relief devices, pumps, and compressors equipped with a closed vent system as defined in Section 3.0, 3) components buried below ground, 4) components exclusively handling liquid streams which have less than 10 percent by weight (<10 wt%) evaporation at 150 C, 5) components exclusively handling liquid streams with a VOC content less than ten percent by weight (<10 wt%), 6) components exclusively handling gas/vapor streams with a VOC content of less than one percent by weight (<1wt%), 7) components incorporated in lines exclusively in vacuum service, 8) components exclusively handling commercial natural gas, and 9) one-half inch nominal or less stainless steel tube fittings which have been demonstrated to the Air Pollution Control Officer (APCO) to be leak-free based on initial inspection. [District Rule 4455, 4.1 & 4.2] Federally Enforceable Through Title V Permit

103. RULE 4455 LEAK DETECTION AND REPAIR CONDITION: Except for components subject to Rule 4623 (Storage of Organic Liquids) or for components included in the inspection and maintenance (I&M) program implemented pursuant to Section 5.7 of Rule 4623, the operator shall not use any component that leaks in excess of the allowable leak standards of Rule 4455, or is found to be in violation of the provisions specified in Section 5.1.3. A component identified as leaking in excess of an allowable leak standard may be used provided it has been identified with a tag for repair, has been repaired, or is awaiting re-inspection after repair, within the applicable time period specified within the rule. [District Rule 4455, 5.1.1] Federally Enforceable Through Title V Permit

104. RULE 4455 LEAK DETECTION AND REPAIR CONDITION: Each hatch shall be closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4455, 5.1.2] Federally Enforceable Through Title V Permit

105. RULE 4455 LEAK DETECTION AND REPAIR CONDITION: The operator shall be in violation of Rule 4455 if any District inspection demonstrates that one or more of the conditions in Section 5.1.4 (Leak Standards) exist at the facility. [District Rule 4455, 5.1.3.1] Federally Enforceable Through Title V Permit

106. RULE 4455 LEAK DETECTION AND REPAIR CONDITION: Except for annual operator inspection described in Section 5.1.3.2.3, any operator inspection that demonstrates that one or more of the conditions in Section 5.1.4 exist at the facility shall not constitute a violation of Rule 4455 if the leaking components are repaired as soon as practicable but not later than the time frame specified in Rule 4455. Such components shall not be counted towards determination of compliance with the provisions of Section 5.1.4. [District Rule 4455, 5.1.3.2.1] Federally Enforceable Through Title V Permit

107. RULE 4455 LEAK DETECTION AND REPAIR CONDITION: Leaking components detected during operator inspection pursuant Section 5.1.3.2.1 that are not repaired, replaced, or removed from operation as soon as practicable but not later than the time frame specified in Rule 4455 shall be counted toward determination of compliance with the provisions of Section 5.1.4. [District Rule 4455, 5.1.3.2.2] Federally Enforceable Through Title V Permit

108. RULE 4455 LEAK DETECTION AND REPAIR CONDITION: Any operator inspection conducted annually for a component type (including operator annual inspections pursuant to Section 5.2.5, 5.2.6, 5.2.7, or 5.2.8) that demonstrates one or more of the conditions in Section 5.1.4 exist at the facility shall constitute a violation of Rule 4455 regardless of whether or not the leaking components are repaired, replaced, or removed from operation within the allowable repair time frame specified in Rule 4455. [District Rule 4455, 5.1.3.2.3] Federally Enforceable Through Title V Permit

109. RULE 4455 LEAK DETECTION AND REPAIR CONDITION: A component shall be considered leaking if one or more of the conditions specified in Sections 5.1.4.1 through 5.1.4.4 of Rule 4455 exist at the facility. Readings shall be taken as methane using a portable hydrocarbon detection instrument and shall be made in accordance with the methods specified in Section 6.4.1 of Rule 4455. [District Rule 4455, 5.1.4] Federally Enforceable Through Title V Permit

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110. RULE 4455 LEAK DETECTION AND REPAIR CONDITION: The operator shall audio-visually inspect for leaks all accessible operating pumps, compressors and Pressure Relief Devices (PRDs) in service at least once every 24 hours, except when operators do not report to the facility for that given 24 hours. Any identified leak that cannot be immediately repaired shall be reinspected within 24 hours using a portable analyzer. If a leak is found, it shall be repaired as soon as practical but not later than the time frame specified in Table 3. [District Rule 4455, 5.2.1 & 5.2.2] Federally Enforceable Through Title V Permit

111. RULE 4455 LEAK DETECTION AND REPAIR CONDITION: The operator shall inspect all components at least once every calendar quarter, except for inaccessible components, unsafe-to-monitor components and pipes. Inaccessible components, unsafe-to-monitor components and pipes shall be inspected in accordance with the requirements set forth in Sections 5.2.5, 5.2.6, and 5.2.7. New, replaced, or repaired fittings, flanges and threaded connections shall be inspected immediately after being placed into service. Components shall be inspected using EPA Method 21. [District Rule 4455, 5.2.3, 5.2.4, 5.2.5, 5.2.6 & 5.2.7] Federally Enforceable Through Title V Permit

112. RULE 4455 LEAK DETECTION AND REPAIR CONDITION: The operator may apply for a written approval from the APCO to change the inspection frequency from quarterly to annually for a component type, provided the operator meets all the criteria specified in Sections 5.2.8.1 through 5.2.8.3. This approval shall apply to accessible component types, specifically designated by the APCO, except pumps, compressors, and PRDs which shall continue to be inspected on a quarterly basis. [District Rule 4455, 5.2.8] Federally Enforceable Through Title V Permit

113. RULE 4455 LEAK DETECTION AND REPAIR CONDITION: An annual inspection frequency approved by the APCO shall revert to quarterly inspection frequency for a component type if either the operator inspection or District inspection demonstrates that a violation of the provisions of Sections 5.1, 5.2 and 5.3 of the rule exists for that component type, or the APCO issued a Notice of Violation for violating any of the provisions of Rule 4455 during the annual inspection period for that component type. When the inspection frequency changes from annual to quarterly inspections, the operator shall notify the APCO in writing within five (5) calendar days after changing the inspection frequency, giving the reason(s) and date of change to quarterly inspection frequency. [District Rule 4455, 5.2.9 & 5.2.10] Federally Enforceable Through Title V Permit

114. RULE 4455 LEAK DETECTION AND REPAIR CONDITION: The operator shall initially inspect a process PRD that releases to the atmosphere as soon as practicable but not later than 24 hours after the time of the release. To insure that the process PRD is operating properly, and is leak-free, the operator shall re-inspect the process PRD not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the date of the release using EPA Method 21. If the process PRD is found to be leaking at either inspection, the PRD leak shall be treated as if the leak was found during quarterly operator inspections. [District Rule 4455, 5.2.11] Federally Enforceable Through Title V Permit

115. RULE 4455 LEAK DETECTION AND REPAIR CONDITION: Except for process PRD, a component shall be inspected within 15 calendar days after repairing the leak or replacing the component using EPA Method 21. [District Rule 4455, 5.2.12] Federally Enforceable Through Title V Permit

116. RULE 4455 LEAK DETECTION AND REPAIR CONDITION: A District inspection in no way fulfills any of the mandatory inspection requirements that are placed upon operators and cannot be used or counted as an inspection required of an operator. Any attempt by an operator to count such District inspections as part of the mandatory operator's inspections is considered to be willful circumvention and is a violation of this rule. [District Rule 4455, 5.2.13] Federally Enforceable Through Title V Permit

117. RULE 4455 LEAK DETECTION AND REPAIR CONDITION: Upon detection of a leaking component, the operator shall affix to that component a weatherproof readily visible tag that contains the information specified in Section 5.3.3. The tag shall remain affixed to the component until the leaking component has been repaired or replaced; has been re-inspected using EPA Method 21; and is found to be in compliance with the requirements of Rule 4455. [District Rule 4455, 5.3.1 5.3.2 and 5.3.3] Federally Enforceable Through Title V Permit

118. RULE 4455 LEAK DETECTION AND REPAIR CONDITION: An operator shall minimize all component leaks immediately to the extent possible, but not later than one (1) hour after detection of leaks in order to stop or reduce leakage to the atmosphere. [District Rule 4455, 5.3.4] Federally Enforceable Through Title V Permit

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119. RULE 4455 LEAK DETECTION AND REPAIR CONDITION: If the leak has been minimized but the leak still exceeds the applicable leak standards of Rule 4455, an operator shall repair or replace the leaking component, vent the leaking component to a closed vent system, or remove the leaking component from operation as soon as practicable but not later than the time period specified in Table 3. For each calendar quarter, the operator may be allowed to extend the repair period as specified in Table 3, for a total number of leaking components, not to exceed 0.05 percent of the number of components inspected, by type, rounded upward to the nearest integer where required. [District Rule 4455, 5.3.5] Federally Enforceable Through Title V Permit

120. RULE 4455 LEAK DETECTION AND REPAIR CONDITION: If the leaking component is an essential component or a critical component and which cannot be immediately shut down for repairs, the operator shall minimize the leak within one hour after detection of the leak. If the leak has been minimized, but the leak still exceeds any of the applicable leak standards of Rule 4455, the essential component or critical component shall be repaired or replaced to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection, whichever comes earlier. [District Rule 4455 5.3.6] Federally Enforceable Through Title V Permit

121. RULE 4455 LEAK DETECTION AND REPAIR CONDITION: For any component that has incurred five repair actions for major gas leaks or major liquid leaks, or any combination of major gas leaks and major liquid leaks within a continuous 12-month period, the operator shall comply with at least one of the requirements specified in Sections 5.3.7.1, 5.3.7.2, 5.3.7.3, or 5.3.7.4 by the applicable deadlines specified in Sections 5.3.7.5 and 5.3.7.6. If the original leaking component is replaced with a new like-in-kind component before incurring five repair actions for major leaks within 12-consecutive months, the repair count shall start over for the new component. An entire compressor or pump need not be replaced provided the compressor part(s) or pump part(s) that have incurred five repair actions as described in Section 5.3.7 are brought into compliance with at least one of the requirements of Sections 5.3.7.1 through 5.3.7.6. [District Rule 4455, 5.3.7] Federally Enforceable Through Title V Permit

122. RULE 4455 LEAK DETECTION AND REPAIR CONDITION: The operator shall monitor process PRD by using electronic process control instrumentation that allows for real time continuous parameter monitoring or by using telltale indicators for the process PRD where parameter monitoring is not feasible. [District Rule 4455, 5.4.1] Federally Enforceable Through Title V Permit

123. RULE 4455 LEAK DETECTION AND REPAIR CONDITION: After a release from a process PRD in excess of 500 pounds of VOC in a continuous 24-hour period, the operator shall immediately conduct a failure analysis and implement corrective actions as soon as practicable but not later than 30 days to prevent the reoccurrence of similar release. For refineries processing greater than 20,000 barrels of crude oil per day, any subsequent release in excess of 500 pounds of VOC within a continuous 24-hour period shall be subject to the requirements of Section 5.4.5. [District Rule 4455, 5.4.3 & 5.4.4] Federally Enforceable Through Title V Permit

124. RULE 4455 LEAK DETECTION AND REPAIR CONDITION: The operator of a refinery processing greater than 20,000 barrels of crude oil per day shall connect all process PRDs serving that process equipment to an APCO-approved closed vent system as defined in Section 3.0 if any of the conditions specified in Sections 5.4.5.1 and 5.4.5.2 occurs. Process PRDs subject to the provisions of Section 5.4.5 shall be connected to an APCO-approved closed-vent system as soon as practicable, but no later than the first turnaround after the requirement to connect becomes effective. [District Rule 4455, 5.4.5] Federally Enforceable Through Title V Permit

125. RULE 4455 LEAK DETECTION AND REPAIR CONDITION: All major components and critical components shall be physically identified clearly and visibly for inspection, repair, and recordkeeping purposes. The physical identification shall consist of labels, tags, manufacturer's nameplate identifier, serial number, or model number, or other system approved by the APCO that enables an operator or District personnel to locate each individual component. The operator shall replace tags or labels that become missing or unreadable as soon as practicable but not later than 24 hours after discovery. The operator shall comply with the requirements of Sections 6.1.4 if there is any change in the description of major components or critical components. [District Rule 4455, 5.5.1 & 5.5.2] Federally Enforceable Through Title V Permit

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126. RULE 4455 LEAK DETECTION AND REPAIR CONDITION: The operator shall keep a copy of the operator management plan at the facility and make it available to the APCO, ARB and US EPA upon request. By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved operator management plan. [District Rule 4455, 6.1.2 & 6.1.4] Federally Enforceable Through Title V Permit

127. RULE 4455 LEAK DETECTION AND REPAIR CONDITION: The operator shall maintain an inspection log containing, at a minimum, 1) total number of components inspected, and total number and percentage of leaking components found by component types, 2) location, type, name or description of each leaking component, and description of any unit where the leaking component is found, 3) date of leak detection and method of leak detection, 4) for gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak, 5) date of repair, replacement, or removal from operation of leaking components, 6) identification and location of essential component and critical components found leaking that cannot be repaired until the next process unit turnaround or not later one year after leak detection, whichever comes earlier, 7) methods used to minimize the leak from essential components and critical components that cannot be repaired until the next process unit turnaround or not later one year after leak detection, whichever comes earlier, 8) after the component is repaired or is replaced, the date of reinspection and the leak concentration in ppmv, 9) inspector's name, business mailing address, and business telephone number, and 10) the facility operator responsible for the inspection and repair program shall sign and date the inspection log certifying the accuracy of the information recorded in the log. [District Rule 4455, 6.2.1] Federally Enforceable Through Title V Permit

128. RULE 4455 LEAK DETECTION AND REPAIR CONDITION: Records of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components, including a copy of current calibration gas certification from the vendor of said calibration gas cylinder, the date of calibration, concentration of calibration gas, analyzer reading of calibration gas before adjustment, instrument reading of calibration gas after adjustment, calibration gas expiration date, and calibration gas cylinder pressure at the time of calibration. [District Rule 4455, 6.2.3] Federally Enforceable Through Title V Permit

129. RULE 4455 LEAK DETECTION AND REPAIR CONDITION: The operator shall notify the APCO, by telephone or other methods approved by the APCO, of any process PRD release described in Sections 5.4.4 and 5.4.5, and any release in excess of the reportable quantity limits as stipulated in 40 CFR, Part 117, Part 302 and Part 355, including any release in excess of 100 pounds of VOC, within one hour of such occurrence or within one hour of the time said person knew or reasonably should have known of its occurrence. [District Rule 4455, 6.3.1] Federally Enforceable Through Title V Permit

130. RULE 4455 LEAK DETECTION AND REPAIR CONDITION: The operator shall submit a written report to the APCO within thirty (30) calendar days following a PRD release subject to 6.3.1. The written report shall include 1) process PRD type, size, and location, 2) date, time and duration of the process PRD release, 3) types of VOC released and individual amounts, in pounds, including supporting calculations, 4) cause of the process PRD release, and 5) corrective actions taken to prevent a subsequent process PRD release. [District Rule 4455 6.3.2] Federally Enforceable Through Title V Permit

131. RULE 4455 LEAK DETECTION AND REPAIR CONDITION: Copies of all records shall be retained for a minimum of five (5) years after the date of an entry. Such records shall be made available to the APCO, ARB, or US EPA upon request. [District Rule 4455, 6.2.2, 6.2.3 & 6.2.4] Federally Enforceable Through Title V Permit

132. RULE 4455 LEAK DETECTION AND REPAIR CONDITION: Measurements of gaseous leak concentrations shall be conducted according to US EPA Method 21 using an appropriate portable hydrocarbon detection instrument calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in US EPA Method 21 or the manufacturer's instruction, as appropriate, not more than 30 days prior to its use. The operator shall record the calibration date of the instrument. [District Rule 4455, 6.4.1] Federally Enforceable Through Title V Permit

133. RULE 4455 LEAK DETECTION AND REPAIR CONDITION: The VOC content of exempt streams shall be determined using American Society of Testing and Materials (ASTM) D 1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 for liquids. [District Rule 4455, 6.4.2] Federally Enforceable Through Title V Permit

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134. RULE 4455 LEAK DETECTION AND REPAIR CONDITION: For exempt streams, the percent by volume liquid evaporated at 150 deg C shall be determined using ASTM D 86. [District Rule 4455, 6.4.3] Federally Enforceable Through Title V Permit

135. RULE 4455 LEAK DETECTION AND REPAIR CONDITION: Equivalent test methods other than specified in Sections 6.4.1 through 6.4.5 may be used provided such test methods have received prior approval from the US EPA, ARB, and APCO. [District Rule 4455, 6.4] Federally Enforceable Through Title V Permit

136. 40 CFR PART 60 SUBPART VVa / GGGa CONDITION: Each owner or operator subject to the provisions of this subpart shall demonstrate compliance with the requirements of 40 CFR 60.482-3a for all equipment within 180 days of initial startup. [40 CFR 60.482-1a(a)] Federally Enforceable Through Title V Permit

137. 40 CFR PART 60 SUBPART VVa / GGGa CONDITION: Compliance with 40 CFR 60.482-3a shall be determined by review of records and reports, review of performance test results, and inspection using the methods and procedures specified in 40 CFR 60.485a. [40 CFR 60.482-1a(b)] Federally Enforceable Through Title V Permit

138. 40 CFR PART 60 SUBPART VVa / GGGa CONDITION: An owner or operator may request a determination of equivalence of a means of emission limitation to the requirements of 40 CFR 60.482-3a as provided in 40 CFR 60.484a. [40 CFR 60.482-1a(c)(1)] Federally Enforceable Through Title V Permit

139. 40 CFR PART 60 SUBPART VVa / GGGa CONDITION: If the Administrator makes a determination that a means of emission limitation is at least equivalent to the requirements of 40 CFR 60.482-3a, an owner or operator shall comply with the requirements of that determination. [40 CFR 60.482-1a(c)(2)] Federally Enforceable Through Title V Permit

140. 40 CFR PART 60 SUBPART VVa / GGGa CONDITION: Equipment that is in vacuum service is excluded from the requirements of 40 CFR 60.482-3a if it is identified as required in 40 CFR 60.486a(e)(5). [40 CFR 60.482-1a(d)] Federally Enforceable Through Title V Permit

141. 40 CFR PART 60 SUBPART VVa / GGGa CONDITION: Unless exempt under 40 CFR 60.482-3a, each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in 40 CFR 60.482-3a(h) and (i). The barrier fluid system shall be in heavy liquid service or shall not be in VOC service. Each compressor shall be operated and equipped as specified in 40 CFR 60.482-3a(b)(1), (2), or (3). [40 CFR 60.482-3a(a), (b), and (c)] Federally Enforceable Through Title V Permit

142. 40 CFR PART 60 SUBPART VVa / GGGa CONDITION: Any compressor that is designated, as described in 40 CFR 60.486a(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background, is exempt from the requirements of 40 CFR 60.482-3a(a) through (h) if the compressor meets the requirements specified in 40 CFR 60.482-3a(i)(1) and (2). [40 CFR 60.482-3a(i), and District Rule 2201] Federally Enforceable Through Title V Permit

143. 40 CFR PART 60 SUBPART VVa / GGGa CONDITION: Any existing reciprocating compressor in a process unit which becomes an affected facility under the provisions of 40 CFR 60.14 or 40 CFR 60.15 is exempt from 40 CFR 60.482a(a), (b), (c), (d), (e), and (h), provided the owner or operator demonstrates that recasting the distance piece or replacing the compressor are the only options available to bring the compressor into compliance with the provisions of 40 CFR 60.482-3a(a), (b), (c), (d), (e), and (h). [40 CFR 60.593a(c)] Federally Enforceable Through Title V Permit

144. Operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

145. Total stationary source (as defined in 40 CFR 63.2) emission shall not exceed 10 tons in any consecutive 12 month period of any hazardous air pollutant (HAP) (as defined in 40 CFR 63.2) and 25 tons in any consecutive 12 month period of any combination of HAPs. [District Rule 2201] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-1-14 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
120 MMBTU/HR CRUDE UNIT INCLUDING ONE DESALTER, 4 FRACTIONATION VESSELS, STRIPPER, 2 ACCUMULATORS, LIGHT NAPHTHA STABILIZER, KNOCKOUT DRUM SCRUBBER, 60 MMBTU/HR TULSA HEATERS INC. PROCESS HEATER, 60 MMBTU/HR BORN HEATER AND 35 HEAT EXCHANGERS

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grain/dscf. Emissions of combustion contaminants shall not exceed 0.1 grain per cubic foot of gas calculated to 12% CO2 at dry standard conditions. Emissions of combustion contaminants shall not exceed ten (10) pounds per hour. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
2. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. [District Rule 2520, 9.3.2 and District Rule 4301, 5.2.1] Federally Enforceable Through Title V Permit
3. The duration of each startup and shutdown period of the 60 MMBtu/hr Born heater and 60 MMBtu/hr Tulsa heater shall not exceed 9.7 hours and 6.4 hours respectfully. Emission limits of District Rules 4305 and 4306 shall be waived during periods of startup and shutdown. [District Rules 4305, Section 5.5.6, District Rule 4306 Section 5.3] Federally Enforceable Through Title V Permit
4. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown. [District Rules 4305, 5.5.6.2, and 4306, 5.3.2] Federally Enforceable Through Title V Permit
5. Crude unit heaters shall be fired solely on treated refinery fuel gas or purchased natural gas. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Refinery fuel gas supply shall be equipped with continuous H2S monitor meeting the requirements of NSPS Subpart J. [District Rule 4001] Federally Enforceable Through Title V Permit
7. Sulfur content of refinery fuel gas burned in crude unit heaters shall not to exceed 100 ppmv (as H2S). [District NSR Rule] Federally Enforceable Through Title V Permit
8. Sulfur content of natural gas burned in crude unit heaters shall not exceed 1 gr S/100 scf (16.9 ppmv H2S). [District NSR Rule] Federally Enforceable Through Title V Permit
9. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 2520, 9.3.2; Kern County Rule 407, District Rule 4801] Federally Enforceable Through Title V Permit
10. This unit is subject to Rule 4455 Leak Detection and Repair Conditions on the facility wide permit S-37-0. [District Rule 4455] Federally Enforceable Through Title V Permit
11. The compressors associate with Skids C-02 and C-03 are subject to Rule 4001 (NSPS, Subpart GGGa) requirements identified in the facility-wide permit. [District Rule 4001] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. For valves and connectors associated with compressor skids C-02 and C-03 , a leak shall be defined as a reading of methane in excess of 100 ppmv above background when measured per EPA Method 21. For pump and compressor seals associated with compressor skids C-02 and C-03, a leak shall be defined as a reading of methane in excess of 500 ppmv above background when measure per EPA Method 21. [District Rule 2201] Federally Enforceable Through Title V Permit
13. VOC emission rate from fugitive components associated with compressor skids C-02 and C-03 shall not exceed 10.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Permit holder shall maintain accurate component count for compressor skids C-02 and C-03 and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. Permit holder shall update such records when new components are approved and installed. Components shall be screened and leak rate shall be measured in accordance with the frequency of inspection specified in Rule 4455. [District Rule 2201] Federally Enforceable Through Title V Permit
15. 60 MM Btu/hr Tulsa Heaters Inc. process heater shall be equipped with eight Caldius LE-CSG-8W low NOx burners, each having a maximum heat release of 8.18 MM BTU/HR. Heater shall be fired exclusively on PUC or FERC regulated natural gas or refinery fuel gas. [District NSR Rule] Federally Enforceable Through Title V Permit
16. 60 MMBtu/hr Born heater shall be equipped with John Zink PSMR-19 low NOx burners and shall be fired exclusively on PUC or FERC regulated natural gas or refinery fuel gas. [District NSR Rule, District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit
17. Tulsa Heaters Inc. process heater emission rates shall not exceed NOx: 30 ppmv @ 3% O2 or 0.036 lb/MMBtu, CO: 239 ppmvd @ 3% O2, VOC: 0.0026 lb/MMBtu, PM10: 0.014 lb/MMBtu, and SOx: 0.0167 lb SO2/MMBtu. [District Rule 2201, District Rule 4351 5.1, District Rule 4305, 5.1 and 5.3, District Rule 4306, District Rule 4301 and Kern County Rule 408] Federally Enforceable Through Title V Permit
18. Born process heater emission rates shall not exceed NOx (as NO2) 30 ppmv @ 3% O2 or .036 lb/MMBtu, CO: 239 ppmvd @ 3% O2, VOC: 0.0026 lb/MMBtu, PM10: 0.014 lb/MMBtu, and SOx: 0.0167 lb SO2/MMBtu . [District NSR Rule, District Rules 4351 5.1, 4305, 5.1 and 5.3, District Rule 4306, District Rule 4301 and Kern County Rule 408] Federally Enforceable Through Title V Permit
19. Heat input to Tulsa Heater Inc. process heater shall not exceed 60 MM Btu/hr (hhv), as measured on an annual average basis. [District NSR Rule] Federally Enforceable Through Title V Permit
20. Permittee shall demonstrate compliance with the heat input limit of Tulsa Heaters Inc. process heater by maintaining records of hhv of fuel burned and of the cumulative annual fuel use (scf/yr). Records shall be kept for a period of five years and shall be made readily available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
21. For each heater, stack concentrations of NOx (as NO2), CO, and O2 shall be measured at least on a monthly basis using District approved portable analyzers. In-stack O2 monitors are acceptable for O2 measurement. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
22. If the NOx or CO concentrations, as measured by the portable analyzer, exceed the allowable emissions rate, the permittee shall notify the District and return the NOx and CO concentrations to the allowable emissions rate as soon as possible but no longer than one (1) hour after detection. If the portable analyzer readings continue to exceed the allowable emissions rate after one hour, the permittee shall conduct an emissions test within 60 days, utilizing District approved test methods, to determine compliance with the applicable emissions limits. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
23. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

24. The permittee shall maintain records of the date and time of NOx, CO, and O2 measurements, the measured NO2 and CO concentrations corrected to 3% O2, and the O2 concentration. The records must also include a description of any corrective action taken to maintain the emissions within an acceptable range. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit

25. Operator shall perform annual source testing for NOx (ppmv) according to EPA Method 7E (or ARB Method 100), stack gas oxygen by EPA Method 3 or 3A (or ARB Method 100), NOx emission rate (heat input basis) by EPA Method 19, CO by EPA method 10 or ARB method 100, stack gas velocities by EPA Method 2, and stack gas moisture content by EPA Method 4. [District Rule 4305, 6.2.2, 6.2.4-7 and 4351, 6.2.2 & 6.2.4-7, & 6.3, District Rule 4306] Federally Enforceable Through Title V Permit

26. Nitrogen oxide (NOx) emission concentrations in ppmv shall be referenced at dry stack gas conditions, and shall be calculated to 3.00 percent by volume stack gas oxygen and averaged over 60 minutes, and lb/MMBtu rates shall be calculated as lb NO2/MMBtu of heat input (hhv). [District Rule 4305, 5.0, 8.2, District Rule 4306, and/or 4351, 8.1] Federally Enforceable Through Title V Permit

27. During the source test, emissions for these units shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx and CO. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

28. Compliance source testing shall be conducted under conditions representative of normal operation. [District Rule 1081] Federally Enforceable Through Title V Permit

29. Exhaust stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 1081] Federally Enforceable Through Title V Permit

30. Source testing to measure NOx and CO emissions shall be conducted at least once every 12 months, except as provided below. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

31. Source testing to measure NOx and CO emissions shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit

32. If permittee fails any compliance demonstration for NOx or CO emission limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit

33. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit

34. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

35. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

36. Annual test results submitted to the District from unit(s) representing a group of units may be used to demonstrate compliance with NOx limits of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.) [District Rules 4305, 6.3.2, 4306, and 4351, 6.3] Federally Enforceable Through Title V Permit

37. The following conditions must be met for representative unit(s) to be used to demonstrate compliance for NOx limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rules 2520, 9.3.2, 4305, 6.3.2, and 4306] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

38. All units in a group for which representative units are source tested to demonstrate compliance for NOx limits of this permit shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for the each unit of the group including all preventative and corrective maintenance work done. [District Rules 2520, 9.4.2, 4305, 6.3.2, and 4306] Federally Enforceable Through Title V Permit

39. All units in a group for which representative units are source tested to demonstrate compliance for NOx limits of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type (e.g. from natural gas to refinery gas) then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rules 2520, 9.3.2, 4305, 6.3.2, and 4306] Federally Enforceable Through Title V Permit

40. The number of representative units source tested to demonstrate compliance for NOx limits shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that in 3 years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

41. Copies of all purchased fuel invoices, gas purchase contract, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. Operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

42. Draeger tubes shall be used as an alternative method for measuring fuel gas H2S during scheduled maintenance or unscheduled interruptions of CEMs. Draeger tube use shall be limited to no more than 96 continuous hours and fuel gas H2S shall be checked a minimum of every two hours during scheduled maintenance or unscheduled interruptions of CEMs. Alternate method of measuring fuel gas H2S shall occur no more than 192 hours in any calendar year. [40CFR60.13(i)] Federally Enforceable Through Title V Permit

43. Operator shall maintain all records of the reason for alternative monitoring and required fuel gas H2S monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

44. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit

45. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-2-9 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
RERUN UNIT INCLUDING PRE-FLASH DRUM, FRACTIONATOR, STRIPPER, ACCUMULATOR, AND ASSOCIATED VALVES, FLANGES, AND CONNECTORS

PERMIT UNIT REQUIREMENTS

1. Copies of all test results to determine compliance with the conditions of this permit shall be maintained. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
2. Permittee shall maintain a record of hours of operation of the Rerun Unit. Records shall be retained for a minimum of five years, and shall be made available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
3. Spent caustics and waste liquids shall be disposed of in a manner preventing the creation of odors. [District Rule 4102]
4. Fugitive VOC emissions shall not exceed 13,656 lb per year. [District NSR Rule] Federally Enforceable Through Title V Permit
5. This unit is subject to Rule 4455 Leak Detection and Repair Conditions on the facility wide permit S-37-0. [District Rule 4455] Federally Enforceable Through Title V Permit
6. Permittee shall maintain accurate records of number of fugitive components and expected emissions calculated using Technical Guidance Document to AB2588 for refineries Tables D1-D3, AP-42 Table 9.1-2, or other District approved emission factors. [District NSR Rule and District Rule 1070] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-3-9 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
KEROSENE HYDROTREATER UNIT (KHT) INCLUDING A SPLITTER, A REACTOR, A SEPARATOR, 3 ACCUMULATORS, 11.4 MMBTU/HR CHARGE HEATER WITH ZEECO GLSF-10 LOW NOX BURNERS AND 12.5 MMBTU/HR SPLITTER REBOILER HEATER WITH ZEECO GLSF-10 LOW NOX BURNERS

PERMIT UNIT REQUIREMENTS

1. Heaters shall be fired only on purchased commercial natural gas, refinery fuel gas, or any combination thereof. [District Rule 2201, 4001] Federally Enforceable Through Title V Permit
2. Sulfur content of fuel combusted in this unit shall not exceed 100 ppmv (as total reduced sulfur), based on a 3 hour rolling average. [District Rules 2201 and 40 CFR Part 60, Subpart J, 60.104(a)(1)] Federally Enforceable Through Title V Permit
3. All refinery fuel gas combusted in the heaters shall be monitored for H2S content by a continuous emissions monitoring (CEM) system. CEM shall be installed, calibrated, operated, and reported according to EPA guidelines as specified under 40 CFR 60, Subpart J, Specification 7, and general requirements. CEM results shall be calculated on a rolling three (3) hour basis. [District Rules 2201, 4001, Subpart J, 60.105(a)(4) and 60.105(a)(4)iii] Federally Enforceable Through Title V Permit
4. At least once per year, permittee shall obtain and analyze a representative sample for total reduced sulfur of the fuel combusted in this unit. Each sample shall be analyzed for the following reduced sulfur compounds: carbon disulfide, carbonyl sulfide, dimethyl disulfide, dimethyl sulfide, hydrogen sulfide and methyl mercaptan. For each sample, permittee shall record the analytical results for total sulfur, calculated as the sum of the results for all analytes, expressed as H2S. Samples shall be analysed using ASTM D6228-98 or other District-approved method. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The permittee shall demonstrate continuous compliance with the sulfur content limit (as total reduced sulfur) of the fuel combusted in this unit by calculation, as the sum of the non-H2S reduced sulfur compounds (carbon disulfide, carbonyl sulfide, dimethyl disulfide, dimethyl sulfide, methyl mercaptan), based on the most recently conducted fuel sample analysis for total sulfur, and each one hour monitored H2S result. The calculated hourly fuel sulfur values shall be averaged over a rolling three hour period to determine compliance. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Emission rates from each heater, except during startup and shutdown, shall not exceed any of the following: NOx (as NO2): 25 ppmv @ 3% O2 or 0.030 lb/MMBtu, VOC: 5.5 lb/MMscf, PM10: 7.6 lb/MMscf or CO: 50 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
7. Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
8. Daily combustion emissions from this permit unit shall not exceed any of the following: NOx (as NO2): 17.2 lb/day, VOC: 3.2 lb/day, PM10: 4.4 lb/day, or CO: 21.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. The duration of each startup and shutdown period for each heater shall not exceed 12 hours and 9 hours respectively. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

10. The combustion in the fuel gas combustion devices of gases released as a result of start-up, shutdown, upset, malfunction, or the result of relief valve leakage is exempt from the H2S or sulfur content requirement. [District Rules 2201, 4001, Subpart J, 60.104(a)(1)] Federally Enforceable Through Title V Permit

11. The permittee shall record the date and the duration of each startup and each shutdown. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

12. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit

13. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

14. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

15. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

16. Heater exhaust stacks shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 1081] Federally Enforceable Through Title V Permit

17. Source testing to demonstrate compliance with NOx and CO emission limits shall be conducted not less than once every 12 months, except as provided below. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

18. Source testing to demonstrate compliance with NOx and CO emission limits shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

19. If permittee fails any compliance demonstration for NOx or CO emission limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

20. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

21. Compliance source testing shall be conducted under conditions representative of normal operation. [District Rule 1081] Federally Enforceable Through Title V Permit
22. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
23. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
24. The following test methods shall be used unless otherwise approved by the APCO and EPA: NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, and stack gas oxygen - EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit
25. All required source testing shall conform to the compliance testing procedures described in District Rule 1081. [District Rule 1081] Federally Enforceable Through Title V Permit
26. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results used to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
27. Nitrogen oxide (NOx) emission concentrations in ppmv shall be referenced at dry stack gas conditions, and shall be calculated to 3.00 percent by volume stack gas oxygen and averaged over 60 minutes, and lb/MMBtu rates shall be calculated as lb NO2/MMBtu of heat input (hhv). [District Rule 4305, 5.0, 8.2 and/or 4351, 8.1] Federally Enforceable Through Title V Permit
28. Draeger tubes shall be used as an alternative method for measuring fuel gas H2S during scheduled maintenance or unscheduled interruptions of CEMs. Draeger tube use shall be limited to no more than 96 continuous hours and fuel gas H2S shall be checked a minimum of every two hours during scheduled maintenance or unscheduled interruptions of CEMs. Alternate method of measuring fuel gas H2S shall occur no more than 192 hours in any calendar year. [40CFR60.13(i)] Federally Enforceable Through Title V Permit
29. Operator shall maintain all records of the reason for alternative monitoring and required fuel gas H2S monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
30. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320]
31. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320]
32. VOC emission rate from fugitive components associated with this emissions unit shall not exceed 90.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
33. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

34. Operator shall maintain records to demonstrate compliance with fugitive VOC emissions limit of this permit annually. Compliance shall be demonstrated by calculation, using the correlation equations, zero default and 10,000 ppmv pegged factors set forth in the CAPCOA California implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-3a, February 1999, and the average emission concentrations of total organic compounds measured for each component during all inspections conducted during the prior 365 day period. [District Rule 2201] Federally Enforceable Through Title V Permit
35. Permit unit shall comply with applicable District Rule 4001 (NSPS, Subpart GGG) requirements on facility wide permit S-37-0. [District Rule 4001] Federally Enforceable Through Title V Permit
36. The requirements of 40 CFR 60 Subpart GGGa do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
37. This unit is subject to Rule 4455 Leak Detection and Repair Conditions on the facility wide permit S-37-0. [District Rule 4455] Federally Enforceable Through Title V Permit
38. Permittee shall comply with all applicable testing, recordkeeping, and reporting requirements specified in Rule 4001 - New Source Performance Standards, including but not limited to Subparts A and J. [District Rule 4001] Federally Enforceable Through Title V Permit
39. Operators shall not depressurize any vessel containing VOCs unless the process unit turnaround is accomplished by employing one of the following operating procedures: The organic vapors shall either be recovered, added to the refinery fuel gas system and combusted; or controlled and piped to an appropriate firebox or incinerated for combustion; or flared, until the pressure within the process vessel is as close to atmospheric pressure as is possible. All process vessels shall be depressurized into the control facilities to less than 1020 mm Hg (5 psig) before venting/opening to atmosphere. All organic compounds which emerge from a refinery process vessel during the purging of said vessel and which otherwise would be emitted to the atmosphere shall be either directed to a flare or incinerator or shall be used for fuel until such disposition of emissions is not technically feasible or is less safe than atmospheric venting. [District Rule 4454, 4.0] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-4-18 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
PLATFORMER UNIT INCLUDING SEPARATOR, ADSORBER, 3 REACTORS, 4 FT. DIA. STABILIZER TOWER, ACCUMULATORS, 29.3 MMBTU/HR CHARGE HEATER #1 WITH ZEECO GLSF-12 LOW NOX BURNERS, 17.9 MMBTU/HR CHARGE HEATER #2 WITH ZEECO GLSF-12 LOW NOX BURNERS, AND 11.9 MMBTU/HR CHARGE HEATER #3 WITH ZEECO GLSF-10 LOW NOX BURNERS

PERMIT UNIT REQUIREMENTS

1. Heaters shall be fired only on purchased commercial natural gas, refinery fuel gas, or any combination thereof. [District Rule 2201, 4001] Federally Enforceable Through Title V Permit
2. Sulfur content of fuel combusted in this unit shall not exceed 100 ppmv (as total reduced sulfur), based on a 3 hour rolling average. [District Rules 2201 and 40 CFR Part 60, Subpart J, 60.104(a)(1)] Federally Enforceable Through Title V Permit
3. All refinery fuel gas combusted in the heaters shall be monitored for H2S content by a continuous emissions monitoring (CEM) system. CEM shall be installed, calibrated, operated, and reported according to EPA guidelines as specified under 40 CFR 60, Subpart J, Specification 7, and general requirements. CEM results shall be calculated on a rolling three (3) hour basis. [District Rules 2201, 4001, Subpart J, 60.105(a)(4) and 60.105(a)(4)iii] Federally Enforceable Through Title V Permit
4. At least once per year, permittee shall obtain and analyze a representative sample for total reduced sulfur of the fuel combusted in this unit. Each sample shall be analyzed for the following reduced sulfur compounds: carbon disulfide, carbonyl sulfide, dimethyl disulfide, dimethyl sulfide, hydrogen sulfide and methyl mercaptan. For each sample, permittee shall record the analytical results for total sulfur, calculated as the sum of the results for all analytes, expressed as H2S. Samples shall be analysed using ASTM D6228-98 or other District-approved method. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The permittee shall demonstrate continuous compliance with the sulfur content limit (as total reduced sulfur) of the fuel combusted in this unit by calculation, as the sum of the non-H2S reduced sulfur compounds (carbon disulfide, carbonyl sulfide, dimethyl disulfide, dimethyl sulfide, methyl mercaptan), based on the most recently conducted fuel sample analysis for total sulfur, and each one hour monitored H2S result. The calculated hourly fuel sulfur values shall be averaged over a rolling three hour period to determine compliance. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Emission rates from each heater, except during startup and shutdown, shall not exceed any of the following: NOx (as NO2): 25 ppmv @ 3% O2 or 0.030 lb/MMBtu, VOC: 5.5 lb/MMscf, PM10: 7.6 lb/MMscf or CO: 50 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
7. Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
8. Daily combustion emissions from this permit unit shall not exceed any of the following: NOx (as NO2): 42.6 lb/day, VOC: 7.8 lb/day, PM10: 10.8 lb/day, or CO: 52.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. The duration of each startup and shutdown period for each heater shall not exceed 12 hours and 9 hours respectively. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

10. The combustion in the fuel gas combustion devices of gases released as a result of start-up, shutdown, upset, malfunction, or the result of relief valve leakage is exempt from the H2S or sulfur content requirement. [District Rules 2201, 4001, Subpart J, 60.104(a)(1)] Federally Enforceable Through Title V Permit

11. The permittee shall record the date and the duration of each startup and each shutdown. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

12. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit

13. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

14. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

15. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

16. Heater exhaust stacks shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 1081] Federally Enforceable Through Title V Permit

17. Source testing to demonstrate compliance with NOx and CO emission limits shall be conducted not less than once every 12 months, except as provided below. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

18. Source testing to demonstrate compliance with NOx and CO emission limits shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

19. If permittee fails any compliance demonstration for NOx or CO emission limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

20. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

21. Compliance source testing shall be conducted under conditions representative of normal operation. [District Rule 1081] Federally Enforceable Through Title V Permit
22. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
23. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
24. The following test methods shall be used unless otherwise approved by the APCO and EPA: NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, and stack gas oxygen - EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit
25. All required source testing shall conform to the compliance testing procedures described in District Rule 1081. [District Rule 1081] Federally Enforceable Through Title V Permit
26. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results used to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
27. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit
28. Nitrogen oxide (NOx) emission concentrations in ppmv shall be referenced at dry stack gas conditions, and shall be calculated to 3.00 percent by volume stack gas oxygen and averaged over 60 minutes, and lb/MMBtu rates shall be calculated as lb NO2/MMBtu of heat input (hhv). [District Rule 4305, 5.0, 8.2 and/or 4351, 8.1] Federally Enforceable Through Title V Permit
29. Draeger tubes shall be used as an alternative method for measuring fuel gas H2S during scheduled maintenance or unscheduled interruptions of CEMs. Draeger tube use shall be limited to no more than 96 continuous hours and fuel gas H2S shall be checked a minimum of every two hours during scheduled maintenance or unscheduled interruptions of CEMs. Alternate method of measuring fuel gas H2S shall occur no more than 192 hours in any calendar year. [40CFR60.13(i)] Federally Enforceable Through Title V Permit
30. Operator shall maintain all records of the reason for alternative monitoring and required fuel gas H2S monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
31. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320]
32. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320]
33. VOC emission rate from fugitive components associated with this emissions unit shall not exceed 97.8 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
34. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

35. Operator shall maintain records to demonstrate compliance with fugitive VOC emissions limit of this permit annually. Compliance shall be demonstrated by calculation, using the correlation equations, zero default and 10,000 ppmv pegged factors set forth in the CAPCOA California implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-3a, February 1999, and the average emission concentrations of total organic compounds measured for each component during all inspections conducted during the prior 365 day period. [District Rule 2201] Federally Enforceable Through Title V Permit
36. This unit is subject to Rule 4455 Leak Detection and Repair Conditions on the facility wide permit S-37-0. [District Rule 4455] Federally Enforceable Through Title V Permit
37. Permit unit shall comply with applicable District Rule 4001 (NSPS, Subpart GGG) requirements on facility wide permit S-37-0. [District Rule 4001] Federally Enforceable Through Title V Permit
38. The requirements of 40 CFR 60 Subpart GGGa do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
39. Permittee shall comply with all applicable testing, recordkeeping, and reporting requirements specified in Rule 4001 - New Source Performance Standards, including but not limited to Subparts A and J. [District Rule 4001] Federally Enforceable Through Title V Permit
40. Operators shall not depressurize any vessel containing VOCs unless the process unit turnaround is accomplished by employing one of the following operating procedures: The organic vapors shall either be recovered, added to the refinery fuel gas system and combusted; or controlled and piped to an appropriate firebox or incinerated for combustion; or flared, until the pressure within the process vessel is as close to atmospheric pressure as is possible. All process vessels shall be depressurized into the control facilities to less than 1020 mm Hg (5 psig) before venting/opening to atmosphere. All organic compounds which emerge from a refinery process vessel during the purging of said vessel and which otherwise would be emitted to the atmosphere shall be either directed to a flare or incinerator or shall be used for fuel until such disposition of emissions is not technically feasible or is less safe than atmospheric venting. [District Rule 4454, 4.0] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-5-3 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
LIQUID-LIQUID MEROX SWEETENING UNIT INCLUDING MIXER, CAUSTIC SETTLER, CATALYST INJECTION PORT, AND ASSOCIATED PUMPS AND PIPING

PERMIT UNIT REQUIREMENTS

1. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801] Federally Enforceable Through Title V Permit
2. Spent caustics and waste liquids shall be disposed of in a manner preventing the creation of odors. [District Rule 4102]
3. This unit is subject to Rule 4455 Leak Detection and Repair Conditions on the facility wide permit S-37-0. [District Rule 4455] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-6-19 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
49.0 MMBTU/HR COEN, MODEL #D-57, DUAL-FIRED INDUCED DRAFT WATER TUBE BOILER #6 - REPLACEMENT STANDBY BOILER FOR THE TURBINE AND/OR DUCT BURNER (COGENERATION UNIT S-37-114) COMPLIANT DORMANT EMISSIONS UNIT

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without an Authority to Construct for such modifications, except for changes specified in conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel supply line shall be physically disconnected from this unit. [District Rules 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
3. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
4. While dormant, normal source testing shall not be required. [District Rule 2080]
5. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080]
6. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080]
7. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]
8. Operators shall notify the District at least seven (7) calendar days prior to recommencing operation of this dormant emissions unit, at which time this permit will be administratively modified to remove DEU references. [District Rules 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
9. This equipment shall not be operated for any reason on or after the applicable Rule 4320 Compliance Deadline (Section 5.2.1 and Table 1), unless an Authority to Construct permit has been issued approving all necessary retrofits required to comply with the applicable requirements of District Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit
10. Boiler shall operate as a replacement standby unit for the turbine and/or the duct burner (cogeneration unit, S-37-114). Simultaneous operation of all three emissions units (the replacement standby boiler, the turbine, and the duct burner) shall not occur except during start-up of the third unit or shutdown of one of the two operating units). [District Rules 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
11. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
12. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
14. Boiler shall be fired either on PUC/FERC regulated natural gas or refinery gas. [District Rule 2201] Federally Enforceable Through Title V Permit
15. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of natural gas combusted in the unit shall be installed, utilized and maintained. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit
16. Maximum annual heat input of the unit shall be less than 9 billion Btu per calendar year. [District Rule 2201, 4305, and 4306] Federally Enforceable Through Title V Permit
17. Emissions rates from the natural gas-fired unit shall not exceed any of the following limits: 95 ppmvd NOx @ 3% O2 or 0.1 lb-NOx/MMBtu, 0.00285 lb-SOx/MMBtu, 0.0076 lb-PM10/MMBtu, 400 ppmvd CO @ 3% O2 or 0.3 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
18. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown. [District Rule 4305] Federally Enforceable Through Title V Permit
19. Owner/operator shall have unit tuned at least twice each calendar year, from four to eight months apart, in which it operates, by a technician that is qualified, to the satisfaction of the APCO, in accordance with the procedure described in Rule 4304 (Equipment Tuning Procedure for Boilers, Steam Generators, and Process Heaters). [District Rule 4306] Federally Enforceable Through Title V Permit
20. If the unit does not operate throughout a continuous six-month period within a calendar year, only one tune-up is required for that calendar year. No tune-up is required for any unit that is not operated during that calendar year; this unit may be test fired to verify availability of the unit for its intended use, but once the test firing is completed the unit shall be shutdown. [District Rule 4306] Federally Enforceable Through Title V Permit
21. The permittee shall monitor, at least on a monthly basis, the amount of water use, the amount of unit blow down, and the exhaust stack temperature or other operational characteristics recommended by the unit manufacturer. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 day of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
22. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. [District Rule 2520, 9.3.2; District Rule 4301, 5.2.1] Federally Enforceable Through Title V Permit
23. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 2520, 9.3.2; Kern County Rule 407; District Rule 4801] Federally Enforceable Through Title V Permit
24. Compliance with sulfur compound emission limits may be demonstrated by firing this unit either on PUC/FERC regulated natural gas or refinery gas with a sulfur content of no more than 20,000 ppmv or 2.0% by weight according to the H2S monitoring of the boiler fuel gas supply, sampled upstream of the boiler, using Draeger Tubes or District approved equal. [District Rules 4301, 4801 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
25. If the unit is not fired on PUC/FERC regulated natural gas, each fuel source shall be tested for sulfur content (as H2S) within one week of the startup of its standby-operation. When source or type of fuel gas changes, sampling for sulfur content shall be conducted within one week. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
26. Records of monthly and annual heat input of the unit shall be maintained. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit
27. Records of tune-up and monitoring of the operational characteristics of the unit shall be maintained. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
28. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, and 4306] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

29. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320]
30. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320]
31. This unit is subject to Rule 4455 Leak Detection and Repair Conditions on the facility wide permit S-37-0. [District Rule 4455] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-7-7 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
JOHN ZINK STF-S-8 STEAM ASSIST FLARE WITH CONSTANT IGNITION PILOTS, INCLUDING THE FOLLOWING GAS RECOVERY EQUIPMENT: TWO ELECTRIC DRIVEN GAS COMPRESSORS (350 HP TOTAL), FOUR KNOCKOUT POTS, ONE SEAL POT, TWO HEAT EXCHANGERS, TWO STEAM DRIVEN LIQUID RECOVERY PUMPS, AND ONE ELECTRIC DRIVEN LIQUID RECOVERY PUMP (2 HP), C-02 COMPRESSOR SKID INCLUDING: COMPRESSOR (250 HP), TWO KNOCKOUT POTS AND A HEAT EXCHANGER

PERMIT UNIT REQUIREMENTS

1. Flares shall be designed for and operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. [40 CFR 60.18(c)(1)] Federally Enforceable Through Title V Permit
2. Demonstration of compliance with the visible emissions limit of this permit shall be conducted at least annually, using EPA Method 22. The observation period shall be 2 hours. [40CFR 60.18(f)(1)] Federally Enforceable Through Title V Permit
3. The outlet shall be equipped with an automatic ignition system, or, shall operate with a pilot flame present at all times when combustible gases are vented through the flare, except during purge periods for automatic-ignition equipped flares. [District Rule 4311, 5.3 and 40CFR 60.18(f)(2)] Federally Enforceable Through Title V Permit
4. For valves and connectors associated with compressor skids C-02 and C-03, flare gas suction K.O. pot V-19, aftercooler E-07and purge gas piping system, a leak shall be defined as a reading of methane in excess of 100 ppmv above background when measured per EPA Method 21. For pump and compressor seals associated with compressor skids C-02 and C-03 and pump P-07, a leak shall be defined as a reading of methane in excess of 500 ppmv above background when measure per EPA Method 21. [District Rule 2201] Federally Enforceable Through Title V Permit
5. VOC emission rate from fugitive components associated with compressor skids C-02 and C-03, flare gas suction K.O. pot V-19, pump P-07, aftercooler E-07 and purge gas piping system shall not exceed 16.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. Permit holder shall update such records when new components are approved and installed. Components shall be screened and leak rate shall be measured in accordance with the frequency of inspection specified in Rule 4455. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The flare shall be equipped with an operational flow-sensing ignition system or a heat sensing device such as a thermocouple, ultraviolet beam sensor, infrared sensor, or an alternative equivalent device capable of continuously detecting at least one pilot flame or the flare flame. [District Rule 4311, 5.5 and 40CFR 60.18(f)(2)] Federally Enforceable Through Title V Permit
8. The flame shall be present at all times when combustible gases are vented through the flare. [District Rule 4311, 5.2 and 40CFR 60.18(c)(2) and (f)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. The flare shall be operated with a flame present at all times, as determined by the methods specified in 40 CFR 60.18(f). [40 CFR 60.18(c)(2)] Federally Enforceable Through Title V Permit

10. The permittee shall adhere to either (1) the heat content specifications in 40 CFR 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR 60.18(c)(4), or (2) the requirements in 40 CFR 60.18(c)(3)(i). [40 CFR 60.18(c)(3)] Federally Enforceable Through Title V Permit

11. Flares that use flow-sensing automatic ignition systems and which do not use a continuous flame pilot shall use purge gas for purging. [District Rule 4311, 5.6] Federally Enforceable Through Title V Permit

12. Open flares in which the flare gas pressure is less than 5 psig shall be operated in such a manner that meets the provisions of 40 CFR 60.18. [District Rule 4311, 5.6] Federally Enforceable Through Title V Permit

13. The operator shall minimize flare sulfur dioxide emissions consistent with the requirements of section 5.9 of Rule 4311. [District Rule 4311, 5.9] Federally Enforceable Through Title V Permit

14. The operator shall monitor the vent gas flow to the flare with a flow measuring device. [District Rule 4311, 5.10] Federally Enforceable Through Title V Permit

15. The operator shall provide the APCO with access to the flare monitoring system to collect the vent gas samples. [District Rule 4311, 6.6.7] Federally Enforceable Through Title V Permit

16. The operator shall monitor the volumetric flows of the flare's purge and pilot gases with flow measuring devices or other parameters as specified on the Permit to Operate so that volumetric flows of pilot and purge gas may be calculated based on pilot design and the parameters monitored. [District Rule 4311, 6.7] Federally Enforceable Through Title V Permit

17. Upon request, the operator of flares that are subject to Section 5.6 shall make available, to the APCO, the compliance determination records that demonstrate compliance with the provisions of 40 CFR 60.18, (c)(3) through (c)(5). [District Rule 4311, 6.4.1] Federally Enforceable Through Title V Permit

18. The operator shall monitor and record the water level and pressure of the water seal that services the flare daily. [District Rule 4311, 6.8] Federally Enforceable Through Title V Permit

19. The operator shall comply with the following, as applicable: (1) Periods of flare monitoring system inoperation greater than 24 continuous hours shall be reported by the following working day, followed by notification of resumption of monitoring. Periods of inoperation of monitoring equipment shall not exceed 14 days per any 18-consecutive-month period. Periods of flare monitoring system inoperation do not include the periods when the system feeding the flare is not operating; (2) During periods of inoperation of continuous analyzers or auto-samplers installed pursuant to Section 6.6, operators responsible for monitoring shall take one sample within 30 minutes of the commencement of flaring, from the flare header or from an alternate location at which samples are representative of vent gas composition and have samples analyzed pursuant to Section 6.3.4. During periods of inoperation of flow monitors required by Section 5.10, flow shall be calculated using good engineering practices; (3) Maintain and calibrate all required monitors and recording devices in accordance with the applicable manufacturer's specifications. In order to claim that a manufacturer's specification is not applicable, the person responsible for emissions must have, and follow, a written maintenance policy that was developed for the device in question. The written policy must explain and justify the difference between the written procedure and the manufacturer's procedure; (4) All in-line continuous analyzer and flow monitoring data must be continuously recorded by an electronic data acquisition system capable of one-minute averages. Flow monitoring data shall be recorded as one-minute averages. [District Rule 4311, 6.9] Federally Enforceable Through Title V Permit

20. The operator of a petroleum refinery flare shall install and maintain equipment that records a real-time digital image of the flare and flame at a frame rate of no less than one frame per minute. The recorded image of the flare shall be of sufficient size, contrast, and resolution to be readily apparent in the overall image or frame. The image shall include an embedded date and time stamp. The equipment shall archive the images for each 24-hour period. In lieu of video monitoring the operator may use an alternative monitoring method that provides data to verify date, time, vent gas flow, and duration of flaring events. [District Rule 4311, 6.10] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

21. The operator shall notify the APCO of an unplanned flaring event within 24 hours after the start of the next business day or within 24 hours of their discovery, which ever occurs first. The notification shall include the flare source identification, the start date and time, and the end date and time. [District Rule 4311, 6.2.1] Federally Enforceable Through Title V Permit

22. Effective on and after July 1, 2012, and annually thereafter, the operator of a flare subject to flare minimization plans pursuant to Section 5.8 shall submit an annual report to the APCO that summarizes all Reportable Flaring Events that occurred during the previous 12 month period. A Reportable Flaring Event is any flaring where more than 500,000 standard cubic feet of vent gas is flared per calendar day, or where sulfur oxide emissions are greater than 500 pounds per calendar day. A reportable flaring event ends when it can be demonstrated by monitoring required in Section 6.8 that the integrity of the water seal has been maintained sufficiently to prevent vent gas to the flare tip. The report of all Reportable Flaring Events shall be submitted within 30 days following the end of the twelve month period of the previous year. The report shall include, but is not limited to all of the following: (1) The results of an investigation to determine the primary cause and contributing factors of the flaring event; (2) Any prevention measures considered or implemented to prevent recurrence together with a justification for rejecting any measures that were considered but not implemented; (3) If appropriate, an explanation of why the flaring was an emergency and necessary to prevent accident, hazard or release of vent gas to the atmosphere, or where, due to a regulatory mandate to vent a flare, it cannot be recovered, treated and used as a fuel gas at the facility; and (4) The date, time, and duration of the flaring event. [District Rule 4311, 6.2.2] Federally Enforceable Through Title V Permit

23. Effective on and after July 1, 2012, and annually thereafter, the operator of a flare subject to flare monitoring requirements shall submit an annual report to the APCO within 30 days following the end of each 12 month period. The report shall include the following: (1) The total volumetric flow of vent gas in standard cubic feet for each day. (2) Hydrogen sulfide content, methane content, and hydrocarbon content of vent gas composition pursuant to Section 6.6. (3) If vent gas composition is monitored by a continuous analyzer or analyzers pursuant to Section 5.11, average total hydrocarbon content by volume, average methane content by volume, and depending upon the analytical method used pursuant to Section 6.3.4, total reduced sulfur content by volume or hydrogen sulfide content by volume of vent gas flared for each hour of the month. (4) If the flow monitor used pursuant to Section 5.10 measures molecular weight, the average molecular weight for each hour of each month. (5) For any pilot and purge gas used, the type of gas used, the volumetric flow for each day and for each month, and the means used to determine flow. (6) Flare monitoring system downtime periods, including dates and times. (7) For each day and for each month provide calculated sulfur dioxide emissions. (8) A flow verification report for each flare subject to this rule. The flow verification report shall include flow verification testing pursuant to Section 6.3.5. [District Rule 4311, 6.2.3] Federally Enforceable Through Title V Permit

24. The following records shall be maintained, retained on-site for a minimum of five years, and made available to the APCO, ARB, and EPA upon request: (1) Copy of the compliance determination conducted pursuant to Section 6.4.1. (2) Copy of the source testing result conducted pursuant to Section 6.4.2. (3) For flares used during an emergency, record of the duration of flare operation, amount of gas burned, and the nature of the emergency situation. (4) Effective on and after July 1, 2011, a copy of the approved flare minimization plan. (5) Effective on and after July 1, 2012, where applicable, a copy of annual reports submitted to the APCO pursuant to Section 6.2. (6) Effective on and after July 1, 2011, where applicable, vent gas monitoring data collected. [District Rule 4311, 6.1] Federally Enforceable Through Title V Permit

25. The flare shall be operated according to the manufacturer's specifications, a copy of which shall be maintained on site. [District Rule 2520, 9.3 and 40CFR 60.18(d)] Federally Enforceable Through Title V Permit

26. The actual exit velocity of a flare shall be determined by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip. [40 CFR 60.18 (f)(4)] Federally Enforceable Through Title V Permit

27. Steam-assisted flares shall only be used when the net heating value of the gas being combusted is 300 Btu/scf or greater. [40 CFR 60.18 (c)(3)(ii)] Federally Enforceable Through Title V Permit

28. Steam-assisted flares shall be operated with an exit velocity less than 60 ft/sec, except as provided in 40 CFR 60.18 (c)(4)(ii) and (iii). [40 CFR 60.18 (c)(4)(i)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

29. Steam-assisted flares may be operated with an exit velocity equal to or greater than 60 ft/sec, but less than 400 ft/sec, if the net heating value of the gas being combusted is greater than 1,000 Btu/scf. [40 CFR 60.18 (c)(4)(ii)] Federally Enforceable Through Title V Permit

30. Steam-assisted flares may be operated with an exit velocity less than the velocity Vmax, as determined by the methods specified in 40 CFR 60.18 (f)(5), and less than 400 ft/sec. [40 CFR 60.18 (c)(4)(iii)] Federally Enforceable Through Title V Permit

31. The net heating value of the gas being combusted in the flare shall be calculated pursuant to 40 CFR 60.18(f)(3) or by using EPA Method 18, ASTM D1945-96, ASTM D1946, and ASTM D2382 if published values are not available or cannot be calculated. [40 CFR 60.18 (f)(3)] Federally Enforceable Through Title V Permit

32. Operators shall not depressurize any vessel containing VOCs unless the process unit turnaround is accomplished by employing one of the following operating procedures: The organic vapors shall either be recovered, added to the refinery fuel gas system and combusted; or controlled and piped to an appropriate firebox or incinerated for combustion; or flared, until the pressure within the process vessel is as close to atmospheric pressure as is possible. All process vessels shall be depressurized into the control facilities to less than 1020 mm Hg (5 psig) before venting/opening to atmosphere. All organic compounds which emerge from a refinery process vessel during the purging of said vessel and which otherwise would be emitted to the atmosphere shall be either directed to a flare or incinerator or shall be used for fuel until such disposition of emissions is not technically feasible or is less safe than atmospheric venting. [District Rule 4454, 4.0] Federally Enforceable Through Title V Permit

33. This unit is subject to Rule 4455 Leak Detection and Repair Conditions on the facility wide permit S-37-0. [District Rule 4455] Federally Enforceable Through Title V Permit

34. Permit unit shall comply with applicable District Rule 4001 (NSPS, Subpart GGG) requirements on facility wide permit S-37-0, except for those components listed in the condition below. [District Rule 4001] Federally Enforceable Through Title V Permit

35. The compressors associate with Skids C-02 and C-03 are subject to Rule 4001 (NSPS, Subpart GGGa) requirements identified in the facility-wide permit. [District Rule 4001] Federally Enforceable Through Title V Permit

36. The individual drain system associated with this permit unit shall comply with Rule 4001 (NSPS, Subpart QQQ) requirements. [District Rule 4001] Federally Enforceable Through Title V Permit

37. Each drain, receiving refinery wastewater from a process unit, shall be equipped with water seal controls. [40 CFR 60.692-2(a)(1)] Federally Enforceable Through Title V Permit

38. Each drain in active service, receiving refinery wastewater from a process unit, shall be checked by visual or physical inspection monthly for indications of low water levels or other conditions that would reduce the effectiveness of the water seal controls. [40 CFR 60.692-2(a)(2)] Federally Enforceable Through Title V Permit

39. Each drain out of active service shall be checked by visual or physical inspection weekly for indications of low water levels or other problems that could result in VOC emissions. As an alternative, the owner or operator may elect to install a tightly sealed cap or plug over a drain that is out of service, inspection shall be conducted initially and semiannually to ensure caps or plugs are in place and properly installed. Whenever low water levels or missing or improperly installed caps or plugs are identified, water shall be added or first efforts at repair shall be made as soon as practicable, but not later than 24 hours after detection, except if the repair is technically impossible without a complete or partial refinery or process unit shutdown. Repair of such equipment shall occur before the end of the next refinery or process unit shutdown [40 CFR 60.692-2(a) and 60.692-6] Federally Enforceable Through Title V Permit

40. Junction boxes in refinery wastewater systems shall be equipped with a cover and may have an open vent pipe. The vent pipe shall be at least 90 cm (3 ft) in length and shall not exceed 10.2 cm (4 in) in diameter. Junction box covers shall have a tight seal around the edge and shall be kept in place at all times, except during inspection and maintenance. [40 CFR 60.692-2(b)(1)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

41. Junction boxes in refinery wastewater systems shall be visually inspected semiannually to ensure that the cover is in place and to ensure that the cover has a tight seal around the edge. If a broken seal or gap is identified, first effort at repair shall be made as soon as practicable, but not later than 15 calendar days after the broken seal or gap is identified, except if the repair is technically impossible without a complete or partial refinery or process unit shutdown. Repair of such equipment shall occur before the end of the next refinery or process unit shutdown. [40 CFR 60.692-2(b)(3)(4) and 60.692-6] Federally Enforceable Through Title V Permit

42. Sewer lines, conveying refinery wastewater to wastewater treatment system, shall not be open to the atmosphere and shall be covered or enclosed in a manner so as to have no visual gaps or cracks in joints, seals, or other emission interfaces. [40 CFR 60.692-2(c)(1)] Federally Enforceable Through Title V Permit

43. The portion of each unburied sewer line shall be visually inspected semiannually for indication of cracks, gaps, or other problems that could result in VOC emissions. Whenever cracks, gaps, or other problems are detected, repairs shall be made as soon as practicable, but not later than 15 calendar days after identification, except if the repair is technically impossible without a complete or partial refinery or process unit shutdown. Repair of such equipment shall occur before the end of the next refinery or process unit shutdown. [40 CFR 60.692-2(c)(2)(3) and 60.692-6] Federally Enforceable Through Title V Permit

44. Refinery wastewater routed through new process drains and a new first common downstream junction box, either as part of a new individual drain system or an existing individual drain system, shall not be routed through a downstream catch basin. [40 CFR 60.692-2(e)] Federally Enforceable Through Title V Permit

45. This flare is subject to the New Source Performance Standards (NSPS) for Petroleum Refineries, 40 CFR 60 Subpart Ja and applicable requirements of the General Provisions, 40 CFR 60 Subpart A. The provisions of 40 CFR 60.14 pertaining to modifications are superseded by the provisions of 40 CFR 60.100a(c)(1) or (2), as applicable. [40 CFR 60.100a] Federally Enforceable Through Title V Permit

46. Permittee shall develop and implement a written Flare Management Plan by November 11, 2015. The flare management plan must include the information described in 40 CFR 60.103a(a)(1) through (7). [40 CFR 60.103a(a)] Federally Enforceable Through Title V Permit

47. Permittee shall submit the Flare Management Plan to EPA Region 9 and the District by November 11, 2015. [40 CFR 60.103a(b)] Federally Enforceable Through Title V Permit

48. The Flare Management Plan shall be submitted, updated and/or resubmitted as required by 40 CFR 60.103a(b)(2) and (3). [40 CFR 60.103a(b)(2) and (3)] Federally Enforceable Through Title V Permit

49. Permittee shall comply with the submitted Flare Management Plan and any revisions at all times. [40 CFR 60.103a(b)(2)] Federally Enforceable Through Title V Permit

50. Permittee shall conduct a Root Cause Analysis and a Corrective Action Analysis: (1) Any time the SO2 emissions exceed 500 lb in any 24-hour period; or (2) When discharge to the flare is in excess of 500,000 standard cubic feet (scf) above the baseline, as determined under 40 CFR 60.103a(a)(4), in any 24- hour period. [40 CFR 60.103a(c)(1)] Federally Enforceable Through Title V Permit

51. The Root Cause Analysis and Corrective Action Analysis must be completed as soon as possible, but no later than 45 days after a discharge meeting one of the conditions triggering the required analysis occurs. The special circumstances affecting the number of root cause analyses and/or corrective action analyses required are provided in 40 CFR 60.103a(d)(1) through (5). [40 CFR 60.103a(d)] Federally Enforceable Through Title V Permit

52. Permittee shall implement the corrective action(s) identified in the Corrective Action Analysis in accordance with the applicable requirements in 40 CFR 60.103a(e)(1) through (3). [40 CFR 60.103a(e)] Federally Enforceable Through Title V Permit

53. Permittee shall not burn in the flare any fuel gas that contains H2S in excess of 162 ppmv determined hourly on a 3-hour rolling average basis. The combustion in a flare of process upset gases or fuel gas that is released to the flare as a result of relief valve leakage or other emergency malfunctions is exempt from this limit. [40 CFR 60.103a(h)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

54. Periods of excess emissions are defined as specified in 40 CFR 60.107a(i)(2). [40 CFR 60.107a(i)(2)] Federally Enforceable Through Title V Permit

55. Permittee shall install, operate, calibrate and maintain an instrument for continuously monitoring and recording the concentration by volume (dry basis) of H2S in the fuel gases before being burned in the flare. Such instrument shall comply with the requirements contained in 40 CFR 60.107a(a)(2)(i) though (vi). [40 CFR 60.107a(a)(2)] Federally Enforceable Through Title V Permit

56. Permittee shall conduct a performance test for the flare to demonstrate initial compliance with 40 CFR 60.8. All required performance tests shall be conducted in accordance with the provisions of 40 CFR 60.104a(c) and (j). [40 CFR 60.104a(c) and (j)] Federally Enforceable Through Title V Permit

57. Permittee shall determine the total reduced sulfur concentration for each gas line directed to the flare in accordance with the monitoring requirements contained in 40 CFR 60.107a(e)(1),. [40 CFR 60.107a(e)] Federally Enforceable Through Title V Permit

58. The permittee shall install, operate, calibrate and maintain, in accordance with the specifications contained in paragraph 40 CFR 60.107a(f)(1), a CPMS to measure and record the flow rate of gas discharged to the flare. [40 CFR 60.107a(f)] Federally Enforceable Through Title V Permit

59. The permittee shall maintain a copy of the flare management plan on site. [40 CFR 108a(c)(1)] Federally Enforceable Through Title V Permit

60. The permittee shall maintain records of discharges greater than 500 lb SO2 in any 24-hour period from the flare, and discharges to the flare in excess of 500,000 scf above baseline in any 24-hour period. For any such discharge, the information specified in 40 CFR 108a(c)(6)(i) through (xi) shall be recorded no later than 45 days following the end of a discharge exceeding these thresholds. Such records shall be maintained on site. [40 CFR 108a(c)(6)] Federally Enforceable Through Title V Permit

61. The permittee shall submit an excess emissions report for all periods of excess emissions according to the requirements of 40 CFR 60.7(c), except that the report shall contain the information specified in 40 CFR 108a(d)(1) through (7). [40 CFR 108a(d)] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-8-33 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
ORGANIC LIQUID LOADING AREAS AND REFINERY VAPOR RECOVERY SYSTEM SERVING TANK S-37-150 AND INCLUDING COMPRESSOR(S), LOADING RACKS (RACKS A, F, K, L, N) WITH 10 PRODUCT LINES AND 9 VAPOR RETURN LINES

PERMIT UNIT REQUIREMENTS

1. Transfer Racks N and F may be used for loading and unloading. Transfer Racks A, K, and L shall be used only for loading. [District Rule 2201] Federally Enforceable Through Title V Permit
2. All liquids and gases from the transfer operation shall be routed to one of the following systems: a vapor collection and control system; a fixed roof container that meets the control requirements specified in Rule 4623 (Storage of Organic Liquids); a floating roof container that meets the control requirements specified in Rule 4623 (Storage of Organic Liquids); or a pressure vessel equipped with an APCO-approved vapor recovery system that meets the control requirements specified in Rule 4623 (Storage of Organic Liquids); or a closed VOC emission control system. [District Rules 4623 and 4624] Federally Enforceable Through Title V Permit
3. A floating roof container that meets the applicable control requirements of Section 5.0 of Rule 4623 (Storage of Organic Liquids) shall be considered not leaking when receiving unloaded liquids for compliance with Rule 4624. [District Rule 4624] Federally Enforceable Through Title V Permit
4. For the transfer of gasoline only, transfer to any stationary storage container with 250 gallon capacity or more, that is not subject to Rule 4623, shall not be allowed unless the container is equipped with a permanent submerged fill pipe and an ARB certified Phase I vapor recovery system, which is maintained and operated according to the manufacturer's specifications, or a vapor recovery system with 95% control approved by the District. [District Rule 4621] Federally Enforceable Through Title V Permit
5. All delivery tanks which previously contained organic liquids, including gasoline, with a TVP 1.5 psia or greater at the storage container's maximum organic liquid storage temperature shall be filled only at Class 1 or Class 2 loading facilities that meet the vapor collection and control requirements of District Rule 4624 or listed herein. [District Rule 4624] Federally Enforceable Through Title V Permit
6. Construction, reconstruction (as defined in District Rule 4001) or expansion of any top loading facility shall not be allowed. [District Rule 4624] Federally Enforceable Through Title V Permit
7. The organic liquid and gasoline loading operation shall be equipped with bottom loading equipment with a vapor collection and control system meeting the requirements listed in this permit. [District Rules 4621 and 4624] Federally Enforceable Through Title V Permit
8. Transfer rack and vapor collection and control equipment shall be designed, installed, maintained in accordance with the manufacturers specifications, and operated such that there are no leaks or excess organic liquid drainage at disconnections as defined herein. [District Rules 4621 and 4624] Federally Enforceable Through Title V Permit
9. During unloading of gasoline, a leak shall be defined as the dripping of VOC-containing liquid at a rate of more than three drops per minute or a reading greater than 100 percent of the Lower Explosive Limit (21,000 ppmv as propane) in accordance with EPA Method 21. [District Rule 4621] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. For components used in the gasoline loading operation, a leak shall be defined as the dripping of VOC-containing liquid at a rate of more than three drops per minute or the detection of organic compounds, in excess of 10,000 ppm as methane measured at a distance of one centimeter from the potential source in accordance with EPA Method 21. Excess liquid drainage shall be defined as exceeding 10 milliliters per average of 3 consecutive disconnects. [District Rules 4621 and 4624] Federally Enforceable Through Title V Permit
11. For delivery vessels and components used in the organic liquid transfer operation, a leak shall be defined as the detection of organic compounds, in excess of 1,000 ppm as methane measured at a distance of one centimeter from the potential source in accordance with EPA Method 21. [District Rule 4624] Federally Enforceable Through Title V Permit
12. Equipment under vapor control shall not vent to atmosphere. [District Rules 4621 and 4624.] Federally Enforceable Through Title V Permit
13. The vapor collection and control system shall operate such that VOC emissions do not exceed 0.08 lb/1000 gallons of organic liquid loaded; maintains at least 95% capture and control efficiency of VOC and which operates so the delivery tank does not exceed 18 inches water column pressure nor 6 inches water column vacuum. [District Rule 4624] Federally Enforceable Through Title V Permit
14. No gasoline delivery vessel shall be used or operated unless it is leak-free. No gasoline delivery vessel shall be operated or loaded unless valid State of California decals are displayed on the cargo tank, attesting to the vapor integrity of the tank as verified by annual performance of CARB required Certification and Test Procedures for Vapor Recovery Systems for Cargo Tanks (Executive Order G-70-10-A) or EPA Method 27 for testing delivery vessels owned or operated by this facility. [District Rule 4621, Health & Safety Code, section 41962, and CCR, Title 17 section 94004] Federally Enforceable Through Title V Permit
15. Measurements of leak concentrations for organic liquid delivery vessels, including gasoline, shall be conducted according to the ARB Test Procedure for Determination of Leaks, TP-204.3, or EPA Method 21. [District Rules 4621 and 4624] Federally Enforceable Through Title V Permit
16. VOC emission rate from diesel loading rack shall not exceed any of the following: Fugitive emissions: 0.12 lb/hr and vapor recovery system: 0.09 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
17. VOC emission rate from fugitive components associated with the refinery vapor control system shall not exceed 6.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
18. During loading of a delivery vessel, the truck-mounted vapor return line shall be connected to the vapor recovery system listed on this permit. [District Rules 2201 and 4621] Federally Enforceable Through Title V Permit
19. A delivery vessel loading gasoline shall discontinue if its pressure relief valve opens. Corrective action shall be taken should this condition occur. [District Rules 2520 and 4621] Federally Enforceable Through Title V Permit
20. Switch loading shall not be conducted unless such transfer is made using an ARB certified vapor recovery system. [District Rules 2201 and 4621] Federally Enforceable Through Title V Permit
21. Operators shall conduct all performance tests required by the facility installation and operations manual as per the frequency outlined therein or as designated by the APCO. [District Rules 4621 and 4624] Federally Enforceable Through Title V Permit
22. The operator shall perform and record the results of monthly leak and drainage inspections of the loading and vapor collection equipment at each loading arm. During the loading of gasoline or organic liquids, leak detection shall be conducted using EPA Method 21 measuring at a distance of one centimeter from the potential source. When not in current operation, excess drainage inspections shall be conducted before 10:00 am at the disconnect of each loading arm by collecting all drainage at disconnect in a container and determining the volume within one (1) minute of collection [District Rules 2520, 40 CFR 60.502(j) and 4624] Federally Enforceable Through Title V Permit
23. The leak detection instrument shall be calibrated each day of its use, prior to use, by the procedures specified in Method 21 using the following calibration gases: A) Zero air (less than 10 ppm of hydrocarbon in air); and B) Mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [District Rules 2520, 9.3.2 and 4624] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

24. Corrective steps shall be taken at any time the operator observes a leak or excess drainage at disconnect. All equipment found leaking shall be repaired or replaced within 72 hours. If the leaking component cannot be repaired or replaced within 72 hours, the component shall be taken out of service until such time the component is repaired or replaced. The repaired or replacement equipment shall be reinspected the first time the equipment is in operation after the repair or replacement. [District Rule 4624] Federally Enforceable Through Title V Permit

25. All inspections shall be documented within the inspection log. Inspection records shall include, at a minimum, 1) date of inspection, 2) location and description of any missing, loose, leaking, or damaged equipment and any malfunction requiring repair, 3) corrective steps taken to repair or replace the equipment, 4) test method and results for leak and drainage inspections, 5) location and description of any of equipment which shall be inspected upon commencing operation after repair or replacement and 6) inspector name and signature. [District Rules 4621 and 4624] Federally Enforceable Through Title V Permit

26. Records of daily throughput of each loading rack shall be maintained and made available to the APCO, ARB, or EPA during normal business hours. [District Rules 2201, 4621, and 4624] Federally Enforceable Through Title V Permit

27. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), CAPCOA-Revised 1995 EPA Correlation Equations and Factors for Refineries and Marketing Terminals. Components shall be screened and leak rate shall be measured at least once each quarter. If compliance with the daily emission limit is shown during each of five (5) consecutive quarterly inspections, the inspection frequency may be changed from quarterly to annual. If any annual inspection shows non-compliance with the daily emission limit, then quarterly inspections shall be resumed. [District Rule 2201] Federally Enforceable Through Title V Permit

28. This unit is subject to Rule 4455 Leak Detection and Repair Conditions on the facility wide permit S-37-0. [District Rule 4455] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-9-12 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
OIL/WATER SEPARATION OPERATION INCLUDING API SEPARATOR, CORRUGATED PLATE SEPARATOR, INDUCED AIR FLOATATION UNIT, DRAIN PIT, FOUR FILTERS, AND THREE 5,000 BBL STORAGE TANKS (#5061, 5062, AND 5063)

PERMIT UNIT REQUIREMENTS

1. Varec breather vent shall be set at the following settings: 3.0 in. w.c. pressure and 0.865 in. w.c. vacuum. [District NSR Rule] Federally Enforceable Through Title V Permit
2. All access openings, gauge hatches, etc., with the exception of the third compartment of the API separator, shall meet the leak standards identified in Rule 4455. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Clean water tanks shall not be a source of air contaminant emissions. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Vapor space of oil/water separators shall not be purged unless vapors are directed to a control device. [District NSR Rule] Federally Enforceable Through Title V Permit
5. A person shall not use any compartment of any vessel or device operated for the recovery of oil from effluent water from any equipment which processes, refines, stores or handles petroleum products, except for air flotation units, unless such compartments are equipped with one of the following vapor loss control devices: a solid cover with all openings sealed and totally enclosing the liquid contents, except for structurally necessary breathing vents; a flotation pontoon or double deck-type cover as specified in Rule 4625, Section 5.1.2 (version 12/15/11); or a vapor recovery system with a combined collection and control efficiency of at least 95% by weight. [District Rule 4625] Federally Enforceable Through Title V Permit
6. Drain pit with forebay shall be equipped with solid covers. [Rule 4625] Federally Enforceable Through Title V Permit
7. Sampling ports shall remain closed at all times except during gauging or sampling. [District Rule 4625] Federally Enforceable Through Title V Permit
8. Skimmed oil removed from skim tank shall be transferred to crude oil charge tanks or to other tank(s) under vapor control with at least 95% control efficiency by weight. [District Rule 4625] Federally Enforceable Through Title V Permit
9. Operator shall conduct quarterly sampling from the oil/water separator to qualify for exemption from fugitive component counts for components handling fluids with less than 10% VOC by weight. If samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually. [District Rules 2201 and 4455] Federally Enforceable Through Title V Permit
10. This unit is subject to Rule 4455 Leak Detection and Repair Conditions on the facility wide permit S-37-0. [District Rule 4455] Federally Enforceable Through Title V Permit
11. Permittee shall maintain a record of the VOC content test results from the oil/water separator for a period of five years and make such records available for inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Permit unit shall comply with applicable Rule 4001 (NSPS, Subpart QQQ) requirements. [District Rule 4001] Federally Enforceable Through Title V Permit
13. Each drain, receiving refinery wastewater from a process unit, shall be equipped with water seal controls. [40 CFR 60.692-2(a)(1)] Federally Enforceable Through Title V Permit
14. Each drain in active service, receiving refinery wastewater from a process unit, shall be checked by visual or physical inspection monthly for indications of low water levels or other conditions that would reduce the effectiveness of the water seal controls. [40 CFR 60.692-2(a)(2)] Federally Enforceable Through Title V Permit
15. Each drain out of active service shall be checked by visual or physical inspection weekly for indications of low water levels or other problems that could result in VOC emissions. As an alternative, the owner or operator may elect to install a tightly sealed cap or plug over a drain that is out of service, inspection shall be conducted initially and semiannually to ensure caps or plugs are in place and properly installed. Whenever low water levels or missing or improperly installed caps or plugs are identified, water shall be added or first efforts at repair shall be made as soon as practicable, but not later than 24 hours after detection, except if the repair is technically impossible without a complete or partial refinery or process unit shutdown. Repair of such equipment shall occur before the end of the next refinery or process unit shutdown [40 CFR 60.692-2(a) and 60.692-6] Federally Enforceable Through Title V Permit
16. Junction boxes in refinery wastewater systems shall be equipped with a cover and may have an open vent pipe. The vent pipe shall be at least 90 cm (3 ft) in length and shall not exceed 10.2 cm (4 in) in diameter. Junction box covers shall have a tight seal around the edge and shall be kept in place at all times, except during inspection and maintenance. [40 CFR 60.692-2(b)(1)] Federally Enforceable Through Title V Permit
17. Junction boxes in refinery wastewater systems shall be visually inspected semiannually to ensure that the cover is in place and to ensure that the cover has a tight seal around the edge. If a broken seal or gap is identified, first effort at repair shall be made as soon as practicable, but not later than 15 calendar days after the broken seal or gap is identified, except if the repair is technically impossible without a complete or partial refinery or process unit shutdown. Repair of such equipment shall occur before the end of the next refinery or process unit shutdown. [40 CFR 60.692-2(b)(3)(4) and 60.692-6] Federally Enforceable Through Title V Permit
18. Sewer lines, conveying refinery wastewater to wastewater treatment system, shall not be open to the atmosphere and shall be covered or enclosed in a manner so as to have no visual gaps or cracks in joints, seals, or other emission interfaces. [40 CFR 60.692-2(c)(1)] Federally Enforceable Through Title V Permit
19. The portion of each unburied sewer line shall be visually inspected semiannually for indication of cracks, gaps, or other problems that could result in VOC emissions. Whenever cracks, gaps, or other problems are detected, repairs shall be made as soon as practicable, but not later than 15 calendar days after identification, except if the repair is technically impossible without a complete or partial refinery or process unit shutdown. Repair of such equipment shall occur before the end of the next refinery or process unit shutdown. [40 CFR 60.692-2(c)(2)(3) and 60.692-6] Federally Enforceable Through Title V Permit
20. Refinery wastewater routed through new process drains and a new first common downstream junction box, either as part of a new individual drain system or an existing individual drain system, shall not be routed through a downstream catch basin. [40 CFR 60.692-2(e)] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-12-3 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
210,000 GALLON FIXED ROOF GASOLINE STORAGE TANK #5009 WITH SHARED VAPOR RECOVERY SYSTEM LISTED IN S-37-8

PERMIT UNIT REQUIREMENTS

1. This tank shall only vent to the vapor recovery system listed on S-37-8. [District Rule 4623, 5.1] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
3. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
4. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
5. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
6. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
7. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
8. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
9. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
14. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
15. This unit commenced construction, modification, or reconstruction before June 11, 1973. Therefore, the requirements of 40 CFR 60 Subparts K, Ka, and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-13-3 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
210,000 GALLON FIXED ROOF GASOLINE STORAGE TANK #5010 WITH SHARED VAPOR RECOVERY SYSTEM LISTED IN S-37-8

PERMIT UNIT REQUIREMENTS

1. This tank shall only vent to the vapor recovery system listed on S-37-8. [District Rule 4623, 5.1] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
3. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
4. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
5. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
6. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
7. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
8. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
9. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
14. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
15. This unit commenced construction, modification, or reconstruction before June 11, 1973. Therefore, the requirements of 40 CFR 60 Subparts K, Ka, and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-14-3 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
210,000 GALLON FIXED ROOF GASOLINE STORAGE TANK #5011 WITH SHARED VAPOR RECOVERY SYSTEM LISTED IN S-37-8

PERMIT UNIT REQUIREMENTS

1. This tank shall only vent to the vapor recovery system listed on S-37-8. [District Rule 4623, 5.1] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
3. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
4. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
5. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
6. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
7. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
8. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
9. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
14. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
15. This unit commenced construction, modification, or reconstruction before June 11, 1973. Therefore, the requirements of 40 CFR 60 Subparts K, Ka, and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-15-4 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
210,000 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK #5020 WITH SHARED VAPOR RECOVERY SYSTEM LISTED IN S-37-8

PERMIT UNIT REQUIREMENTS

1. This tank shall only vent to the vapor recovery system listed on S-37-8. [District Rule 4623, 5.1] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
3. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
4. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
5. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
6. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
7. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
8. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
9. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
14. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
15. This unit commenced construction, modification, or reconstruction before June 11, 1973. Therefore, the requirements of 40 CFR 60 Subparts K, Ka, and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-16-5 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
504,000 GALLON WELDED EXTERNAL FLOATING ROOF TANK (#12000) WITH MECHANICAL SHOE PRIMARY SEAL AND RIM-MOUNTED SECONDARY SEAL

PERMIT UNIT REQUIREMENTS

1. The tank shall be equipped with a cover consisting of either a pontoon-type or double-deck-type cover which rests upon the surface of the liquid being stored and is equipped with a closure device between the tank shell and roof edge consisting of two seals, one above the other; the one below shall be referred to as the primary seal, and the one above shall be referred to as the secondary seal. [District Rule 4623, 5.3.1.1, 5.3.1.2] Federally Enforceable Through Title V Permit
2. The external floating roof shall float on the surface of the stored liquid at all times (i.e., off the roof leg supports) except during the initial fill until the roof is lifted off the leg supports and when the tank is completely emptied and subsequently refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. Whenever the permittee intends to land the roof on it's legs, the permittee shall notify the APCO in writing at least five calendar days prior to performing the work. The tank must be in compliance with this rule before it may land on its legs. [District Rule 4623, 5.3.1.3] Federally Enforceable Through Title V Permit
3. True vapor pressure of the stored liquid shall not exceed 11 psia. [District Rule 4623, 5.1.1] Federally Enforceable Through Title V Permit
4. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623, 5.4.1, 5.3.2.1.1] Federally Enforceable Through Title V Permit
5. The cumulative length of all primary seal gaps greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623, 5.4.1, 5.3.2.1.1] Federally Enforceable Through Title V Permit
6. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623, 5.4.1, 5.3.2.1.1] Federally Enforceable Through Title V Permit
7. No continuous gap greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623, 5.4.1, 5.3.2.1.1] Federally Enforceable Through Title V Permit
8. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623, 5.4.1, 5.3.2.1.2] Federally Enforceable Through Title V Permit
9. The cumulative length of all secondary seal gaps greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623, 5.4.1, 5.3.2.1.2] Federally Enforceable Through Title V Permit
10. The metallic shoe-type seal shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 24 inches above the stored liquid surface. [District Rule 4623, 5.4.1, 5.3.2.1.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. The maximum gap between the shoe and the tank shell shall be no greater than double the gap allowed by the seal gap criteria for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623, 5.4.1, 5.3.2.1.4] Federally Enforceable Through Title V Permit
12. There shall be no tears, holes or openings in the secondary seal or in the primary seal envelope surrounding the annular vapor space enclosed by the roof edge, stored liquid surface, shoe, and seal fabric. [District Rule 4623, 5.4.1, 5.3.2.1.5] Federally Enforceable Through Title V Permit
13. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.4.1, 5.3.2.1.6] Federally Enforceable Through Title V Permit
14. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623, 5.4.1, 5.3.2.1.7] Federally Enforceable Through Title V Permit
15. All openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10% of the maximum allowable working pressure of the roof, shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be leak-free, except when the device or appurtenance is in use. [District Rule 4623. 5.5.1] Federally Enforceable Through Title V Permit
16. Except for automatic bleeder vents and rim vents and pressure vacuum relief vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface. [District Rule 4623, 5.5.2.2.1] Federally Enforceable Through Title V Permit
17. Except for automatic bleeder vents and rim vents, roof drains, and leg sleeves, each opening in the roof shall be equipped with a gasketed cover, seal, or lid that shall be maintained in a closed position at all times (i.e., no visible gap) except when in actual use. [District Rule 4623, 5.5.2.2.2] Federally Enforceable Through Title V Permit
18. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. [District Rule 4623, 5.5.2.2.3] Federally Enforceable Through Title V Permit
19. Rim vents shall be equipped with a gasket and shall be set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. [District Rule 4623, 5.5.2.2.4] Federally Enforceable Through Title V Permit
20. Each emergency roof drain shall be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening. The fabric cover must be impermeable if the liquid is drained into the contents of the tanks. [District Rule 4623, 5.5.2.2.5]
21. External floating roof legs shall be equipped with vapor socks or vapor barriers in order to maintain a leak-free condition so as to prevent VOC emissions from escaping through the roof leg opening. [District Rule 4623, 5.5.2.2.6] Federally Enforceable Through Title V Permit
22. All wells and similar fixed projections through the floating roof shall provide a projection below the liquid surface. [District Rule 4623, 5.5.1, 5.5.2.3.1, 5.5.2.4.1] Federally Enforceable Through Title V Permit
23. The well shall be equipped with a pole wiper and a gasketed cover, seal or lid which shall be in a closed position at all times (i.e., no visible gap) except when the well is in use. [District Rule 4623, 5.5.2.3.2] Federally Enforceable Through Title V Permit
24. The gap between the pole wiper and the solid guidepole shall be added to the gaps measured to determine compliance with the secondary seal requirement, and in no case shall exceed 1/2 inch. [District Rule 4623, 5.5.2.3.3] Federally Enforceable Through Title V Permit
25. The slotted guidepole well on a external floating roof shall be equipped with the following: a sliding cover, a well gasket, a pole sleeve, a pole wiper, and an internal float and float wiper designed to minimize the gap between the float and the well, and provided the gap shall not exceed 1/8 inch; or shall be equipped with a well gasket, a zero gap pole wiper seal and a pole sleeve that projects below the liquid surface. [District Rule 4623, 5.5.2.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

26. The gap between the pole wiper and the slotted guidepole shall be added to the gaps measured to determine compliance with the secondary seal requirement, and in no case shall exceed 1/8 inch. [District Rule 4623, 5.5.2.4.3] Federally Enforceable Through Title V Permit

27. The permittee of external floating roof tanks shall make the primary seal envelope available for unobstructed inspection by the APCO on an annual basis at locations selected along its circumference at random by the APCO. A minimum of four locations shall be made available. If the APCO suspects a violation may exist the APCO may require such further unobstructed inspection of the primary seal as may be necessary to determine the seal condition for its entire circumference. [District Rule 4623, 6.1.1] Federally Enforceable Through Title V Permit

28. The permittee shall inspect all floating roof tanks at least once every 12 months to determine compliance with the requirements of this rule. The actual gap measurements of the floating roof primary and secondary seals shall be recorded. The inspection results shall be submitted to the APCO as specified in Section 6.3.5. [District Rule 4623, 6.1.3.1] Federally Enforceable Through Title V Permit

29. The permittee shall inspect the primary and secondary seals for compliance with the requirements of this rule every time a tank is emptied or degassed. Actual gap measurements shall be performed when the liquid level is static but not more than 48 hours after the tank roof is re-floated. [District Rule 4623, 6.1.3.2] Federally Enforceable Through Title V Permit

30. Operator shall visually inspect tank valves, flanges, and connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 4]

31. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 4]

32. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 4]

33. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 4]

34. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 4 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 4 shall constitute a violation of this rule. [District Rule 4623, Table 4]

35. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623, Table 4]

36. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 4]

37. The permittee shall inspect all floating tanks at least once every 12 months to determine compliance with the requirements of this rule. The actual gap measurements of the floating roof primary and secondary seals shall be recorded. The inspection results shall be submitted to the APCO as specified in District Rule 4623, Section 6.3.5. [District Rule 4623, 6.1.3.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

38. The permittee shall inspect the primary and secondary seals for compliance with the requirements of this rule every time a tank is emptied or degassed. Actual gap measurements shall be performed when the liquid level is static but not more than 24 hours after the tank roof is re-floated. [District Rule 4623, 6.1.3.1.2] Federally Enforceable Through Title V Permit

39. Permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of District Rule 4623, Sections 5.2 through 5.5 (Amended May 19, 2005). The inspection report for tanks that that have been determined to be in compliance with the requirements of District Rule 4623, Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of District Rule 4623, Sections 6.3.5.1 through 6.3.5.6 (amended May 19, 2005). [District Rule 4623, 6.3.5] Federally Enforceable Through Title V Permit

40. Permittee shall maintain the records of the external floating roof landing activities that are performed pursuant to District Rule 4623, Sections 5.3.1.3 and 5.4.3 (Amended May 19, 2005). The records shall include information on the true vapor pressure (TVP), API gravity, storage temperature, type of organic liquid stored in the tank, the purpose of landing the roof on its legs, the date of roof landing, duration the roof was on its legs, the level or height at which the tank roof was set to land on its legs, and the lowest liquid level in the tank. [District Rule 4623, 6.3.7] Federally Enforceable Through Title V Permit

41. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3.7] Federally Enforceable Through Title V Permit

42. Construction, reconstruction, or modification of this unit was commenced prior to June 11, 1973. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-17-5 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
504,000 GALLON FIXED ROOF TANK (#12001) WITH VAPOR CONTROL SYSTEM LISTED ON PERMIT S-37-8

PERMIT UNIT REQUIREMENTS

1. VOC fugitive emissions from the components in gas service on this tank and on piping from this tank to the control system listed on Permit to Operate S-37-8 shall not exceed 4.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Except as otherwise provided in this permit, the operator shall ensure that the vapor control system is functional and is operating as designed at all times. [District Rule 2201] Federally Enforceable Through Title V Permit
3. All piping, valves, and fittings shall be constructed and maintained in a leak free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
4. A leak free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
5. Any tank gauging or sampling device on a tank vented to the vapor control system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
6. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
7. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
8. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
10. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Any component found to be leaking on two consecutive annual inspections is in violation of the District Rule 4623, even if it is under the voluntary inspection and maintenance program. [District Rules 2201 and 4623, Table 3] Federally Enforceable Through Title V Permit
13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
14. Permit holder shall maintain accurate component counts for components on this tank and on piping from this tank to the vapor control system listed on S-37-8 and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Operator shall maintain records to demonstrate compliance with fugitive VOC emissions limit of this permit annually. Compliance shall be demonstrated by calculation, using the correlation equations, zero default and 10,000 ppmv pegged factors set forth in the CAPCOA California implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-3a, February 1999, and the average emission concentrations of total organic compounds measured for each component during all inspections conducted during the prior 365 day period. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Construction, reconstruction, or modification of this unit was commenced prior to June 11, 1973. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-18-3 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
420,000 GALLON FIXED ROOF GASOLINE STORAGE TANK #10007 WITH SHARED VAPOR RECOVERY SYSTEM LISTED IN S-37-8

PERMIT UNIT REQUIREMENTS

1. This tank shall only vent to the vapor recovery system listed on S-37-8. [District Rule 4623, 5.1] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
3. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
4. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
5. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
6. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
7. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
8. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
9. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
14. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
15. This unit commenced construction, modification, or reconstruction before June 11, 1973. Therefore, the requirements of 40 CFR 60 Subparts K, Ka, and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-19-3 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
420,000 GALLON FIXED ROOF GASOLINE STORAGE TANK #10008 WITH SHARED VAPOR RECOVERY SYSTEM LISTED IN S-37-8

PERMIT UNIT REQUIREMENTS

1. This tank shall only vent to the vapor recovery system listed on S-37-8. [District Rule 4623, 5.1] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
3. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
4. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
5. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
6. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
7. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
8. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
9. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
14. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
15. This unit commenced construction, modification, or reconstruction before June 11, 1973. Therefore, the requirements of 40 CFR 60 Subparts K, Ka, and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-20-4 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
420,000 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK #10001 WITH SHARED VAPOR RECOVERY SYSTEM LISTED IN S-37-8

PERMIT UNIT REQUIREMENTS

1. This tank shall only vent to the vapor recovery system listed on S-37-8. [District Rule 4623, 5.1] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
3. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
4. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
5. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
6. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
7. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
8. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
9. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
14. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
15. This unit commenced construction, modification, or reconstruction before June 11, 1973. Therefore, the requirements of 40 CFR 60 Subparts K, Ka, and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-21-11 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
210,000 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK #5006

PERMIT UNIT REQUIREMENTS

1. Tanks shall be vented to vapor recovery system (VRS) listed in permit S-37-8 when storing organic liquids with a TVP of 0.5 psia or greater. When storing liquids in the tank with a TVP less than 0.5 psia, vapor recovery system may be disconnected. [District Rule 4623]
2. Upon reconnection to the vapor recovery system, permittee shall inspect all piping, fittings, and valves associated with this tank using a portable hydrocarbon analyzer. If any of the components are found to be leaking, the operator shall minimize and eliminate the leak as described in Table 3 of District Rule 4623. [District Rule 2201 and District Rule 4623]
3. Daily tank liquid throughput shall not exceed 1,100 barrels per day when disconnected from the vapor recovery system. [District Rule 2201] Federally Enforceable Through Title V Permit
4. When disconnected from the vapor recovery system, daily VOC emission shall not exceed 58 lb/day, calculated using District's "Tank Emissions, Fixed Roof Crude Oil less than 26 API" spreadsheet. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Tank shall be equipped with a pressure/vacuum vent hatch set to within 10% of the maximum tank working pressure. [District Rules 2201 and 4623, 5.2] Federally Enforceable Through Title V Permit
6. VOC emission rate from fugitive components associated with this emissions unit shall not exceed 0.02 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Operator shall maintain records to demonstrate compliance with fugitive VOC emissions limit of this permit annually. Compliance shall be demonstrated by calculation, using the correlation equations, zero default and 10,000 ppmv pegged factors set forth in the CAPCOA California implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-3a, February 1999, and the average emission concentrations of total organic compounds measured for each component during all inspections conducted during the prior 365 day period. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
10. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit

12. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

13. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

14. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

15. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

16. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

17. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

18. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

19. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit

20. Permittee shall perform TVP testing before disconnecting vapor recovery system and the test results shall be maintained and recorded in a log for District Inspection. Permittee shall keep a daily log of the throughput of tank, TVP of stored liquid and status of the vapor recovery system, and shall make such records available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

21. Except for crude oil with a API gravity 26 degrees or less, the TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures from the oil and gas section of "ARB Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588," dated August 1989. As an alternative to using ASTM D 323-94, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and US EPA. In lieu of performing a TVP test, an operator may use Appendix A of District Rule 4623 to determine the TVP of the stored organic liquid provided the storage temperature listed in Appendix A is not exceeded at any time. [District Rule 4623, 6.4.2 and 6.4.3] Federally Enforceable Through Title V Permit
22. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph," as approved by ARB and US EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
23. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
24. This unit commenced construction, modification, or reconstruction before June 11, 1973. Therefore, the requirements of 40 CFR 60 Subparts K, Ka, and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-22-11 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 31S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
210,000 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK #5007

PERMIT UNIT REQUIREMENTS

1. Tanks shall be vented to vapor recovery system (VRS) listed in permit S-37-8 when storing organic liquids with a TVP of 0.5 psia or greater. When storing liquids in the tank with a TVP less than 0.5 psia, vapor recovery system may be disconnected. [District Rule 4623]
2. Upon reconnection to the vapor recovery control system, permittee shall inspect all piping, fittings, and valves associated with this tank using a portable hydrocarbon analyzer. If any of the components are found to be leaking, the operator shall minimize and eliminate the leak as described in Table 3 of District Rule 4623. [District Rule 2201 and District Rule 4623]
3. Daily tank liquid throughput shall not exceed 1,100 barrels per day when disconnected from the vapor recovery system. [District Rule 2201] Federally Enforceable Through Title V Permit
4. When disconnected from the vapor recovery system, daily VOC emission shall not exceed 58 lb/day, calculated using District's "Tank Emissions, Fixed Roof Crude Oil less than 26 API" spreadsheet. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Tank shall be equipped with a pressure/vacuum vent hatch set to within 10% of the maximum tank working pressure. [District Rules 2201 and 4623, 5.2] Federally Enforceable Through Title V Permit
6. VOC emission rate from fugitive components associated with this emissions unit shall not exceed 0.02 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Operator shall maintain records to demonstrate compliance with fugitive VOC emissions limit of this permit annually. Compliance shall be demonstrated by calculation, using the correlation equations, zero default and 10,000 ppmv pegged factors set forth in the CAPCOA California implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-3a, February 1999, and the average emission concentrations of total organic compounds measured for each component during all inspections conducted during the prior 365 day period. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
10. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit

12. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

13. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

14. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

15. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

16. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

17. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

18. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

19. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit

20. Permittee shall perform TVP testing before disconnecting vapor recovery system and the test results shall be maintained and recorded in a log for District Inspection. Permittee shall keep a daily log of the throughput of tank, TVP of stored liquid and status of the vapor recovery system, and shall make such records available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

21. Except for crude oil with a API gravity 26 degrees or less, the TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures from the oil and gas section of "ARB Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588," dated August 1989. As an alternative to using ASTM D 323-94, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and US EPA. In lieu of performing a TVP test, an operator may use Appendix A of District Rule 4623 to determine the TVP of the stored organic liquid provided the storage temperature listed in Appendix A is not exceeded at any time. [District Rule 4623, 6.4.2 and 6.4.3] Federally Enforceable Through Title V Permit

22. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph," as approved by ARB and US EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit

23. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

24. This unit commenced construction, modification, or reconstruction before June 11, 1973. Therefore, the requirements of 40 CFR 60 Subparts K, Ka, and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-23-8 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
210,000 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK #5008 SERVED BY REFINERY SHARED VAPOR RECOVERY SYSTEM LISTED ON S-37-8

PERMIT UNIT REQUIREMENTS

1. This tank shall only vent to the vapor recovery system listed on S-37-8. [District Rule 4623, 5.1] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank. [District NSR Rule, District Rule 4623, 5.6.1] Federally Enforceable Through Title V Permit
3. VOC emissions from fugitive emissions sources in this permit unit shall not exceed 3.3 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Operator shall maintain records to demonstrate compliance with fugitive VOC emissions limit of this permit annually. Compliance shall be demonstrated by calculation, using the correlation equations, zero default and 10,000 ppmv pegged factors set forth in the CAPCOA California implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-3a, February 1999, and the average emission concentrations of total organic compounds measured for each component during all inspections conducted during the prior 365 day period. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
7. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
8. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
9. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
14. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
15. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
16. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
17. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
18. This unit commenced construction, modification, or reconstruction before June 11, 1973. Therefore, the requirements of 40 CFR 60 Subparts K, Ka, and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-24-5 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
3000 BBL FIXED-ROOF ORGANIC LIQUID STORAGE TANK #3014 CONNECT TO THE VAPOR RECOVERY SYSTEM LISTED ON PERMIT S-37-8

PERMIT UNIT REQUIREMENTS

1. All piping, valves, and fittings shall be constructed and maintained in a leak free condition. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
2. A leak free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
3. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
4. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
5. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
6. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take on of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
7. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

8. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

9. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

10. VOC fugitive emissions from the components in gas service on this tank and on piping from this tank shall not exceed 0.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

11. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. [District Rule 2201] Federally Enforceable Through Title V Permit

12. Operator shall maintain records to demonstrate compliance with fugitive VOC emissions limit of this permit annually. Compliance shall be demonstrated by calculation, using the correlation equations, zero default and 10,000 ppmv pegged factors set forth in the CAPCOA California implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-3a, February 1999, and the average emission concentrations of total organic compounds measured for each component during all inspections conducted during the prior 365 day period. [District Rule 2201] Federally Enforceable Through Title V Permit

13. Except as otherwise provided in this permit, the operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2201] Federally Enforceable Through Title V Permit

14. This unit commenced construction, modification, or reconstruction before June 11, 1973. Therefore, the requirements of 40 CFR 60 Subparts K, Ka, and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-25-4 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
126,000 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK #3026

PERMIT UNIT REQUIREMENTS

1. True vapor pressure (TVP) of liquids placed, stored, or held in this tank shall be less than 0.5 psi. [District Rule 4623] Federally Enforceable Through Title V Permit
2. The operator shall conduct TVP testing on the liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in each tank. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. Except for crude oil with a API gravity 26 degrees or less, the TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures from the oil and gas section of "ARB Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588," dated August 1989. As an alternative to using ASTM D 323-94, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and US EPA. In lieu of performing a TVP test, an operator may use Appendix A of District Rule 4623 to determine the TVP of the stored organic liquid provided the storage temperature listed in Appendix A is not exceeded at any time. [District Rule 4623, 6.4.2 and 6.4.3] Federally Enforceable Through Title V Permit
4. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph," as approved by ARB and US EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
5. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287-92 (2000) e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)." Sampling for API gravity shall be performed in accordance with ASTM Method D 4057-95 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit
6. The permittee shall keep accurate records of true vapor pressure, storage temperature and types of liquids stored, for a period of five years, and shall make such records available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart K. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
8. This unit commenced construction, modification, or reconstruction before May 19, 1978. Therefore, the requirements of 40 CFR 60 Subpart Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-26-4 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
126,000 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK #3027

PERMIT UNIT REQUIREMENTS

1. True vapor pressure (TVP) of liquids placed, stored, or held in this tank shall be less than 0.5 psi. [District Rule 4623] Federally Enforceable Through Title V Permit
2. The operator shall conduct TVP testing on the liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in each tank. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. Except for crude oil with a API gravity 26 degrees or less, the TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures from the oil and gas section of "ARB Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588," dated August 1989. As an alternative to using ASTM D 323-94, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and US EPA. In lieu of performing a TVP test, an operator may use Appendix A of District Rule 4623 to determine the TVP of the stored organic liquid provided the storage temperature listed in Appendix A is not exceeded at any time. [District Rule 4623, 6.4.2 and 6.4.3] Federally Enforceable Through Title V Permit
4. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph," as approved by ARB and US EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
5. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287-92 (2000) e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)." Sampling for API gravity shall be performed in accordance with ASTM Method D 4057-95 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit
6. The permittee shall keep accurate records of true vapor pressure, storage temperature and types of liquids stored, for a period of five years, and shall make such records available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart K. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
8. This unit commenced construction, modification, or reconstruction before May 19, 1978. Therefore, the requirements of 40 CFR 60 Subpart Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-27-4 **EXPIRATION DATE:** 08/31/2022

SECTION: 30 **TOWNSHIP:** 30S **RANGE:** 29E

EQUIPMENT DESCRIPTION:
37,000 BBL (ALTECH INDUSTRIES) INTERNAL FLOATING ROOF CRUDE OIL STORAGE TANK (#37,000), RIVETED CONSTRUCTION WITH MECHANICAL SHOE PRIMARY SEAL AND RIM-MOUNTED SECONDARY SEAL

PERMIT UNIT REQUIREMENTS

1. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal roof shall be floating on the liquid surface except during initial fill and when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. Whenever the permittee intends to land the roof on it's legs, the permittee shall notify the APCO in writing at least five days prior to performing the work. [District Rule 4623, 5.4.1, 5.4.3] Federally Enforceable Through Title V Permit
2. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623, 5.4.1, 5.3.2.1.1] Federally Enforceable Through Title V Permit
3. The cumulative length of all primary seal gaps greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623, 5.4.1, 5.3.2.1.1] Federally Enforceable Through Title V Permit
4. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623, 5.4.1, 5.3.2.1.1] Federally Enforceable Through Title V Permit
5. No continuous gap greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623, 5.4.1, 5.3.2.1.1] Federally Enforceable Through Title V Permit
6. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623, 5.4.1, 5.3.2.1.2] Federally Enforceable Through Title V Permit
7. The cumulative length of all secondary seal gaps greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623, 5.4.1, 5.3.2.1.2] Federally Enforceable Through Title V Permit
8. The metallic shoe-type seal shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 18 inches above the stored liquid surface. [District Rule 4623, 5.4.1, 5.3.2.1.3] Federally Enforceable Through Title V Permit
9. The maximum gap between the shoe and the tank shell shall be no greater than double the gap allowed by the seal gap criteria for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623, 5.4.1, 5.3.2.1.4] Federally Enforceable Through Title V Permit
10. There shall be no tears, holes or openings in the secondary seal or in the primary seal envelope surrounding the annular vapor space enclosed by the roof edge, stored liquid surface, shoe, and seal fabric. [District Rule 4623, 5.4.1, 5.3.2.1.5] Federally Enforceable Through Title V Permit
11. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.4.1, 5.3.2.1.6] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623, 5.4.1, 5.3.2.1.7] Federally Enforceable Through Title V Permit

13. All openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10% of the maximum allowable working pressure of the roof, shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be leak-free except when the device or appurtenance is in use. [District Rule 4623, 5.5.1] Federally Enforceable Through Title V Permit

14. Each opening in a non-contact internal floating roof, except for automatic bleeder vents (vacuum breaker vents) and rim space vents, shall provide a projection below the liquid surface. [District Rule 4623, 5.5.2.1.1] Federally Enforceable Through Title V Permit

15. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use. [District Rule 4623, 5.5.2.1.2] Federally Enforceable Through Title V Permit

16. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. [District Rule 4623, 5.5.2.1.3] Federally Enforceable Through Title V Permit

17. Rim vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [District Rule 4623, 5.5.2.1.4] Federally Enforceable Through Title V Permit

18. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The well shall have a slit fabric cover that covers at least 90% of the opening. The fabric cover must be impermeable. [District Rule 4623, 5.5.2.1.5] Federally Enforceable Through Title V Permit

19. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover. The fabric sleeve must be impermeable. [District Rule 4623, 5.5.2.1.6] Federally Enforceable Through Title V Permit

20. The permittee shall visually inspect the internal floating roof, and its appurtenant parts, fittings, etc. and measure the gaps of the primary seal and/or secondary seal prior to filling the tank for newly constructed, repair, or rebuilt internal floating roof tanks. If holes, tears, or openings in the primary seal, the secondary seal, the seal fabric or defects in the internal floating roof or its appurtenant parts, components, fittings, etc., are found, they shall be repaired prior to filling the tank. [District Rule 4623, 6.1.3.2.1] Federally Enforceable Through Title V Permit

21. The permittee shall visually inspect, through the manholes, roof hatches, or other openings on the fixed roof, the internal floating roof and its appurtenant parts, fittings, etc., and the primary seal and/or secondary seal at least once every 12 months after the tank is initially filled with an organic liquid. There should be no visible organic liquid on the roof, tank walls, or anywhere. Other than the gap criteria specified by this rule, no holes, tears, or other openings are allowed that would permit the escape of vapors. Any defects found are violations of this rule. [District Rule 4623, 6.1.3.2.2] Federally Enforceable Through Title V Permit

22. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. [District Rule 4623, 6.1.3.2.3] Federally Enforceable Through Title V Permit

23. Permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of District Rule 4623, Sections 5.2 through 5.5 (amended May 19, 2005). The inspection report for tanks that that have been determined to be in compliance with the requirements of District Rule 4623, Sections 5.2 through 5.5 (amended May 19, 2005) need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of District Rule 4623 (amended May 19, 2005). [District Rule 4623, 6.3.5] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

24. Permittee shall maintain the records of the internal floating roof landing activities that are performed pursuant to District Rule 4623, Sections 5.3.1.3 and 5.4.3 (amended May 19, 2005). The records shall include information on the true vapor pressure (TVP), API gravity, storage temperature, type of organic liquid stored in the tank, the purpose of landing the roof on its legs, the date of roof landing, duration the roof was on its legs, the level or height at which the tank roof was set to land on its legs, and the lowest liquid level in the tank. [District Rule 4623, 6.3.7] Federally Enforceable Through Title V Permit

25. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2 and 4623, 6.3, 6.3.7] Federally Enforceable Through Title V Permit

26. True vapor pressure of the stored liquid shall not exceed 11 psia. [District Rule 4623, 5.1.1] Federally Enforceable Through Title V Permit

27. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually inspect the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4326, Table 5]

28. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 5]

29. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 5]

30. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 5]

31. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 5 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 5 shall constitute a violation of this rule. [District Rule 4623, Table 5]

32. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623, Table 5]

33. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 5]

34. Construction, reconstruction, or modification of this unit was commenced prior to June 11, 1973. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-28-5 **EXPIRATION DATE:** 08/31/2022

SECTION: 30 **TOWNSHIP:** 30S **RANGE:** 29E

EQUIPMENT DESCRIPTION:
80,000 BBL (ALTECH INDUSTRIES) INTERNAL FLOATING ROOF CRUDE OIL STORAGE TANK (#80,000), RIVETED CONSTRUCTION WITH MECHANICAL SHOE PRIMARY SEAL AND RIM-MOUNTED SECONDARY SEAL

PERMIT UNIT REQUIREMENTS

1. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal roof shall be floating on the liquid surface except during initial fill and when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. Whenever the permittee intends to land the roof on it's legs, the permittee shall notify the APCO in writing at least five days prior to performing the work. [District Rule 4623, 5.4.1, 5.4.3] Federally Enforceable Through Title V Permit
2. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623, 5.4.1, 5.3.2.1.1] Federally Enforceable Through Title V Permit
3. The cumulative length of all primary seal gaps greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623, 5.4.1, 5.3.2.1.1] Federally Enforceable Through Title V Permit
4. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623, 5.4.1, 5.3.2.1.1] Federally Enforceable Through Title V Permit
5. No continuous gap greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623, 5.4.1, 5.3.2.1.1] Federally Enforceable Through Title V Permit
6. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623, 5.4.1, 5.3.2.1.2] Federally Enforceable Through Title V Permit
7. The cumulative length of all secondary seal gaps greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623, 5.4.1, 5.3.2.1.2] Federally Enforceable Through Title V Permit
8. The metallic shoe-type seal shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 18 inches above the stored liquid surface. [District Rule 4623, 5.4.1, 5.3.2.1.3] Federally Enforceable Through Title V Permit
9. The maximum gap between the shoe and the tank shell shall be no greater than double the gap allowed by the seal gap criteria for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623, 5.4.1, 5.3.2.1.4] Federally Enforceable Through Title V Permit
10. There shall be no tears, holes or openings in the secondary seal or in the primary seal envelope surrounding the annular vapor space enclosed by the roof edge, stored liquid surface, shoe, and seal fabric. [District Rule 4623, 5.4.1, 5.3.2.1.5] Federally Enforceable Through Title V Permit
11. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.4.1, 5.3.2.1.6] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623, 5.4.1, 5.3.2.1.7] Federally Enforceable Through Title V Permit

13. All openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10% of the maximum allowable working pressure of the roof, shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be leak-free except when the device or appurtenance is in use. [District Rule 4623, 5.5.1] Federally Enforceable Through Title V Permit

14. Each opening in a non-contact internal floating roof, except for automatic bleeder vents (vacuum breaker vents) and rim space vents, shall provide a projection below the liquid surface. [District Rule 4623, 5.5.2.1.1] Federally Enforceable Through Title V Permit

15. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use. [District Rule 4623, 5.5.2.1.2] Federally Enforceable Through Title V Permit

16. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. [District Rule 4623, 5.5.2.1.3] Federally Enforceable Through Title V Permit

17. Rim vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [District Rule 4623, 5.5.2.1.4] Federally Enforceable Through Title V Permit

18. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The well shall have a slit fabric cover that covers at least 90% of the opening. The fabric cover must be impermeable. [District Rule 4623, 5.5.2.1.5] Federally Enforceable Through Title V Permit

19. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover. The fabric sleeve must be impermeable. [District Rule 4623, 5.5.2.1.6] Federally Enforceable Through Title V Permit

20. The permittee shall visually inspect the internal floating roof, and its appurtenant parts, fittings, etc. and measure the gaps of the primary seal and/or secondary seal prior to filling the tank for newly constructed, repair, or rebuilt internal floating roof tanks. If holes, tears, or openings in the primary seal, the secondary seal, the seal fabric or defects in the internal floating roof or its appurtenant parts, components, fittings, etc., are found, they shall be repaired prior to filling the tank. [District Rule 4623, 6.1.3.2.1] Federally Enforceable Through Title V Permit

21. The permittee shall visually inspect, through the manholes, roof hatches, or other openings on the fixed roof, the internal floating roof and its appurtenant parts, fittings, etc., and the primary seal and/or secondary seal at least once every 12 months after the tank is initially filled with an organic liquid. There should be no visible organic liquid on the roof, tank walls, or anywhere. Other than the gap criteria specified by this rule, no holes, tears, or other openings are allowed that would permit the escape of vapors. Any defects found are violations of this rule. [District Rule 4623, 6.1.3.2.2] Federally Enforceable Through Title V Permit

22. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. [District Rule 4623, 6.1.3.2.3] Federally Enforceable Through Title V Permit

23. Permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of District Rule 4623, Sections 5.2 through 5.5 (amended May 19, 2005). The inspection report for tanks that that have been determined to be in compliance with the requirements of District Rule 4623, Sections 5.2 through 5.5 (amended May 19, 2005) need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of District Rule 4623 (amended May 19, 2005). [District Rule 4623, 6.3.5] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

24. Permittee shall maintain the records of the internal floating roof landing activities that are performed pursuant to District Rule 4623, Sections 5.3.1.3 and 5.4.3 (amended May 19, 2005). The records shall include information on the true vapor pressure (TVP), API gravity, storage temperature, type of organic liquid stored in the tank, the purpose of landing the roof on its legs, the date of roof landing, duration the roof was on its legs, the level or height at which the tank roof was set to land on its legs, and the lowest liquid level in the tank. [District Rule 4623, 6.3.7] Federally Enforceable Through Title V Permit

25. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2 and 4623, 6.3, 6.3.7] Federally Enforceable Through Title V Permit

26. True vapor pressure of the stored liquid shall not exceed 11 psia. [District Rule 4623, 5.1.1] Federally Enforceable Through Title V Permit

27. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually inspect the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4326, Table 5]

28. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 5]

29. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 5]

30. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 5]

31. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 5 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 5 shall constitute a violation of this rule. [District Rule 4623, Table 5]

32. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623, Table 5]

33. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 5]

34. Construction, reconstruction, or modification of this unit was commenced prior to June 11, 1973. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-31-7 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
1,000 BBL FIXED-ROOF ORGANIC LIQUID STORAGE TANK(#1000) WITH A SHARED VAPOR RECOVERY SYSTEM (LISTED ON PERMIT UNIT S-37-8)

PERMIT UNIT REQUIREMENTS

1. This tank shall only vent to the vapor recovery system listed on S-37-8. [District Rule 4623, 5.1] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District NSR Rule and District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
3. VOC emissions from fugitive emissions sources in this permit unit shall not exceed 4.4 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Operator shall maintain records to demonstrate compliance with fugitive VOC emissions limit of this permit annually. Compliance shall be demonstrated by calculation, using the correlation equations, zero default and 10,000 ppmv pegged factors set forth in the CAPCOA California implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-3a, February 1999, and the average emission concentrations of total organic compounds measured for each component during all inspections conducted during the prior 365 day period. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
7. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
8. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
9. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
14. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
15. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
16. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
17. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-34-5 **EXPIRATION DATE:** 08/31/2022

SECTION: 30 **TOWNSHIP:** 30S **RANGE:** 29E

EQUIPMENT DESCRIPTION:
80,000 BBL EXTERNAL FLOATING ROOF PETROLEUM STORAGE TANK (#80,001), WELDED CONSTRUCTION WITH METALLIC SHOE PRIMARY SEAL AND SECONDARY RIM-MOUNTED SEAL

PERMIT UNIT REQUIREMENTS

1. The tank shall be equipped with a cover consisting of either a pontoon-type or double-deck-type cover which rests upon the surface of the liquid being stored and is equipped with a closure device between the tank shell and roof edge consisting of a primary and a secondary seal. [40 CFR 60.112a(a)(1), District Rule 4623, 5.3.1.1, 5.3.1.2] Federally Enforceable Through Title V Permit
2. The external floating roof shall float on the surface of the stored liquid at all times (i.e., off the roof leg supports) except during the initial fill until the roof is lifted off the leg supports and when the tank is completely emptied and subsequently refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. Whenever the permittee intends to land the roof on it's legs, the permittee shall notify the APCO in writing at least five calendar days prior to performing the work. The tank must be in compliance with this rule before it may land on its legs. [District Rule 4623, 5.3.1.3 and 40 CFR 60.112a(a)(1)] Federally Enforceable Through Title V Permit
3. Primary seal (lower seal) shall be either a metallic shoe seal, a liquid-mounted seal, or a vapor-mounted seal. [40 CFR 60.112a(a)(1)(i)] Federally Enforceable Through Title V Permit
4. Secondary seal shall be installed above the primary seal. [40 CFR 60.112a(a)(1)(ii)(A)] Federally Enforceable Through Title V Permit
5. If the secondary seal is used in combination with a vapor-mounted primary seal, there shall be no gaps between the tank wall and the secondary seal. [40 CFR 60.112a(a)(1)(ii)(B)] Federally Enforceable Through Title V Permit
6. Operator shall be exempt from the requirements for secondary seals and the secondary seal gap criteria when performing gap measurements or inspections of the primary seal. [40 CFR 60.112a(a)(1)(ii)(C)] Federally Enforceable Through Title V Permit
7. True vapor pressure of the stored liquid shall not exceed 11 psia. [District Rule 4623, 5.1.1] Federally Enforceable Through Title V Permit
8. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623, 5.3.2.1.1] Federally Enforceable Through Title V Permit
9. The cumulative length of all primary seal gaps greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1] Federally Enforceable Through Title V Permit
10. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1] Federally Enforceable Through Title V Permit
11. No continuous gap greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623, 5.3.2.1.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623, 5.3.2.1.2] Federally Enforceable Through Title V Permit
13. The cumulative length of all secondary seal gaps greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623, 5.3.2.1.2] Federally Enforceable Through Title V Permit
14. The metallic shoe-type seal shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 24 inches above the stored liquid surface. [District Rule 4623, 5.3.2.1.3] Federally Enforceable Through Title V Permit
15. The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623, 5.3.2.1.4] Federally Enforceable Through Title V Permit
16. There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623, 5.3.2.1.5] Federally Enforceable Through Title V Permit
17. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.3.2.1.6] Federally Enforceable Through Title V Permit
18. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623, 5.3.2.1.7] Federally Enforceable Through Title V Permit
19. All openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10% of the maximum allowable working pressure of the roof, shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be leak-free, except when the device or appurtenance is in use. [40 CFR 60.112a(a)(1)(iii), District Rule 4623. 5.5.1] Federally Enforceable Through Title V Permit
20. Except for automatic bleeder vents, rim vents, and pressure relief vents, each opening in a non-contact external floating roof shall provide a projection below the liquid surface. [District Rule 4623, 5.5.2.2.1] Federally Enforceable Through Title V Permit
21. Except for automatic bleeder vents and rim vents, roof drains, and leg sleeves, each opening in the roof shall be equipped with a gasketed cover, seal, or lid that shall be maintained in a closed position at all times (i.e., no visible gap) except when in actual use. [District Rule 4623, 5.5.2.2.2] Federally Enforceable Through Title V Permit
22. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. [40 CFR 60.112a(a)(1)(iii)], District Rule 4623, 5.5.2.2.3] Federally Enforceable Through Title V Permit
23. Rim vents shall be equipped with a gasket and shall be set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. [40 CFR 60.112a(a)(1)(iii)], District Rule 4623, 5.5.2.2.4] Federally Enforceable Through Title V Permit
24. Each emergency roof drain shall be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening. The fabric cover must be impermeable if the liquid is drained into the contents of the tanks. [District Rule 4623, 5.5.2.2.5]
25. External floating roof legs shall be equipped with vapor socks or vapor barriers in order to maintain a leak-free condition so as to prevent VOC emissions from escaping through the roof leg opening. [District Rule 4623, 5.5.2.2.6] Federally Enforceable Through Title V Permit
26. All wells and similar fixed projections through the floating roof shall provide a projection below the liquid surface. [District Rule 4623, 5.5.1, 5.5.2.3.1, 5.5.2.4.1] Federally Enforceable Through Title V Permit
27. A solid guidepole well shall be equipped with a pole wiper and a gasketed cover, seal or lid which shall be in a closed position at all times (i.e., no visible gap) except when the well is in use. [District Rule 4623, 5.5.2.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

28. The gap between the pole wiper and the solid guidepole shall be added to the gaps measured to determine compliance with the secondary seal requirement, and in no case shall exceed 1/2 inch. [District Rule 4623, 5.5.2.3.3] Federally Enforceable Through Title V Permit

29. The slotted guidepole well on a external floating roof shall be equipped with the following: a sliding cover, a well gasket, a pole sleeve, a pole wiper, and an internal float and float wiper designed to minimize the gap between the float and the well, and provided the gap shall not exceed 1/8 inch; or shall be equipped with a well gasket, a zero gap pole wiper seal and a pole sleeve that projects below the liquid surface. [District Rule 4623, 5.5.2.4.1] Federally Enforceable Through Title V Permit

30. The gap between the pole wiper and the slotted guidepole shall be added to the gaps measured to determine compliance with the secondary seal requirement, and in no case shall exceed 1/8 inch. [District Rule 4623, 5.5.2.4.2] Federally Enforceable Through Title V Permit

31. The permittee of external floating roof tanks shall make the primary seal envelope available for unobstructed inspection by the APCO on an annual basis at locations selected along its circumference at random by the APCO. A minimum of four locations shall be made available. If the APCO suspects a violation may exist the APCO may require such further unobstructed inspection of the primary seal as may be necessary to determine the seal condition for its entire circumference. [District Rule 4623, 6.1.1] Federally Enforceable Through Title V Permit

32. Operator shall perform gap measurements on primary seals within 60 days of the initial fill and at least once every 5 years thereafter. Operator shall perform gap measurements on secondary seals within 60 days of the initial fill with petroleum liquid and at least once every year thereafter. If unit is out of service for a period of one year or more, subsequent refilling with petroleum liquid shall be considered initial fill. [40 CFR 60.113a(a)(1)(i)(A), (B), and (C)] Federally Enforceable Through Title V Permit

33. If unit is out of service for a period of one year or more, subsequent refilling with petroleum liquid shall be considered initial fill in accordance with the conditions of this permit. [40 CFR 60.113a(a)(1)(i)(C)] Federally Enforceable Through Title V Permit

34. Operator shall determine gap widths in the primary and secondary seals using the following procedure: 1) Measure seal gaps, at one or more floating roof levels when the roof is floating off leg supports; 2) Measure seal gaps around entire circumference of the tank in each place where a one-eighth (1/8) inch diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the tank wall and measure the circumferential distance of each such location; 3), Total surface area of each gap shall be determined by using probes of various widths to accurately measure the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance; 4) Add the gap surface area of each gap location for the primary seal and the secondary seal individually. Divide the sum for each seal by the nominal diameter of the tank. [40 CFR 60.113a(a)(1)(ii) and (iii)] Federally Enforceable Through Title V Permit

35. Operator shall record the vessel on which the measurement was performed, date of the seal gap measurement, and raw data obtained in the measurement process in accordance with the conditions of this permit. [40 CFR 60.113a(a)(1)(i)(D)] Federally Enforceable Through Title V Permit

36. Operator shall provide the APCO with 30 days notice of the gap measurement to afford the District the opportunity to have an observer present. [40 CFR 60.113a(a)(1)(iv)] Federally Enforceable Through Title V Permit

37. If the accumulated area of gaps or gap width exceed limits, operator shall submit a report to the APCO within 60 days of the date of measurement. Report should include identification of the vessel, reason vessel did not meet the specifications, and a description of the actions necessary to bring the storage vessel into compliance. [40 CFR 60.113a(a)(1)(i)(E)] Federally Enforceable Through Title V Permit

38. Maximum true vapor pressure may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR 60.115a(b)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

39. Operator shall determine the true vapor pressure of each type of crude oil with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method from available data and record if the true vapor pressure is greater than 1.0 psia. [40 CFR 60.115a(c)] Federally Enforceable Through Title V Permit

40. Operator shall visually inspect tank valves, flanges, and connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 4]

41. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 4]

42. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 4]

43. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 4]

44. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 4 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 4 shall constitute a violation of this rule. [District Rule 4623, Table 4]

45. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623, Table 4]

46. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 4]

47. The permittee shall inspect all floating tanks at least once every 12 months to determine compliance with the requirements of this rule. The actual gap measurements of the floating roof primary and secondary seals shall be recorded. The inspection results shall be submitted to the APCO as specified in District Rule 4623, Section 6.3.5. [District Rule 4623, 6.1.3.1] Federally Enforceable Through Title V Permit

48. The permittee shall inspect the primary and secondary seals for compliance with the requirements of this rule every time a tank is emptied or degassed. Actual gap measurements shall be performed when the liquid level is static but not more than 24 hours after the tank roof is re-floated. [District Rule 4623, 6.1.3.1.2] Federally Enforceable Through Title V Permit

49. Permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of District Rule 4623, Sections 5.2 through 5.5 (Amended May 19, 2005). The inspection report for tanks that that have been determined to be in compliance with the requirements of District Rule 4623, Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of District Rule 4623. 6.3.5.1 through 6.3.5.6 (amended May 19, 2005). [District Rule 4623, 6.3.5] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

50. Permittee shall maintain the records of the external floating roof landing activities that are performed pursuant to District Rule 4623, Sections 5.3.1.3 and 5.4.3 (Amended May 19, 2005). The records shall include information on the true vapor pressure (TVP), API gravity, storage temperature, type of organic liquid stored in the tank, the purpose of landing the roof on its legs, the date of roof landing, duration the roof was on its legs, the level or height at which the tank roof was set to land on its legs, and the lowest liquid level in the tank. [District Rule 4623, 6.3.7] Federally Enforceable Through Title V Permit

51. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3.7] Federally Enforceable Through Title V Permit

52. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60, Subpart Ka. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

53. This unit commenced construction, modification, or reconstruction between May 18, 1978 and July 23, 1984. Therefore, the requirements of 40 CFR 60 Subpart K and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-38-11 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
SOLVENT UNIT INCLUDING V-7 FRACTIONATOR, 1 REFLUX DRUM V-8, AND 3,750,000 BTU/HR GAS FIRED FIRE TUBE HEATER (H-1)

PERMIT UNIT REQUIREMENTS

1. Heater shall be fired on purchased natural gas or refinery fuel gas only. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Reflux drum V-8 shall vent only to flare listed on permit S-37-7. [District NSR Rule] Federally Enforceable Through Title V Permit
3. There shall be no pressure relief valves or vents designed to emit air contaminants to the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
4. There shall be no leaks of 10,000 ppmv or greater of any pressure relief devices installed as part of the unit. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
6. Heater shall be equipped with fuel flowrate indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
7. If splitter unit plant produces odoriferous wastewater, such wastewater shall not be transported in open system or disposed of in open air site(s). [District NSR Rule] Federally Enforceable Through Title V Permit
8. This permit to operate does not authorize steam production increase over S-37-6 permit limit. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Fuel gas sulfur content (as H2S) shall not exceed 0.10 gr/ dscf (160 ppmv) over a three hour rolling average and shall be continuously monitored and recorded. [40 CFR 60, Subpart J, 60.104] Federally Enforceable Through Title V Permit
10. The combustion in the fuel gas combustion devices of gases released as a result of start-up, shutdown, upset, malfunction, or the result of relief valve leakage is exempt from the H2S or sulfur content requirement. [District Rules 2201, 4001, Subpart J, 60.104(a)(1)] Federally Enforceable Through Title V Permit
11. Heater shall operate with no emissions in excess of 5% opacity or source testing shall be required to document emission rates. [District NSR Rule] Federally Enforceable Through Title V Permit
12. Heater shall not be fired at greater than 3.75 MMBtu/hr heat input rate. [District NSR Rule] Federally Enforceable Through Title V Permit
13. Emissions from fugitive emissions components shall not exceed 52.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

14. Emission rates shall not exceed any of the following limits: PM10: 0.06 lb/hr, SOx (as SO2): 1.89 lb/hr, NOx (as NO2): 0.55 lb/hr, VOC: 3.91 lb/hr or CO: 0.14 lb/hr. [District NSR Rule] Federally Enforceable Through Title V Permit

15. Particulate matter emissions shall not exceed 0.1 grain/dscf. Emissions of combustion contaminants shall not exceed 0.1 grain per cubic foot of gas calculated to 12% CO2 at dry standard conditions. Emissions of combustion contaminants shall not exceed ten (10) pounds per hour. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit

16. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. [District Rule 2520, 9.3.2; District Rule 4301, 5.2.1] Federally Enforceable Through Title V Permit

17. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 2520, 9.3.2; Kern County Rule 407; District Rule 4801] Federally Enforceable Through Title V Permit

18. Compliance with sulfur compound emission limits may be demonstrated by firing this unit either on PUC or FERC regulated natural gas or refinery gas with a sulfur content of no more than 0.1 grain-H2S/dscf (160 ppmv) according to the continuous H2S monitor installed downstream of the sulfur recovery unit. [District Rules 4301, 4801 and 2520, 9.3.2] Federally Enforceable Through Title V Permit

19. Operator shall report all rolling 3-hour periods during which the average concentration of H2S as measured by the H2S continuous monitoring system exceeds 0.10 gr/dscf (160 ppmv). [40 CFR Part 60, Subpart J, 60.105(e)(3)(ii)] Federally Enforceable Through Title V Permit

20. Operator shall determine compliance with the H2S standard using EPA Method 11. [40 CFR Part 60, Subpart J, 60.106(e)] Federally Enforceable Through Title V Permit

21. The permittee shall comply with all applicable notification, recordkeeping and monitoring requirements of Rule 4001. [District Rule 4001] Federally Enforceable Through Title V Permit

22. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. [District Rule 2201] Federally Enforceable Through Title V Permit

23. Operator shall maintain records to demonstrate compliance with fugitive VOC emissions limit of this permit annually. Compliance shall be demonstrated by calculation, using the correlation equations, zero default and 10,000 ppmv pegged factors set forth in the CAPCOA California implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-3a, February 1999, and the average emission concentrations of total organic compounds measured for each component during all inspections conducted during the prior 365 day period. [District Rule 2201] Federally Enforceable Through Title V Permit

24. The permittee shall keep accurate records of sulfur content of refinery fuel gas for a period of five years, and shall make such records available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit

25. Permit unit shall comply with applicable District Rule 4001 (NSPS, Subpart GGG) requirements on facility wide permit S-37-0. [District Rule 4001] Federally Enforceable Through Title V Permit

26. The requirements of 40 CFR 60 Subpart GGGa do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

27. Emissions from the natural gas-fired heater H-1 shall not exceed any of the following limits: 30 ppmvd NOx @ 3% O2 (equivalent to 0.036 lb-NOx/MMBtu), 0.005 lb-PM10/MMBtu, 400 ppmvd CO @ 3% O2 (equivalent to 0.3 lb-CO/MMBtu), or 0.0055 lb-VOC/MMBtu. [District Rules 2201 and 4307] Federally Enforceable Through Title V Permit

28. Gas combusted by heater H-1 shall contain no more than 5 gr S/100scf. [District Rule 4307] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

29. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rule 4307] Federally Enforceable Through Title V Permit

30. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4307] Federally Enforceable Through Title V Permit

31. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4307] Federally Enforceable Through Title V Permit

32. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4307] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-42-4 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
3,600 BBL ORGANIC LIQUID STORAGE TANK (#3300) WITH A SHARED VAPOR RECOVERY SYSTEM (LISTED ON PERMIT UNIT S-37-8)

PERMIT UNIT REQUIREMENTS

1. This tank shall only vent to the vapor recovery system listed on S-37-8. [District Rule 4623, 5.1] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
3. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
4. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
5. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
6. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
7. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
8. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
9. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
14. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
15. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart K. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
16. This unit commenced construction, modification, or reconstruction before May 19, 1978. Therefore, the requirements of 40 CFR 60 Subpart Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-43-4 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
15 HP LIGHT SOLVENT TRUCK LOADING OPERATION WITH VAPOR CONTROL SYSTEM INCLUDING: EMCO WHEATON LOADING HOSE AND VAPOR RETURN COUPLERS, 15 PUMP, METER AND CHECK VALVES AND VAPOR RETURN PIPING TO VAPOR CONTROL SYSTEM (RACK G)

PERMIT UNIT REQUIREMENTS

1. The loading rack shall be equipped with bottom loading and a vapor collection and control system such that TOC emissions do not exceed 0.08 pounds per 1000 gallons of organic liquid loaded. [District Rule 4624 and County Rule 413 (Kern)] Federally Enforceable Through Title V Permit
2. Vapor collection and control system shall operate such that the pressure in the delivery tank being loaded does not exceed 18 inches water column pressure and 6 inches water column vacuum. [District Rule 4624 and County Rule 413 (Kern)] Federally Enforceable Through Title V Permit
3. Gasoline, as defined in Rule Rule 4621, shall not be loaded or unloaded in this equipment. [District Rule 4621] Federally Enforceable Through Title V Permit
4. No more than 48 disconnects shall be allowed in any day without prior District approval. [District NSR Rule] Federally Enforceable Through Title V Permit
5. All delivery tanks which previously contained organic liquids, including gasoline, with a TVP greater than 1.5 psia at loading conditions shall be filled only at Class 1 loading facilities using bottom loading equipment with a vapor collection and control system operating such that VOC emissions do not exceed 0.08 lb/1000 gallons loaded; or Class 2 loading facilities equipped with a system to control at least 95% of VOC displaced; and which operate so the delivery tank does not exceed 18 inches water column pressure nor 6 inches water column vacuum. [District Rule 4624, 5.3] Federally Enforceable Through Title V Permit
6. Loading and vapor collection and control equipment shall be designed, installed, maintained and operated such that there are no leaks or excess organic liquid drainage at disconnections. A leak shall be defined as the dripping of organic compounds at a rate of more than three drops per minute or the detection of organic compounds, in excess of 10,000 ppm as methane measured at a distance of one centimeter from the potential source in accordance with EPA Method 21. Excess liquid drainage shall be defined as exceeding 10 mls per average of 3 consecutive disconnects. [District Rule 4624, 5.4, Kern County Rule 413] Federally Enforceable Through Title V Permit
7. During the loading of organic liquids, the operator shall perform and record the results of monthly leak inspections of the loading and vapor collection equipment at each loading arm. Leak inspections shall be conducted using sight, sound, smell and instrument methods to detect leaks. Instrument detection shall be conducted using EPA Method 21 and shall be measured at a distance of one centimeter from the potential source. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: A) Zero air (less than 10 ppm of hydrocarbon in air); and B) Mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

8. Corrective steps shall be taken at any time the operator observes a leak or excess drainage at disconnect. In addition, the operator shall perform and record the results of monthly drainage inspections at disconnect for each loading arm during any month that the loading arm(s) are in operation. If no excess drainage conditions are found during five consecutive monthly inspections, the drainage inspection frequency may be changed from monthly to quarterly. However, if one or more excess drainage condition is found during a quarterly inspection, the inspection frequency shall return to monthly. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. Drainage inspections shall be completed before 10:00 AM the day of inspection. Compliance shall be demonstrated by collecting all drainage at disconnect in a spouted container. The drainage shall be transferred to a graduated cylinder and the volume determined within one (1) minute of collection. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. All inspections shall be documented with an inspection log. Inspection records shall include, at a minimum, 1) date of inspection, 2) location and description of any missing, loose, leaking, or damaged equipment and any malfunction requiring repair, 3) corrective steps taken to repair or replace the equipment, 4) test method and results for leak and drainage inspections, 5) location and description of any equipment to be inspected upon commencing operation after repair or replacement and 6) inspector name and signature. [District Rule 4624, 6.1.3]
11. Analysis of halogenated exempt compounds shall be by ARB Method 432. [District Rule 4624, 6.2.2, and Kern County Rule 413] Federally Enforceable Through Title V Permit
12. VOC emissions from the vapor collection and control system shall be determined using 40CFR 60.503. "Test Methods and Procedures" and EPA Reference Methods 2A, 2B, 25A and 25B and ARB Method 432, or ARB Method 2-4 or District approved equivalent. [District Rule 4624, 6.2.2, and Kern County Rule 413] Federally Enforceable Through Title V Permit
13. Hose couplers shall be dry break type only. [District NSR Rule] Federally Enforceable Through Title V Permit
14. VOC emission from fugitive emissions shall not exceed 0.2 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
15. VOC disconnect losses shall not exceed 0.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Operator shall maintain records to demonstrate compliance with fugitive VOC emissions limit of this permit annually. Compliance shall be demonstrated by calculation, using the correlation equations, zero default and 10,000 ppmv pegged factors set forth in the CAPCOA California implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-3a, February 1999, and the average emission concentrations of total organic compounds measured for each component during all inspections conducted during the prior 365 day period. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Permittee shall maintain records of the number of disconnects per day and shall make such records available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
19. This unit commenced construction, modification, or reconstruction before June 11, 1973. Therefore, the requirements of 40 CFR 60 Subparts K, Ka, and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-44-4 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
126,000 GALLON ORGANIC LIQUID STORAGE TANK (#3019)

PERMIT UNIT REQUIREMENTS

1. True vapor pressure (TVP) of liquids placed, stored, or held in this tank shall be less than 0.5 psi. [District Rule 4623] Federally Enforceable Through Title V Permit
2. Average daily tank throughput (on annual basis) shall not exceed 193 bbl/day of fluid without prior District approval. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The maximum emission rate of volatile organic compounds shall not exceed 14.3 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Tank shall be equipped with an operational stored liquid temperature indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
5. All tank seams, welds, flanges and joints shall be maintained in leak-free condition. A liquid leak is defined as a leak rate of greater than or equal to 30 drops per minute. A gas leak is defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21. [District NSR Rule and District Rule 4623] Federally Enforceable Through Title V Permit
6. There shall be no open, water draw-off drain. [District NSR Rule] Federally Enforceable Through Title V Permit
7. The operator shall conduct TVP testing on the liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in each tank. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
8. Except for crude oil with a API gravity 26 degrees or less, the TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures from the oil and gas section of "ARB Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588," dated August 1989. As an alternative to using ASTM D 323-94, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and US EPA. In lieu of performing a TVP test, an operator may use Appendix A of District Rule 4623 to determine the TVP of the stored organic liquid provided the storage temperature listed in Appendix A is not exceeded at any time. [District Rule 4623, 6.4.2 and 6.4.3] Federally Enforceable Through Title V Permit
9. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph," as approved by ARB and US EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287-92 (2000) e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)." Sampling for API gravity shall be performed in accordance with ASTM Method D 4057-95 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit
11. The permittee shall keep accurate records of true vapor pressure, storage temperature and daily liquid throughput for a period of five years, and shall make such records available for District inspection upon request. [District NSR Rule and District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
12. This unit commenced construction, modification, or reconstruction before June 11, 1973. Therefore, the requirements of 40 CFR 60 Subparts K, Ka, and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-46-6 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
30 HP LIQUID LOADING/UNLOADING OPERATION INCLUDING ONE UNCONTROLLED LIQUID LOADOUT LINE, ONE ORGANIC LIQUID LOADOUT/UNLOAD (TRANSFER) LINE EQUIPPED WITH VAPOR RECOVERY, TWO 15 HP PUMPS, DRY-BREAK CONNECTORS, METER(S), AND CHECK VALVES (RACK Q)

PERMIT UNIT REQUIREMENTS

1. For the transfer of liquids with a true vapor pressure (TVP) of 1.5 psia or more, the transfer rack shall be equipped with bottom loading or a vapor collection and control system such that VOC emissions do not exceed 0.08 pounds per 1,000 gallons of organic liquid with greatest vapor pressure loaded. [District Rules 4624 and 2201, and County Rule 413 (Kern)] Federally Enforceable Through Title V Permit
2. Vapor collection and control system shall operate such that the pressure in the delivery tank being loaded does not exceed 18 inches water column pressure and 6 inches water column vacuum. [District Rule 4624 and County Rule 413 (Kern)] Federally Enforceable Through Title V Permit
3. The transfer of gasoline from any delivery vessel to any stationary storage container with 250 gallon capacity or more shall not be allowed unless the container is equipped with a permanent submerged fill pipe and an ARB certified Phase I vapor recovery system, which is maintained and operated according to the manufacturers specifications. [District Rule 4621] Federally Enforceable Through Title V Permit
4. No gasoline shall be placed, stored, or held in any above-ground tank of 250 gallon capacity or more unless it is equipped with a pressure-vacuum valve set to within 10% of the maximum allowable working pressure of the tank. [District Rule 4621] Federally Enforceable Through Title V Permit
5. All delivery tanks which previously contained organic liquids, including gasoline, with a TVP 1.5 psia or greater at the storage container's maximum organic liquid storage temperature shall be filled only at Class 1 loading facilities using bottom loading equipment with a vapor collection and control system operating such that VOC emissions do not exceed 0.08 lb/1000 gallons loaded; or Class 2 loading facilities equipped with a system to control at least 95% of VOC displaced; or the transfer facility has a vapor collection and control system such that the pressure in the delivery tank being loaded does not exceed 18 inches water column pressure nor 6 inches water column vacuum. [District Rules 4621 and 4624] Federally Enforceable Through Title V Permit
6. No gasoline delivery vessel shall be used or operated unless it is leak-free. A leak shall be defined as the dripping of organic compounds at a rate of more than three drops per minute or the detection of organic compounds, in excess of 10,000 ppm as methane measured at a distance of one centimeter from the potential source in accordance with EPA Method 21. Excess liquid drainage shall be defined as exceeding 10 milliliters per average of 3 consecutive disconnects. No gasoline delivery vessel shall be operated or loaded unless valid State of California decals are displayed on the cargo tank, attesting to the vapor integrity of the tank as verified by annual performance of CARB required Certification and Test Procedures for Vapor Recovery Systems for Cargo Tanks. [District Rule 4621, Health & Safety Code, section 41962, and CCR, Title 17 section 94004] Federally Enforceable Through Title V Permit
7. The test method to determine vapor tightness of delivery vessels owned or operated by this facility shall be ARB Test Procedure TP-204.3. [District Rule 4621] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

8. Construction, reconstruction (as defined in District Rule 4001), or expansion of any top loading facility shall not be allowed. [District Rule 4624] Federally Enforceable Through Title V Permit

9. Loading and vapor collection and control equipment shall be designed, installed, maintained and operated such that there are no leaks or excess organic liquid drainage at disconnections. A leak from a VOC containing liquid other than gasoline shall be defined as the dripping of organic compounds at a rate of more than three drops per minute or the detection of organic compounds, in excess of 1,000 ppm as methane measured at a distance of one centimeter from the potential source in accordance with EPA Method 21. Excess liquid drainage shall be defined as exceeding 10 milliliters per average of 3 consecutive disconnects. [District Rule 4624 and Kern County Rule 413] Federally Enforceable Through Title V Permit

10. During the loading of organic liquids, the operator shall perform and record the results of monthly leak inspections of the loading and vapor collection equipment at each loading arm. Leak inspections shall be conducted using sight, sound, smell and instrument methods to detect leaks. Instrument detection shall be conducted using EPA Method 21 and shall be measured at a distance of one centimeter from the potential source. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: A) Zero air (less than 10 ppm of hydrocarbon in air); and B) Mixture of methane or n-hexane and air at a concentration of about, but less than, 1,000 ppm methane or n-hexane. [District Rules 2520 and 4624] Federally Enforceable Through Title V Permit

11. Corrective steps shall be taken at any time the operator observes a leak or excess drainage at disconnect. In addition, the operator shall perform and record the results of monthly drainage inspections at disconnect for each loading arm during any month that the loading arm(s) are in operation. If no excess drainage conditions are found during five consecutive monthly inspections, the drainage inspection frequency may be changed from monthly to quarterly. However, if one or more excess drainage condition is found during a quarterly inspection, the inspection frequency shall return to monthly. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

12. All equipment that are found leaking shall be repaired or replaced within 72 hours. If the leaking component cannot be repaired or replaced within 72 hours, the component shall be taken out of service until such time the component is repaired or replaced. The repaired or replacement equipment shall be reinspected the first time the equipment is in operation after the repair or replacement. [District Rule 4624] Federally Enforceable Through Title V Permit

13. Drainage inspections shall be completed before 10:00 AM the day of inspection. Compliance shall be demonstrated by collecting all drainage at disconnect in a spouted container. The drainage shall be transferred to a graduated cylinder and the volume determined within one (1) minute of collection. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

14. All inspections shall be documented with an inspection log. Inspection records shall include, at a minimum, 1) date of inspection, 2) location and description of any missing, loose, leaking, or damaged equipment and any malfunction requiring repair, 3) corrective steps taken to repair or replace the equipment, 4) test method and results for leak and drainage inspections, 5) location and description of any equipment to be inspected upon commencing operation after repair or replacement and 6) inspector name and signature. [District Rule 4624, 6.1.3] Federally Enforceable Through Title V Permit

15. VOC emissions from the vapor collection and control system shall be determined using 40CFR 60.503. "Test Methods and Procedures" and EPA Reference Methods 2A, 2B, 25A and 25B and ARB Method 432, or ARB Method 2-4. [District Rule 4624, 6.2.2, and Kern County Rule 413] Federally Enforceable Through Title V Permit

16. Loading of a delivery vessel shall discontinue if its pressure relief valve opens. Corrective action shall be taken should this condition occur. [District Rule 2520, 9.1] Federally Enforceable Through Title V Permit

17. Operation shall include one uncontrolled loadout line for the handling of naphtha and mineral spirits with true vapor pressure's (TVP's) less than 1.5 psia, and one transfer line equipped with vapor recovery for the handling of light reformate and other organic liquids with TVP's greater than 1.5 psia. [District NSR Rule] Federally Enforceable Through Title V Permit

18. No trucks with a preceding load of petroleum liquid with a greater true vapor pressure than 0.86 psia at 90 deg. F. shall be loaded from loadout line not attached to vapor recovery system. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

19. Only petroleum liquid with a true vapor pressure less than 0.86 psia at 90 deg. F. shall be loaded from loadout hose not attached to vapor recovery system. [District NSR Rule] Federally Enforceable Through Title V Permit
20. All liquid handling equipment and components shall be maintained leak-free (as defined in Rule 4624). [District NSR Rule and Rule 4624] Federally Enforceable Through Title V Permit
21. Hose couplers shall be dry break type only. [District NSR Rule] Federally Enforceable Through Title V Permit
22. VOC emissions from uncontrolled naphtha/mineral spirits loadout line shall not exceed 29.28 lb per day. [District NSR Rule] Federally Enforceable Through Title V Permit
23. Organic liquids with true vapor pressures (TVP) greater than 1.5 psi shall be transferred exclusively through the transfer line equipped with vapor recovery. [District NSR Rule and Rule 4624] Federally Enforceable Through Title V Permit
24. The loadout of organic liquids with true vapor pressures (TVP) greater than 1.5 psi from rack shall not exceed 28,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
25. Permittee shall maintain accurate records of liquid type, throughput, temperature, and Reid Vapor Pressure (or TVP) on site for a period of at least five years and shall be made readily available for District inspection upon request. [District NSR Rule and Rule 1070] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-48-4 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
5,400 BBL ORGANIC LIQUID STORAGE TANK (#5014) WITH A SHARED VAPOR RECOVERY SYSTEM (LISTED ON PERMIT UNIT S-37-8)

PERMIT UNIT REQUIREMENTS

1. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
2. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
3. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
4. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
5. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
6. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
7. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
8. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
10. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
13. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
14. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart K. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
15. This unit commenced construction, modification, or reconstruction before May 19, 1978. Therefore, the requirements of 40 CFR 60 Subpart Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-49-4 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
5,400 BBL ORGANIC LIQUID STORAGE TANK (#5015) WITH A SHARED VAPOR RECOVERY SYSTEM (LISTED ON PERMIT UNIT S-37-8)

PERMIT UNIT REQUIREMENTS

1. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
2. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
3. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
4. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
5. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
6. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
7. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
8. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
10. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
13. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
14. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart K. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
15. This unit commenced construction, modification, or reconstruction before May 19, 1978. Therefore, the requirements of 40 CFR 60 Subpart Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-50-5 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
1,000 BBL ORGANIC LIQUID STORAGE TANK (#1100) WITH A SHARED VAPOR RECOVERY SYSTEM (LISTED ON PERMIT UNIT S-37-8)

PERMIT UNIT REQUIREMENTS

1. This tank shall only vent to the vapor recovery system listed on S-37-8. [District Rule 4623, 5.1] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
3. VOC emissions from fugitive emissions sources in this permit unit shall not exceed 0.6 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Operator shall maintain records to demonstrate compliance with fugitive VOC emissions limit of this permit annually. Compliance shall be demonstrated by calculation, using the correlation equations, zero default and 10,000 ppmv pegged factors set forth in the CAPCOA California implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-3a, February 1999, and the average emission concentrations of total organic compounds measured for each component during all inspections conducted during the prior 365 day period. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
7. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
8. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
9. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
14. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
15. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
16. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
17. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
18. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart Ka. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
19. This unit commenced construction, modification, or reconstruction between May 18, 1978 and July 23, 1984. Therefore, the requirements of 40 CFR 60 Subpart K and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-51-5 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
20,000 BBL FIXED-ROOF ORGANIC LIQUID STORAGE TANK (#20001) WITH A SHARED VAPOR RECOVERY SYSTEM (LISTED ON PERMIT UNIT S-37-8)

PERMIT UNIT REQUIREMENTS

1. This tank shall only vent to the vapor recovery system listed on S-37-8. [District Rule 4623, 5.1] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
3. VOC emissions from fugitive emissions sources in this permit unit shall not exceed 4.3 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Operator shall maintain records to demonstrate compliance with fugitive VOC emissions limit of this permit annually. Compliance shall be demonstrated by calculation, using the correlation equations, zero default and 10,000 ppmv pegged factors set forth in the CAPCOA California implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-3a, February 1999, and the average emission concentrations of total organic compounds measured for each component during all inspections conducted during the prior 365 day period. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
7. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
8. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
9. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
14. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
15. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
16. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
17. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
18. This unit commenced construction, modification, or reconstruction before June 11, 1973. Therefore, the requirements of 40 CFR 60 Subparts K, Ka, and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-52-6 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
10,000 BBL FIXED-ROOF ORGANIC LIQUID STORAGE TANK (#10000) WITH A SHARED VAPOR RECOVERY SYSTEM (LISTED ON PERMIT UNIT S-37-8)

PERMIT UNIT REQUIREMENTS

1. This tank shall only vent to the vapor recovery system listed on S-37-8. [District Rule 4623, 5.1] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
3. VOC emissions from fugitive emissions sources in this permit unit shall not exceed 3.0 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Operator shall maintain records to demonstrate compliance with fugitive VOC emissions limit of this permit annually. Compliance shall be demonstrated by calculation, using the correlation equations, zero default and 10,000 ppmv pegged factors set forth in the CAPCOA California implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-3a, February 1999, and the average emission concentrations of total organic compounds measured for each component during all inspections conducted during the prior 365 day period. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
7. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
8. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
9. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
14. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
15. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
16. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
17. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
18. This unit commenced construction, modification, or reconstruction before June 11, 1973. Therefore, the requirements of 40 CFR 60 Subparts K, Ka, and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-53-5 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
10,000 BBL FIXED-ROOF ORGANIC LIQUID STORAGE TANK (#10002) WITH A SHARED VAPOR RECOVERY SYSTEM (LISTED ON PERMIT UNIT S-37-8)

PERMIT UNIT REQUIREMENTS

1. This tank shall only vent to the vapor recovery system listed on S-37-8. [District Rule 4623, 5.1] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
3. VOC emissions from fugitive emissions sources in this permit unit shall not exceed 1.9 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Operator shall maintain records to demonstrate compliance with fugitive VOC emissions limit of this permit annually. Compliance shall be demonstrated by calculation, using the correlation equations, zero default and 10,000 ppmv pegged factors set forth in the CAPCOA California implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-3a, February 1999, and the average emission concentrations of total organic compounds measured for each component during all inspections conducted during the prior 365 day period. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
7. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
8. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
9. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
14. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
15. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
16. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
17. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
18. This unit commenced construction, modification, or reconstruction before June 11, 1973. Therefore, the requirements of 40 CFR 60 Subparts K, Ka, and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-56-4 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
500 BBL FIXED ROOF ORGANIC LIQUID STORAGE TANK (#505) WITH A SHARED VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT S-37-8

PERMIT UNIT REQUIREMENTS

1. This tank shall only vent to the vapor recovery system listed on S-37-8. [District Rule 4623, 5.1] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
3. VOC emissions from fugitive emissions sources in this permit unit shall not exceed 1.0 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Operator shall maintain records to demonstrate compliance with fugitive VOC emissions limit of this permit annually. Compliance shall be demonstrated by calculation, using the correlation equations, zero default and 10,000 ppmv pegged factors set forth in the CAPCOA California implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-3a, February 1999, and the average emission concentrations of total organic compounds measured for each component during all inspections conducted during the prior 365 day period. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
7. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
8. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
9. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
14. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
15. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
16. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
17. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-57-7 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
210,000 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK #5017 WITH SHARED VAPOR RECOVERY SYSTEM LISTED IN S-37-8 AND 29 HP CIRCULATION PUMP WITH CLAY FILTER

PERMIT UNIT REQUIREMENTS

1. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained ina leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in District Rule 4623. [District NSR Rule and District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
2. Filter drainings, back wash, and media shall be handled and disposed of in a manner preventing the emission of VOC to the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Liquids circulating through clay filter shall return to the tank from which it was withdrawn. [District NSR Rule] Federally Enforceable Through Title V Permit
4. VOC emissions from fugitive emissions sources in this permit unit shall not exceed 5.3 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Operator shall maintain records to demonstrate compliance with fugitive VOC emissions limit of this permit annually. Compliance shall be demonstrated by calculation, using the correlation equations, zero default and 10,000 ppmv pegged factors set forth in the CAPCOA California implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-3a, February 1999, and the average emission concentrations of total organic compounds measured for each component during all inspections conducted during the prior 365 day period. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
8. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
9. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
14. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
15. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
16. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
17. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
18. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
19. This unit commenced construction, modification, or reconstruction between May 18, 1978 and July 23, 1984. Therefore, the requirements of 40 CFR 60 Subpart K and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
20. Permittee shall comply with all applicable requirements of 40 CFR 60, Subpart Ka. [District Rule 4001]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-58-3 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
29 HP JP-4 TRUCK LOADING OPERATION INCLUDING TWO EMCO WHEATON API STYLE DRYBREAK BOTTOM LOADING COUPLERS AND HOSES, TWO OPW MODEL 633 VAPOR RECOVERY COUPLERS AND VAPOR RETURN HOSES, 29 HP UNLOADING PUMP, FILTER, AND METER AND CHECK VALVES (RACK H)

PERMIT UNIT REQUIREMENTS

1. The loading rack shall be equipped with bottom loading and a vapor collection and control system such that VOC emissions do not exceed 0.08 pounds per 1000 gallons of organic liquid loaded. [District Rule 4624 and County Rule 413 (Kern)] Federally Enforceable Through Title V Permit
2. The vapor collection and control system shall operate such that the pressure in the delivery tank being loaded does not exceed 18 inches water column pressure and six (6) inches water column vacuum. [District Rule 4624] Federally Enforceable Through Title V Permit
3. All delivery tanks which previously contained organic liquids with a TVP 1.5 psia or greater at the storage container's maximum organic liquid storage temperature shall be filled only at Class 1 loading facilities using bottom loading equipment with a vapor collection and control system operating such that VOC emissions do not exceed 0.08 lb/1000 gallons loaded; or Class 2 loading facilities equipped with a system to control at least 95% of VOC displaced. [District Rule 4624] Federally Enforceable Through Title V Permit
4. Construction, reconstruction (as defined in District Rule 4001) or expansion of any top loading facility shall not be allowed. [District Rule 4624] Federally Enforceable Through Title V Permit
5. Loading and vapor collection and control equipment shall be designed, installed, maintained and operated such that there are no leaks or excess organic liquid drainage at disconnections. A leak shall be defined as the dripping of organic compounds at a rate of more than three drops per minute or the detection of organic compounds, in excess of 1,000 ppmv as methane measured at a distance of one centimeter from the potential source in accordance with EPA Method 21. Excess liquid drainage shall be defined as exceeding 10 mls per average of 3 consecutive disconnects. [District Rule 4624, 5.4, Kern County Rule 413] Federally Enforceable Through Title V Permit
6. During the loading of organic liquids, the operator shall perform and record the results of monthly leak inspections of the loading and vapor collection equipment at each loading arm. Leak inspections shall be conducted using sight, sound, smell and instrument methods to detect leaks. Instrument detection shall be conducted using EPA Method 21 and shall be measured at a distance of one centimeter from the potential source. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: A) Zero air (less than 10 ppm of hydrocarbon in air); and B) Mixture of methane or n-hexane and air at a concentration of about, but less than 1,000 ppm methane or n-hexane. [District Rule 2520] Federally Enforceable Through Title V Permit
7. All equipment that are found leaking shall be repaired or replaced within 72 hours. If the leaking component cannot be repaired or replaced within 72 hours, the component shall be taken out of service until such time the component is repaired or replaced. The repaired or replacement equipment shall be reinspected the first time the equipment is in operation after the repair or replacement. [District Rule 4624]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

8. Corrective steps shall be taken at any time the operator observes excess drainage at disconnect. In addition, the operator shall perform and record the results of monthly drainage inspections at disconnect for each loading arm. If no excess drainage conditions are found during five consecutive monthly inspections, the drainage inspection frequency may be changed from monthly to quarterly. However, if one or more excess drainage condition is found during a quarterly inspection, the inspection frequency shall return to monthly. [District Rule 2520, 9.1, 9.3.2, 9.4.2] Federally Enforceable Through Title V Permit
9. Drainage inspections shall be completed before 10:00 AM the day of inspection. Compliance shall be demonstrated by collecting all drainage at disconnect in a spouted container. The drainage shall be transferred to a graduated cylinder and the volume determined within one (1) minute of collection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. All inspections shall be documented with an inspection log. Inspection records shall include, at a minimum, 1) date of inspection, 2) location and description of any missing, loose, leaking, or damaged equipment and any malfunction requiring repair, 3) corrective steps taken to repair or replace the equipment, 4) test method and results for leak and drainage inspections, 5) location and description of any equipment to be inspected upon commencing operation after repair or replacement and 6) inspector name and signature. [District Rule 4624, 6.1.3]
11. VOC emissions from the vapor collection and control system shall be determined using 40CFR 60.503. "Test Methods and Procedures" and EPA Reference Methods 2A, 2B, 25A and 25B and ARB Method 432, or ARB Method 2-4. [District Rule 4624 and Kern County Rule 413] Federally Enforceable Through Title V Permit
12. Loading of a delivery vessel shall discontinue if its pressure relief valve opens. Corrective action shall be taken should this condition occur. [District Rule 2520] Federally Enforceable Through Title V Permit
13. Vapor return hose shall only be connected to refinery vapor control system and shall be utilized during the loading of each truck. [District NSR Rule] Federally Enforceable Through Title V Permit
14. Hose couplers shall be drybreak type only. [District NSR Rule] Federally Enforceable Through Title V Permit
15. Filter drainings, back wash, and media shall be handled and disposed of in a manner preventing the emission of VOC to the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
16. VOC emission rate shall not exceed 0.63 lb/hr. [District NSR Rule] Federally Enforceable Through Title V Permit
17. Equipment under vapor control shall not vent to atmosphere. [District Rule 4624] Federally Enforceable Through Title V Permit
18. The operator shall keep records of daily liquid throughput and the results of any required leak inspections. The record shall be made available to the APCO, ARB, or EPA during normal business hours. [District Rule 4624]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-59-5 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
20,000 BBL FIXED-ROOF ORGANIC LIQUID STORAGE TANK (#20000) WITH A SHARED VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT S-37-8

PERMIT UNIT REQUIREMENTS

1. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in gas-tight condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in District Rule 4623. [District NSR Rule and District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
2. VOC emissions from fugitive emissions sources in this permit unit shall not exceed 0.9 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Operator shall maintain records to demonstrate compliance with fugitive VOC emissions limit of this permit annually. Compliance shall be demonstrated by calculation, using the correlation equations, zero default and 10,000 ppmv pegged factors set forth in the CAPCOA California implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-3a, February 1999, and the average emission concentrations of total organic compounds measured for each component during all inspections conducted during the prior 365 day period. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
6. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
7. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
8. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
10. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
14. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
15. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
16. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
17. This unit commenced construction, modification, or reconstruction before June 11, 1973. Therefore, the requirements of 40 CFR 60 Subparts K, Ka, and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-61-7 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
800 BBL FIXED ROOF ORGANIC LIQUID STORAGE TANK (#800) WITH A SHARED VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT S-37-8

PERMIT UNIT REQUIREMENTS

1. Tank shall be vented to vapor control system listed in S-37-8 when storing or introducing liquids into the tank with an Reid Vapor Pressure (RVP) greater than 0.4 psia. When storing or introducing liquids into the tank with an RVP less than or equal to 0.4 psia, use of the vapor control system is not required, except for a period of at least one hour after switching from liquids with an RVP greater than 0.4 psia. [District NSR Rule] Federally Enforceable Through Title V Permit
2. When storing liquids with an RVP less than or equal to 0.4 psia, tank throughput shall not exceed an average of 200 bbl/day over the number of days the liquid is stored. When storing liquids with an RVP greater than 0.4 psia and less than or equal to 9.0 psia, tank throughput shall not exceed an average of 1,315 bbl/day over the number of days the liquid is stored. When storing liquids with an RVP greater than 9.0 psia and less than or equal to12.0 psia, tank throughput shall not exceed an average of 876 bbl/day over the number of days the liquid is stored. [District NSR Rule] Federally Enforceable Through Title V Permit
3. VOC emissions from fugitive emissions sources in this permit unit shall not exceed 1.3 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Operator shall maintain records to demonstrate compliance with fugitive VOC emissions limit of this permit annually. Compliance shall be demonstrated by calculation, using the correlation equations, zero default and 10,000 ppmv pegged factors set forth in the CAPCOA California implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-3a, February 1999, and the average emission concentrations of total organic compounds measured for each component during all inspections conducted during the prior 365 day period. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Upon reconnection to the vapor recovery system, permittee shall inspect all piping, fittings, and valves associated with this tank using a portable hydrocarbon analyzer. If any of the components are found to be leaking, the operator shall minimize and eliminate the leak as described in Table 3 of District Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
7. Tank shall be equipped with an operational stored liquid temperature indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Except as otherwise provided on this permit, when connected to the vapor control system, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. Except as otherwise provided in this permit, when connected to the vapor control system, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit

10. Except as otherwise provided in this permit, when connected to the vapor control system, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit

11. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

12. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

13. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

14. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

15. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

16. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

17. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

18. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit

19. Permittee shall conduct API gravity and true vapor pressure (TVP) testing of the organic liquid, including liquids with a TVP less than 0.5 psia, stored in this tank or representative tank as provided in Section 6.2.1.1 of District Rule 4623, at least once every 24 months during summer (July - September) during any 24 month period in which the tank is operated without being connected to the vapor control system, and/or whenever there is a change in the source or type of organic liquid stored in the tank and the tank is being operated without utilizing the vapor control system. [District NSR Rule and District Rule 4623, 4.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

20. Except for crude oil with a API gravity 26 degrees or less, the TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures from the oil and gas section of "ARB Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588," dated August 1989. As an alternative to using ASTM D 323-94, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and US EPA. In lieu of performing a TVP test, an operator may use Appendix A of District Rule 4623 to determine the TVP of the stored organic liquid provided the storage temperature listed in Appendix A is not exceeded at any time. [District Rule 4623, 6.4.2 and 6.4.3] Federally Enforceable Through Title V Permit
21. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph," as approved by ARB and US EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
22. Permittee shall maintain accurate records of true vapor pressure, temperature of petroleum liquids in the tank, types of liquid stored, and daily liquid records whenever tank is operated without being connected to the vapor control system. Such records shall be made readily available for District inspection upon request for a period of five (5) years. [District Rules 1070, 4623, District NSR Rule] Federally Enforceable Through Title V Permit
23. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-65-5 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
250 BBL FIXED-ROOF ORGANIC LIQUID STORAGE TANK (#250, DEHY NORTH) WITH A SHARED VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT S-37-8

PERMIT UNIT REQUIREMENTS

1. VOC emissions from fugitive emissions sources in this permit unit shall not exceed 1.4 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Operator shall maintain records to demonstrate compliance with fugitive VOC emissions limit of this permit annually. Compliance shall be demonstrated by calculation, using the correlation equations, zero default and 10,000 ppmv pegged factors set forth in the CAPCOA California implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-3a, February 1999, and the average emission concentrations of total organic compounds measured for each component during all inspections conducted during the prior 365 day period. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
5. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
6. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
7. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
8. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
9. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
14. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
15. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
16. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-66-5 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
250 BBL FIXED-ROOF ORGANIC LIQUID STORAGE TANK (#251, DEHY SOUTH) WITH A SHARED VAPOR RECOVERY SYSTEM (LISTED ON PERMIT UNIT S-37-8)

PERMIT UNIT REQUIREMENTS

1. This tank shall only vent to the vapor recovery system listed on S-37-8. [District Rule 4623, 5.1] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
3. VOC emissions from fugitive emissions sources in this permit unit shall not exceed 4.0 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Operator shall maintain records to demonstrate compliance with fugitive VOC emissions limit of this permit annually. Compliance shall be demonstrated by calculation, using the correlation equations, zero default and 10,000 ppmv pegged factors set forth in the CAPCOA California implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-3a, February 1999, and the average emission concentrations of total organic compounds measured for each component during all inspections conducted during the prior 365 day period. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
7. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
8. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
9. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
14. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
15. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
16. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
17. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-67-4 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
8,400 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK (#200) WITH VAREC P/R VALVE, 1 HP PUMP, AND TRUCK UNLOADING FILL LINE WITH DRY-BREAK COUPLER (RACK T)

PERMIT UNIT REQUIREMENTS

1. Average daily tank liquid throughput (on annual basis) shall not exceed 2,500 gallons per day. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Truck unloading shall be performed in a manner preventing spillage of petroleum liquid. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Vapor balance hose shall be connected during truck unloading. [District NSR Rule] Federally Enforceable Through Title V Permit
4. True vapor pressure of stored material shall not exceed 2.7 psi. [District NSR Rule] Federally Enforceable Through Title V Permit
5. The pressure-vacuum relief valve shall be set to within ten (10) percent of the maximum allowable working pressure of the tank. The pressure-vacuum relief valve shall be permanently labeled with the operating pressure settings. The pressure-vacuum relief valve shall be properly installed and maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak-free condition except when the operating pressure exceeds the valve set pressure. [District Rule 4623, 5.2]
6. "Leak-free" shall mean a condition without a gas leak or a liquid leak. A gas leak is a reading in excess of 10,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated with methane in accordance with US EPA Method 21. A liquid leak is the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rule 4623]
7. The operator shall conduct TVP testing on the liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in each tank. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
8. Except for crude oil with a API gravity 26 degrees or less, the TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures from the oil and gas section of "ARB Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588," dated August 1989. As an alternative to using ASTM D 323-94, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and US EPA. In lieu of performing a TVP test, an operator may use Appendix A of District Rule 4623 to determine the TVP of the stored organic liquid provided the storage temperature listed in Appendix A is not exceeded at any time. [District Rule 4623, 6.4.2 and 6.4.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph," as approved by ARB and US EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
10. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287-92 (2000) e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)." Sampling for API gravity shall be performed in accordance with ASTM Method D 4057-95 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit
11. The permittee shall keep accurate records of true vapor pressure, storage temperature and types of liquids stored, for a period of five years, and shall make such records available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-71-6 **EXPIRATION DATE:** 08/31/2022

EQUIPMENT DESCRIPTION:
ORGANIC LIQUID TRUCK LOADING/UNLOADING OPERATION INCLUDING TRUCK UNLOADING CONNECTION, TRUCK LOADING HOSE WITH DRY BREAK COUPLER, VAPOR RECOVERY HOSE WITH DRY BREAK CONNECTOR AND PIPING TO PERMITTED TANKS S-37-50 AND S-37-56 (RACK E)

PERMIT UNIT REQUIREMENTS

1. The transfer of gasoline from any delivery vessel to any stationary storage container with 250 gallon capacity or more shall not be allowed unless the container is equipped with a permanent submerged fill pipe and an ARB certified Phase I vapor recovery system, which is maintained and operated according to the manufacturers specifications. [District Rule 4621, 5.1.1] Federally Enforceable Through Title V Permit
2. No gasoline shall be placed, stored, or held in any above-ground tank of 250 gallon capacity or more unless it is equipped with a pressure-vacuum valve set to within 10% of the maximum allowable working pressure of the tank. [District Rule 4621, 5.1.2] Federally Enforceable Through Title V Permit
3. Any delivery vessel into which gasoline vapors have been transferred shall be filled only at a loading facility that is equipped with a certified system that prevents at least 95% by weight of the gasoline vapors displaced from entering the atmosphere. The loading facility vapor recovery system shall not create a back pressure in excess of 18 inches water column. [District Rules 4621, 5.2.2, 5.2.5] Federally Enforceable Through Title V Permit
4. No gasoline delivery vessel shall be used or operated unless it is vapor tight. No gasoline delivery vessel shall be operated or loaded unless valid State of California decals are displayed on the cargo tank, attesting to the vapor integrity of the tank as verified by annual performance of CARB required Certification and Test Procedures for Vapor Recovery Systems for Cargo Tanks. [District Rule 4621, 5.2.1 & 5.2.2, Health & Safety Code, section 41962, and CCR, Title 17 section 94004] Federally Enforceable Through Title V Permit
5. The test method to determine vapor tightness of delivery vessels owned or operated by this facility shall be EPA Method 27. [District Rule 4621, 6.2.3] Federally Enforceable Through Title V Permit
6. Loading of a delivery vessel shall discontinue if its pressure relief valve opens. Corrective action shall be taken should this condition occur. [District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
7. Only organic liquids shall be received or loaded. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Equipment shall be operated to prevent spillage. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Trucks shall be pumped dry before hose disconnect. [District NSR Rule] Federally Enforceable Through Title V Permit
10. Vapor return hose shall be connected to refinery vapor recovery system whenever organic liquid is loaded. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Organic liquids loaded shall not exceed 3,000 gallons in any one day. [District NSR Rule and District Rule 4624] Federally Enforceable Through Title V Permit
12. Organic liquids shall be unloaded to tank S-37-56. [District NSR Rule] Federally Enforceable Through Title V Permit
13. All open ended lines shall be capped or equipped with two closed valves when not in use. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

14. VOC emission rate shall not exceed 0.08 lb/1,000 gallons loaded. [District Rule 4624] Federally Enforceable Through Title V Permit
15. VOC emission rate shall not exceed 0.61 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
16. Operator shall keep a daily record of the gallons of organic liquid transferred on any day organic liquid is transferred. Records shall be retained for a minimum of five years and shall be made readily available to the APCO, ARB, or EPA during normal business hours and submitted upon request to the APCO, ARB, or EPA. [District Rule 4624] Federally Enforceable Through Title V Permit
17. The rack is subject to Rule 4001 (NSPS, Subpart GGGa) requirements identified in the facility-wide permit. [District Rule 4001] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-77-17 **EXPIRATION DATE:** 08/31/2022

SECTION: NW25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
36 MMBTU/HR DIESEL HYDROTREATER UNIT INCLUDING A 18 MMBTU/HR CHARGE HEATER WITH ZEECO INCORPORATED MODEL GLSF-11 FREE JET BURNERS, 18 MMBTU/HR STRIPPER HEATER WITH A CALLIDUS LE-CSG LOW NOX BURNER, HYDROGEN REACTOR VESSEL, HYDROGEN RECYCLE GAS SCRUBBER, AND ASSOCIATED PIPING AND COMPONENTS

PERMIT UNIT REQUIREMENTS

1. Spent caustics and waste liquids shall be disposed of in a manner preventing the creation of odors. [District Rule 4102]
2. Operator shall not burn in any fuel gas combustion device any fuel gas that contains hydrogen sulfide (H2S) in excess of 100 ppmv@ 0% O2. [District Rules 2201 ,2520, 9.4.2 and 4301, 5.2.1, & 40 CFR Part 60, Subpart J, 60.104(a)(1)] Federally Enforceable Through Title V Permit
3. The combustion in the fuel gas combustion devices of gases released as a result of start-up, shutdown, upset, malfunction, or the result of relief valve leakage is exempt from the H2S or sulfur content requirement. [District Rules 2201, 4001, Subpart J, 60.104(a)(1)] Federally Enforceable Through Title V Permit
4. All refinery fuel gas combusted in the heaters shall be monitored for H2S content by a continuous emissions monitoring (CEM) system. CEM shall be installed, calibrated, operated, and reported according to EPA guidelines as specified under 40 CFR 60, Subpart J, Specification 7, and general requirements. CEM results shall be calculated on a rolling three (3) hour basis. [District Rules 2201, 4001, Subpart J, 60.105(a)(4) and 60.105(a)(4)(iii)] Federally Enforceable Through Title V Permit
5. Operator shall report all rolling 3-hour periods during which the average concentration of H2S as measured by the H2S continuous monitoring system exceeds 100 ppmv@ 0% O2. [District Rules 2201, 4001, Subpart J, 60.105(e)(3)(ii)] Federally Enforceable Through Title V Permit
6. PM10 emission rates from each heater shall not exceed 0.0076 lb/MMBtu. [District Rules 2201, 2520, 4201, 4301] Federally Enforceable Through Title V Permit
7. Emission rates from the process heater, except during startup and shutdown, shall not exceed any of the following: NOx (as NO2): 25 ppmv @ 3% O2, CO: 50 ppmv @ 3% O2 or VOC: 0.0055 lb/MMBtu. [District Rules 2201, 2520, 4301, 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
8. Emission rates from the stripper heater, except during startup and shutdown, shall not exceed any of the following: NOx (as NO2): 25 ppmv @ 3% O2, CO: 150 ppmv @ 3% O2 or VOC: 0.0055 lb/MMBtu. [District Rules 2201, 2520, 4301, 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
9. Daily combustion emissions from the process heater shall not exceed any of the following: NOx (as NO2): 13.0 lb/day, VOC: 2.4 lb/day, or CO: 16.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Daily combustion emissions from the stripper heater shall not exceed any of the following: NOx (as NO2): 13.0 lb/day, VOC: 2.4 lb/day, or CO: 47.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. The duration of each startup and shutdown period for reactor process heater H1 shall not exceed 12.0 hours and 9.0 hours each, respectively. The duration of each startup and shutdown period for reboiler heater H2 heater shall not exceed 12.0 hours and 5.0 hours, respectively. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

12. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit

13. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

14. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

15. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

16. Heater exhaust stacks shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 1081] Federally Enforceable Through Title V Permit

17. Source testing to demonstrate compliance with NOx and CO emission limits shall be conducted not less than once every 12 months, except as provided below. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

18. Source testing to demonstrate compliance with NOx and CO emission limits shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

19. If permittee fails any compliance demonstration for NOx or CO emission limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

20. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit

21. Compliance source testing shall be conducted under conditions representative of normal operation. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

23. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

24. The following test methods shall be used, unless otherwise approved by the APCO and EPA: NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, and stack gas oxygen - EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

25. All required source testing shall conform to the compliance testing procedures described in District Rule 1081. [District Rule 1081, and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit

26. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results used to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

27. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit

28. Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit

29. Nitrogen oxide (NOx) emission concentrations in ppmv shall be referenced at dry stack gas conditions, and shall be calculated to 3.00 percent by volume stack gas oxygen and averaged over 60 minutes, and lb/MMBtu rates shall be calculated as lb NO2/MMBtu of heat input (hhv). [District Rule 4305, 5.0, 8.2 and/or 4351, 8.1] Federally Enforceable Through Title V Permit

30. Draeger tubes shall be used as an alternative method for measuring fuel gas H2S during scheduled maintenance or unscheduled interruptions of CEMs. Draeger tube use shall be limited to no more than 96 continuous hours and fuel gas H2S shall be checked a minimum of every two hours during scheduled maintenance or unscheduled interruptions of CEMs. Alternate method of measuring fuel gas H2S shall occur no more than 192 hours in any calendar year. [40CFR60.13(i)] Federally Enforceable Through Title V Permit

31. Operator shall maintain all records of the reason for alternative monitoring and required fuel gas H2S monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

32. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320]

33. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320]

34. VOC emission rate from fugitive components associated with this emissions unit shall not exceed 44.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

35. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. Permit holder shall update such records when new components are approved and installed. Components shall be screened and leak rate shall be measured in accordance with the frequency of inspection specified in Rule 4455 as applicable. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

36. Permit unit shall comply with applicable District Rule 4001 (NSPS, Subpart GGG) requirements on facility wide permit S-37-0. [District Rule 4001] Federally Enforceable Through Title V Permit

37. Permittee shall comply with all applicable testing, recordkeeping, and reporting requirements specified in Rule 4001 - New Source Performance Standards, including but not limited to Subparts A and J. [District Rule 4001] Federally Enforceable Through Title V Permit

38. Operators shall not depressurize any vessel containing VOCs unless the process unit turnaround is accomplished by employing one of the following operating procedures: The organic vapors shall either be recovered, added to the refinery fuel gas system and combusted; or controlled and piped to an appropriate firebox or incinerated for combustion; or flared, until the pressure within the process vessel is as close to atmospheric pressure as is possible. All process vessels shall be depressurized into the control facilities to less than 1020 mm Hg (5 psig) before venting/opening to atmosphere. All organic compounds which emerge from a refinery process vessel during the purging of said vessel and which otherwise would be emitted to the atmosphere shall be either directed to a flare or incinerator or shall be used for fuel until such disposition of emissions is not technically feasible or is less safe than atmospheric venting. [District Rule 4454, 4.0] Federally Enforceable Through Title V Permit

39. Heaters shall be fired only on purchased commercial natural gas, refinery fuel gas, or any combination thereof. [District Rule 2201, 4001] Federally Enforceable Through Title V Permit

40. This unit is subject to Rule 4455 Leak Detection and Repair Conditions on the facility wide permit S-37-0. [District Rule 4455] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-78-4 **EXPIRATION DATE:** 08/31/2022

SECTION: NW25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
SULFUR SCRUBBING SYSTEM INCLUDING MEA/DEA CONTACTOR VESSEL (ABSORBER), GAS LIQUID SEPARATOR, AMINE REGENERATION VESSEL, LIQUID SOLID SEPARATOR, SULFUR FILTER, AND ASSOCIATED AIR BLOWERS, PUMPS AND PIPING

PERMIT UNIT REQUIREMENTS

1. Volatile organic compounds (VOC) emissions from pump seals for the sulfur recovery unit shall not exceed 500 ppmv measured 1 cm or less from the source of the emission. [District NSR Rule] Federally Enforceable Through Title V Permit
2. VOC emissions from valves, pressure relief valves, flanges and threaded connections for the sulfur recovery unit shall not exceed 100 ppmv measured 1 cm or less from the source of the emission. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Spent caustics and waste liquids shall be disposed of in a manner preventing the creation of odors. [District Rule 4102]
4. The combustion in the fuel gas combustion devices of gases released as a result of start-up, shutdown, upset, malfunction, or the result of relief valve leakage is exempt from the H2S or sulfur content requirement. [District Rules 2201, 4001, Subpart J, 60.104(a)(1)] Federally Enforceable Through Title V Permit
5. Sulfur compound emissions calculated as sulfur dioxide (SO2) associated with the sulfur recovery unit shall not exceed 0.2% by volume averaged over 15 consecutive minutes. [District Rule 4801] Federally Enforceable Through Title V Permit
6. Testing for compliance with compressor, pump seal, valve, pressure relief valve, flange and threaded connection emission rates shall be conducted using EPA Test Method 21, 40 CFR, Part 60. [District Rule 2201] Federally Enforceable Through Title V Permit
7. An instrument for continuous monitoring and recording the concentration (on a dry basis) of H2S in fuel gas before being burned shall be installed, calibrated, maintained, and operated. [40 CFR 60.105(a)(4)] Federally Enforceable Through Title V Permit
8. The relative accuracy of the continuous H2S monitoring system must be no greater than 20 percent when the average reference method (RM) value is used to calculate RA or ten (10) percent when the applicable emission standard is used. [40 CFR 60.105(a)(4)(iii)] Federally Enforceable Through Title V Permit
9. Testing to determine H2S concentration in fuel gas shall be conducted using EPA Test Method 11, 15, 15A, or 16, 40 CFR 60, App. A. [40 CFR 60.105(a)(4)(iii)] Federally Enforceable Through Title V Permit
10. The calibration drift of the H2S monitoring system must not drift or deviate from the reference value of the calibration gas or reference source by more than five (5) percent of the established span value for six out of seven test days. [40 CFR 60.105(a)(4)(iii)] Federally Enforceable Through Title V Permit
11. The span value of the continuous H2S monitor is 425 mg/dscm [40 CFR 60.105(a)(4)(i)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. The owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F, at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rules 1080 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
13. Continuous emission monitoring records of H2S concentration in refinery process fuel gas shall be maintained for a period of at least five years and made readily available for District inspection upon request. [District NSR Rule, District Rule 2520, 9.3.2 and 9.4.2] Federally Enforceable Through Title V Permit
14. This unit is subject to Rule 4455 Leak Detection and Repair Conditions on the facility wide permit S-37-0. [District Rule 4455] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-79-4 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
14,700 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK (#335) CONNECTED TO VAPOR RECOVERY SYSTEM LISTED ON PERMIT S-37-8

PERMIT UNIT REQUIREMENTS

1. VOC emission rate from fugitive components associated with this unit shall not exceed 0.5 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Operator shall maintain records to demonstrate compliance with fugitive VOC emissions limit of this permit annually. Compliance shall be demonstrated by calculation, using the correlation equations, zero default and 10,000 ppmv pegged factors set forth in the CAPCOA California implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-3a, February 1999, and the average emission concentrations of total organic compounds measured for each component during all inspections conducted during the prior 365 day period. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
5. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
6. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
7. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
8. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
9. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
14. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
15. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
16. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-80-3 **EXPIRATION DATE:** 08/31/2022

EQUIPMENT DESCRIPTION:
471 BHP DETROIT MODEL 12V71T DIESEL FIRED IC ENGINE DRIVING AN EMERGENCY GENERATOR

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
2. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 17 CCR 93115 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
3. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rule 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
4. If the IC engine is not fired on CARB certified diesel fuel with a supplier certified sulfur content less than 0.0015% by weight, then the owner or operator shall determine the sulfur content of each delivery of diesel fuel being fired in the IC engine to demonstrate compliance with the 0.0015% sulfur by weight limit. The sulfur content shall be determined using ASTM Method D 2622 or other EPA or CARB approved method with prior written approval by the APCO. [District Rule 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
5. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
6. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
7. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit
8. This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702] Federally Enforceable Through Title V Permit
9. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [District Rule 4702, 17 CCR 93115 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
11. The permittee shall maintain monthly records of the type and source of fuel used including its sulfur content. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
12. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
13. On and after May 3, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ]
14. On and after May 3, 2013, the permittee must 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. [40 CFR 63 Subpart ZZZZ]
15. On and after May 3, 2013, the engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first [40 CFR 63 Subpart ZZZZ]
16. On and after May 3, 2013, the engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ]
17. On and after May 3, 2013, the engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ]
18. On and after May 3, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation [District Rule 1070 and 40 CFR 63 Subpart ZZZZ]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-81-3 **EXPIRATION DATE:** 08/31/2022

EQUIPMENT DESCRIPTION:
225 HP CUMMINS MODEL NT855F1 DIESEL FIRED IC ENGINE DRIVING AN EMERGENCY FIREWATER PUMP

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
2. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
3. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rule 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
4. If the IC engine is not fired on CARB certified diesel fuel with a supplier certified sulfur content less than 0.0015% by weight, then the owner or operator shall determine the sulfur content of each delivery of diesel fuel being fired in the IC engine to demonstrate compliance with the 0.0015% sulfur by weight limit. The sulfur content shall be determined using ASTM Method D 2622 or other EPA or CARB approved method with prior written approval by the APCO. [District NSR Rule and District Rule 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
5. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
6. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
7. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit
8. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. For testing purposes, the engine shall only be operated the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 - "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems", 1998 edition. Total hours of operation for all maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rule 4702, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. The permittee shall monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, and the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.). For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
10. The permittee shall maintain monthly records of the type and source of fuel used including its sulfur content. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
11. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
12. On and after May 3, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ]
13. On and after May 3, 2013, the permittee must 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. [40 CFR 63 Subpart ZZZZ]
14. On and after May 3, 2013, the engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first [40 CFR 63 Subpart ZZZZ]
15. On and after May 3, 2013, the engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ]
16. On and after May 3, 2013, the engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ]
17. On and after May 3, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation [District Rule 1070 and 40 CFR 63 Subpart ZZZZ]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-82-4 **EXPIRATION DATE:** 08/31/2022

EQUIPMENT DESCRIPTION:
60 BHP WAUKESHA MODEL 135 GZU-15861-G GAS-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN INSTRUMENT AIR COMPRESSOR

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101, 5.1] Federally Enforceable Through Title V Permit
2. The engine shall be equipped with a nonresettable elapsed operating time meter. The owner or operator shall utilize the required meters and shall maintain them in proper operating condition. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
3. This engine shall be operated only for the following purposes: (1) periodic maintenance, periodic readiness testing, or readiness testing during and after repair work; (2) unscheduled outages, or to supply power while maintenance is performed or repairs are made to the primary power supply. Operation of the engine for non-emergency purposes shall not exceed 100 hours per calendar year. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
4. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit
5. This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702] Federally Enforceable Through Title V Permit
6. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
7. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
8. Emission rates from this unit shall not exceed any of the following limits: NOx (as NO2) - 0.0165 lb/hp-hr; SOx (as SO2) - 0.0000156 lb/hp-hr; PM10 - 0.00014 lb/hp-hr; CO - 0.027 lb/hp-hr; or VOC (as methane) - 0.000215 lb/hp-hr. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Total sulfur content of natural gas combusted shall not exceed 0.75 grain/100 scf. [District NSR Rule, District Rule 4801, and Kern County Rule 407] Federally Enforceable Through Title V Permit
10. If the engine is fired on natural gas certified by the supplier to have a sulfur content of 0.75 grains per 100 dscf or less, then the permittee shall maintain on file copies of all natural gas bills and supplier certifications for a period of five years. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. If the engine is not fired on natural gas certified by the supplier to have a sulfur content of 0.75 grains per 100 dscf or less, then the sulfur content of the natural gas being fired in the engine shall be determined using ASTM method D 1072, D 4084, or D 3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. If the engine is not fired on natural gas certified by the supplier to have a sulfur content of 0.75 grains per 100 dscf or less, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
13. The permittee shall maintain annual records of hours of emergency and non-emergency operation. Records shall include the date; the number of hours of operation; the purpose of the operation (e.g., load testing, weekly testing, rolling blackout, general area power outage, etc.); and the type, quantity, and sulfur content of the fuel used. Such records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 2520 and 4702] Federally Enforceable Through Title V Permit
14. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
15. On and after October 19, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ]
16. On and after October 19, 2013, the permittee must 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. [40 CFR 63 Subpart ZZZZ]
17. On and after October 19, 2013, the engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first [40 CFR 63 Subpart ZZZZ]
18. On and after October 19, 2013, the engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ]
19. On and after October 19, 2013, the engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ]
20. On and after October 19, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation [District Rule 1070 and 40 CFR 63 Subpart ZZZZ]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-83-4 **EXPIRATION DATE:** 08/31/2022

EQUIPMENT DESCRIPTION:
150 BHP WAUKESHA MODEL 6 WAKB-10F GAS-FIRED EMERGENCY STANDBY IC ENGINE POWERING A UTILITY AIR COMPRESSOR

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101, 5.1] Federally Enforceable Through Title V Permit
2. The engine shall be equipped with a nonresettable elapsed operating time meter. The owner or operator shall utilize the required meters and shall maintain them in proper operating condition. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
3. This engine shall be operated only for the following purposes: (1) periodic maintenance, periodic readiness testing, or readiness testing during and after repair work; (2) unscheduled outages, or to supply power while maintenance is performed or repairs are made to the primary power supply. Operation of the engine for non-emergency purposes shall not exceed 100 hours per calendar year. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
4. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit
5. This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702] Federally Enforceable Through Title V Permit
6. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
7. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
8. Emission rates from this unit shall not exceed any of the following limits: NOx (as NO2) - 0.0165 lb/hp-hr; SOx (as SO2) - 0.0000156 lb/hp-hr; PM10 - 0.00014 lb/hp-hr; CO - 0.027 lb/hp-hr; or VOC (as methane) - 0.000215 lb/hp-hr. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Total sulfur content of natural gas combusted shall not exceed 0.75 grain/100 scf. [District NSR Rule, District Rule 4801, and Kern County Rule 407] Federally Enforceable Through Title V Permit
10. If the engine is fired on natural gas certified by the supplier to have a sulfur content of 0.75 grains per 100 dscf or less, then the permittee shall maintain on file copies of all natural gas bills and supplier certifications for a period of five years. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. If the engine is not fired on natural gas certified by the supplier to have a sulfur content of 0.75 grains per 100 dscf or less, then the sulfur content of the natural gas being fired in the engine shall be determined using ASTM method D 1072, D 4084, or D 3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. If the engine is not fired on natural gas certified by the supplier to have a sulfur content of 0.75 grains per 100 dscf or less, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
13. The permittee shall maintain annual records of hours of emergency and non-emergency operation. Records shall include the date; the number of hours of operation; the purpose of the operation (e.g., load testing, weekly testing, rolling blackout, general area power outage, etc.); and the type, quantity, and sulfur content of the fuel used. Such records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 2520 and 4702] Federally Enforceable Through Title V Permit
14. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
15. On and after October 19, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ]
16. On and after October 19, 2013, the permittee must 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. [40 CFR 63 Subpart ZZZZ]
17. On and after October 19, 2013, the engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first [40 CFR 63 Subpart ZZZZ]
18. On and after October 19, 2013, the engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ]
19. On and after October 19, 2013, the engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ]
20. On and after October 19, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation [District Rule 1070 and 40 CFR 63 Subpart ZZZZ]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-84-7 **EXPIRATION DATE:** 08/31/2022

SECTION: 05 **TOWNSHIP:** 31S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
165 BHP STATIONARY NATURAL GAS-FIRED INGERSOLL RAND, MODEL 6JVG (SERIAL #6AAJ226), I.C. ENGINE EQUIPPED WITH 3-WAY CATALYST SERVING THE NORTH HYDROGEN COMPRESSOR AT THE PLATFORMER UNIT (#S-37-4)

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
2. Kern Oil and Refining Company shall operate and maintain controls as recommended by the emission control system supplier. [District NSR Rule] Federally Enforceable Through Title V Permit
3. NOx emission concentrations shall not exceed 25 ppm by volume at 15% O2 or exhaust emission concentrations shall be reduced by 96%. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
4. VOC emissions concentrations shall not exceed 250 ppmv at 15% O2. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
5. CO emission concentrations shall not exceed 2000 ppm by volume at 15% O2. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
6. Emissions from the engine shall neither exceed SOx (as SO2) - 0.00002 lb/hp-hr, nor PM10 - 0.00014 lb/hp-hr. [District NSR Rule] Federally Enforceable Through Title V Permit
7. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. [In-stack O2 monitors may be allowed if approved by the APCO.] Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 2520, 9.3.2 & 9.4.2; 4701, 5.4; and 4702, 5.6 and 6.5] Federally Enforceable Through Title V Permit
8. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2; 4701, 5.4; and 4702, 5.6 and 6.5] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. All emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken by the portable analyzer shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701, 5.4 and 4702, 5.6] Federally Enforceable Through Title V Permit
10. NOx, CO, and VOC emissions shall be measured (source tested) not less than once every 24 months. [District Rules 4701, 6.3.1 and 4702, 6.3.1] Federally Enforceable Through Title V Permit
11. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081; 4701, 6.4; and 4702, 6.4] Federally Enforceable Through Title V Permit
12. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
13. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Unit shall be fired only on PUC-regulated natural gas with a sulfur content of less than or equal to 1.0 grain/100 scf. [District NSR Rule; District Rules 2520, 9.3.2 and 4801; Kern County Rule 407] Federally Enforceable Through Title V Permit
15. The permittee shall maintain on file copies of all natural gas bills or fuel throughput records for a period of five years. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. The permittee shall maintain records of: (1) total hours of operation; (2) type and quantity of fuel used; (3) maintenance or modifications performed; (4) the date and time of NOx, CO, and O2 measurements; (5) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2; (6) make and model of exhaust gas analyzer; (7) exhaust gas analyzer calibration records; and (8) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701, 6.2 and 4702, 6.2] Federally Enforceable Through Title V Permit
18. The permittee shall install and operate a nonresettable fuel meter and a nonresettable elapsed operating time meter. In lieu of installing a nonresettable fuel meter, the owner or operator may use a non-resettable elapsed operating time meter in conjunction with the engine manufacturer's maximum rated fuel consumption to determine annual fuel usage. The owner or operator shall maintain the required meters in proper operating condition. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
19. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 4702 and 40 CFR 63, ZZZZ]
20. On and after October 19, 2013, the permittee must 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. [40 CFR 63, ZZZZ]
21. On and after October 19, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63, ZZZZ]
22. On and after October 19, 2013, the engine's oil and filter shall be changed every 1,440 hours of operation or every 12 months, whichever comes first. [40 CFR 63, ZZZZ]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. On and after October 19, 2013, the engine's spark plugs shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ]

24. On and after October 19, 2013, the engine's hoses and belts shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ]

25. On and after October 19, 2013, the permittee shall maintain monthly records that include any information necessary to demonstrate compliance with 40 CFR 63, ZZZZ. [40 CFR 63, ZZZZ]

26. On and after October 19, 2013, the permittee shall maintain monthly records of all performance tests, opacity and visible emissions observations and required maintenance performed on the air pollution control and monitoring equipment. [District Rule 1070 and 40 CFR 63, ZZZZ]

27. On and after October 19, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of the operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of the action(s) taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning operation and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070 and 40 CFR 63, ZZZZ]

28. The Permittee shall begin the daily recording of the inlet temperature to the catalyst bed by June 26, 2012 in order to ensure compliance with the requirements of 40 CFR 64, Compliance Assurance Monitoring (CAM). [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

29. Pursuant to Rule 4702, beginning in 2014, the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by June 30 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4702 Table 2. [District Rule 4702]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-85-7 **EXPIRATION DATE:** 08/31/2022

SECTION: 05 **TOWNSHIP:** 31S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
165 BHP INGERSOLL-RAND MODEL 6JVG NATURAL GAS-FIRED IC ENGINE EQUIPPED WITH 3-WAY CATALYST SERVING THE #2 HYDROGEN COMPRESSOR - MIDDLE, AT THE PLATFORMER UNIT (#S-37-4)

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
2. Kern Oil and Refining Company shall operate and maintain controls as recommended by the emission control system supplier. [District NSR Rule] Federally Enforceable Through Title V Permit
3. NOx emission concentrations shall not exceed 25 ppm by volume at 15% O2 or exhaust emission concentrations shall be reduced by 96%. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
4. VOC emissions concentrations shall not exceed 250 ppmv at 15% O2. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
5. CO emission concentrations shall not exceed 2000 ppm by volume at 15% O2. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
6. Emissions from the engine shall neither exceed SOx (as SO2) - 0.00002 lb/hp-hr, nor PM10 - 0.00014 lb/hp-hr. [District NSR Rule] Federally Enforceable Through Title V Permit
7. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. [In-stack O2 monitors may be allowed if approved by the APCO.] Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 2520, 9.3.2 & 9.4.2; 4701, 5.4; and 4702, 5.6 and 6.5] Federally Enforceable Through Title V Permit
8. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2; 4701, 5.4; and 4702, 5.6 and 6.5] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. All emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken by the portable analyzer shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701, 5.4 and 4702, 5.6] Federally Enforceable Through Title V Permit
10. NOx, CO, and VOC emissions shall be measured (source tested) not less than once every 24 months. [District Rules 4701, 6.3.1 and 4702, 6.3.1] Federally Enforceable Through Title V Permit
11. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081; 4701, 6.4; and 4702, 6.4] Federally Enforceable Through Title V Permit
12. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
13. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Unit shall be fired only on PUC-regulated natural gas with a sulfur content of less than or equal to 1.0 grain/100 scf. [District NSR Rule; District Rules 2520, 9.3.2 and 4801; Kern County Rule 407] Federally Enforceable Through Title V Permit
15. The permittee shall maintain on file copies of all natural gas bills or fuel throughput records for a period of five years. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. The permittee shall maintain records of: (1) total hours of operation; (2) type and quantity of fuel used; (3) maintenance or modifications performed; (4) the date and time of NOx, CO, and O2 measurements; (5) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2; (6) make and model of exhaust gas analyzer; (7) exhaust gas analyzer calibration records; and (8) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701, 6.2 and 4702, 6.2] Federally Enforceable Through Title V Permit
18. The permittee shall install and operate a nonresettable fuel meter and a nonresettable elapsed operating time meter. In lieu of installing a nonresettable fuel meter, the owner or operator may use a non-resettable elapsed operating time meter in conjunction with the engine manufacturer's maximum rated fuel consumption to determine annual fuel usage. The owner or operator shall maintain the required meters in proper operating condition. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
19. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 4702 and 40 CFR 63, ZZZZ]
20. On and after October 19, 2013, the permittee must 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. [40 CFR 63, ZZZZ]
21. On and after October 19, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63, ZZZZ]
22. On and after October 19, 2013, the engine's oil and filter shall be changed every 1,440 hours of operation or every 12 months, whichever comes first. [40 CFR 63, ZZZZ]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. On and after October 19, 2013, the engine's spark plugs shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ]

24. On and after October 19, 2013, the engine's hoses and belts shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ]

25. On and after October 19, 2013, the permittee shall maintain monthly records that include any information necessary to demonstrate compliance with 40 CFR 63, ZZZZ. [40 CFR 63, ZZZZ]

26. On and after October 19, 2013, the permittee shall maintain monthly records of all performance tests, opacity and visible emissions observations and required maintenance performed on the air pollution control and monitoring equipment. [District Rule 1070 and 40 CFR 63, ZZZZ]

27. On and after October 19, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of the operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of the action(s) taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning operation and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070 and 40 CFR 63, ZZZZ]

28. The Permittee shall begin the daily recording of the inlet temperature to the catalyst bed by June 26, 2012 in order to ensure compliance with the requirements of 40 CFR 64, Compliance Assurance Monitoring (CAM). [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

29. Pursuant to Rule 4702, beginning in 2014, the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by June 30 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4702 Table 2. [District Rule 4702]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-86-7 **EXPIRATION DATE:** 08/31/2022

SECTION: 05 **TOWNSHIP:** 31S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
165 BHP INGERSOLL-RAND MODEL 6JVG NATURAL GAS-FIRED IC ENGINE EQUIPPED WITH 3-WAY CATALYST SERVING THE #1 HYDROGEN COMPRESSOR - SOUTH, AT THE PLATFORMER UNIT (#S-37-4)

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
2. Kern Oil and Refining Company shall operate and maintain controls as recommended by the emission control system supplier. [District NSR Rule] Federally Enforceable Through Title V Permit
3. NOx emission concentrations shall not exceed 25 ppm by volume at 15% O2 or exhaust emission concentrations shall be reduced by 96%. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
4. VOC emissions concentrations shall not exceed 250 ppmv at 15% O2. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
5. CO emission concentrations shall not exceed 2000 ppm by volume at 15% O2. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
6. Emissions from the engine shall neither exceed SOx (as SO2) - 0.00002 lb/hp-hr, nor PM10 - 0.00014 lb/hp-hr. [District NSR Rule] Federally Enforceable Through Title V Permit
7. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. [In-stack O2 monitors may be allowed if approved by the APCO.] Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 2520, 9.3.2 & 9.4.2; 4701, 5.4; and 4702, 5.6 and 6.5] Federally Enforceable Through Title V Permit
8. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2; 4701, 5.4; and 4702, 5.6 and 6.5] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. All emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken by the portable analyzer shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701, 5.4 and 4702, 5.6] Federally Enforceable Through Title V Permit
10. NOx, CO, and VOC emissions shall be measured (source tested) not less than once every 24 months. [District Rules 4701, 6.3.1 and 4702, 6.3.1] Federally Enforceable Through Title V Permit
11. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081; 4701, 6.4; and 4702, 6.4] Federally Enforceable Through Title V Permit
12. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
13. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Unit shall be fired only on PUC-regulated natural gas with a sulfur content of less than or equal to 1.0 grain/100 scf. [District NSR Rule; District Rules 2520, 9.3.2 and 4801; Kern County Rule 407] Federally Enforceable Through Title V Permit
15. The permittee shall maintain on file copies of all natural gas bills or fuel throughput records for a period of five years. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. The permittee shall maintain records of: (1) total hours of operation; (2) type and quantity of fuel used; (3) maintenance or modifications performed; (4) the date and time of NOx, CO, and O2 measurements; (5) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2; (6) make and model of exhaust gas analyzer; (7) exhaust gas analyzer calibration records; and (8) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701, 6.2 and 4702, 6.2] Federally Enforceable Through Title V Permit
18. The permittee shall install and operate a nonresettable fuel meter and a nonresettable elapsed operating time meter. In lieu of installing a nonresettable fuel meter, the owner or operator may use a non-resettable elapsed operating time meter in conjunction with the engine manufacturer's maximum rated fuel consumption to determine annual fuel usage. The owner or operator shall maintain the required meters in proper operating condition. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
19. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 4702 and 40 CFR 63, ZZZZ]
20. On and after October 19, 2013, the permittee must 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. [40 CFR 63, ZZZZ]
21. On and after October 19, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63, ZZZZ]
22. On and after October 19, 2013, the engine's oil and filter shall be changed every 1,440 hours of operation or every 12 months, whichever comes first. [40 CFR 63, ZZZZ]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. On and after October 19, 2013, the engine's spark plugs shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ]
24. On and after October 19, 2013, the engine's hoses and belts shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ]
25. On and after October 19, 2013, the permittee shall maintain monthly records that include any information necessary to demonstrate compliance with 40 CFR 63, ZZZZ. [40 CFR 63, ZZZZ]
26. On and after October 19, 2013, the permittee shall maintain monthly records of all performance tests, opacity and visible emissions observations and required maintenance performed on the air pollution control and monitoring equipment. [District Rule 1070 and 40 CFR 63, ZZZZ]
27. On and after October 19, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of the operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of the action(s) taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning operation and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070 and 40 CFR 63, ZZZZ]
28. The Permittee shall begin the daily recording of the inlet temperature to the catalyst bed by June 26, 2012 in order to ensure compliance with the requirements of 40 CFR 64, Compliance Assurance Monitoring (CAM). [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit
29. Pursuant to Rule 4702, beginning in 2016, the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by June 30 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4702 Table 2. [District Rule 4702]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-87-6 **EXPIRATION DATE:** 08/31/2022

SECTION: 05 **TOWNSHIP:** 31S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
120 BHP INGERSOLL-RAND MODEL 4JVG NATURAL GAS-FIRED IC ENGINE EQUIPPED WITH 3-WAY CATALYST SERVING THE EAST HYDROGEN COMPRESSOR AT THE UNIFIER UNIT (#S-37-3)

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
2. Kern Oil and Refining Company shall operate and maintain controls as recommended by the emission control system supplier. [District NSR Rule] Federally Enforceable Through Title V Permit
3. NOx emission concentrations shall not exceed 25 ppm by volume at 15% O2 or exhaust emission concentrations shall be reduced by 96%. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
4. VOC emissions concentrations shall not exceed 250 ppmv at 15% O2. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
5. CO emission concentrations shall not exceed 2000 ppm by volume at 15% O2. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
6. Emissions from the engine shall neither exceed SOx (as SO2) - 0.00002 lb/hp-hr, nor PM10 - 0.00014 lb/hp-hr. [District NSR Rule] Federally Enforceable Through Title V Permit
7. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. [In-stack O2 monitors may be allowed if approved by the APCO.] Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 2520, 9.3.2 & 9.4.2; 4701, 5.4; and 4702, 5.6 and 6.5] Federally Enforceable Through Title V Permit
8. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2; 4701, 5.4; 4702, 5.6 and 6.5] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. All emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken by the portable analyzer shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701, 5.4 and 4702, 5.6] Federally Enforceable Through Title V Permit
10. NOx, CO, and VOC emissions shall be measured (source tested) not less than once every 24 months. [District Rules 4701, 6.3.1 and 4702, 6.3.1] Federally Enforceable Through Title V Permit
11. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081; 4701, 6.4; and 4702, 6.4] Federally Enforceable Through Title V Permit
12. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
13. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Unit shall be fired only on PUC-regulated natural gas with a sulfur content of less than or equal to 1.0 grain/100 scf. [District NSR Rule; District Rules 2520, 9.3.2 and 4801; Kern County Rule 407] Federally Enforceable Through Title V Permit
15. The permittee shall maintain on file copies of all natural gas bills or fuel throughput records for a period of five years. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. The permittee shall maintain records of: (1) total hours of operation; (2) type and quantity of fuel used; (3) maintenance or modifications performed; (4) the date and time of NOx, CO, and O2 measurements; (5) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2; (6) make and model of exhaust gas analyzer; (7) exhaust gas analyzer calibration records; and (8) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701, 6.2 and 4702, 6.2] Federally Enforceable Through Title V Permit
18. The permittee shall install and operate a nonresettable fuel meter and a nonresettable elapsed operating time meter. In lieu of installing a nonresettable fuel meter, the owner or operator may use a non-resettable elapsed operating time meter in conjunction with the engine manufacturer's maximum rated fuel consumption to determine annual fuel usage. The owner or operator shall maintain the required meters in proper operating condition. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
19. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 4702 and 40 CFR 63, ZZZZ]
20. On and after October 19, 2013, the permittee must 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. [40 CFR 63, ZZZZ]
21. On and after October 19, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63, ZZZZ]
22. On and after October 19, 2013, the engine's oil and filter shall be changed every 1,440 hours of operation or every 12 months, whichever comes first. [40 CFR 63, ZZZZ]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. On and after October 19, 2013, the engine's spark plugs shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ]

24. On and after October 19, 2013, the engine's hoses and belts shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ]

25. On and after October 19, 2013, the permittee shall maintain monthly records that include any information necessary to demonstrate compliance with 40 CFR 63, ZZZZ. [40 CFR 63, ZZZZ]

26. On and after October 19, 2013, the permittee shall maintain monthly records of all performance tests, opacity and visible emissions observations and required maintenance performed on the air pollution control and monitoring equipment. [District Rule 1070 and 40 CFR 63, ZZZZ]

27. On and after October 19, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of the operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of the action(s) taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning operation and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070 and 40 CFR 63, ZZZZ]

28. Pursuant to Rule 4702, beginning in 2016, the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by June 30 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4702 Table 2. [District Rule 4702]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-88-6 **EXPIRATION DATE:** 08/31/2022

SECTION: 05 **TOWNSHIP:** 31S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
120 BHP INGERSOLL-RAND MODEL 4JVG NATURAL GAS-FIRED IC ENGINE EQUIPPED WITH 3-WAY CATALYST SERVING THE WEST HYDROGEN COMPRESSOR AT THE UNIFINER UNIT (#S-37-3)

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
2. Kern Oil and Refining Company shall operate and maintain controls as recommended by the emission control system supplier. [District NSR Rule] Federally Enforceable Through Title V Permit
3. NOx emission concentrations shall not exceed 25 ppm by volume at 15% O2 or exhaust emission concentrations shall be reduced by 96%. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
4. VOC emissions concentrations shall not exceed 250 ppmv at 15% O2. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
5. CO emission concentrations shall not exceed 2000 ppm by volume at 15% O2. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
6. Emissions from the engine shall neither exceed SOx (as SO2) - 0.00002 lb/hp-hr, nor PM10 - 0.00014 lb/hp-hr. [District NSR Rule] Federally Enforceable Through Title V Permit
7. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. [In-stack O2 monitors may be allowed if approved by the APCO.] Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 2520, 9.3.2 & 9.4.2; 4701, 5.4; and 4702, 5.6 and 6.5] Federally Enforceable Through Title V Permit
8. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2; 4701, 5.4; and 4702, 5.6 and 6.5] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. All emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken by the portable analyzer shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701, 5.4 and 4702, 5.6] Federally Enforceable Through Title V Permit
10. NOx, CO, and VOC emissions shall be measured (source tested) not less than once every 24 months. [District Rules 4701, 6.3.1 and 4702, 6.3.1] Federally Enforceable Through Title V Permit
11. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081; 4701, 6.4; and 4702, 6.4] Federally Enforceable Through Title V Permit
12. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
13. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Unit shall be fired only on PUC-regulated natural gas with a sulfur content of less than or equal to 1.0 grain/100 scf. [District NSR Rule; District Rules 2520, 9.3.2 and 4801; Kern County Rule 407] Federally Enforceable Through Title V Permit
15. The permittee shall maintain on file copies of all natural gas bills or fuel throughput records for a period of five years. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. The permittee shall maintain records of: (1) total hours of operation; (2) type and quantity of fuel used; (3) maintenance or modifications performed; (4) the date and time of NOx, CO, and O2 measurements; (5) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2; (6) make and model of exhaust gas analyzer; (7) exhaust gas analyzer calibration records; and (8) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701, 6.2 and 4702, 6.2] Federally Enforceable Through Title V Permit
18. The permittee shall install and operate a nonresettable fuel meter and a nonresettable elapsed operating time meter. In lieu of installing a nonresettable fuel meter, the owner or operator may use a non-resettable elapsed operating time meter in conjunction with the engine manufacturer's maximum rated fuel consumption to determine annual fuel usage. The owner or operator shall maintain the required meters in proper operating condition. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
19. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 4702 and 40 CFR 63, ZZZZ]
20. On and after October 19, 2013, the permittee must 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. [40 CFR 63, ZZZZ]
21. On and after October 19, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63, ZZZZ]
22. On and after October 19, 2013, the engine's oil and filter shall be changed every 1,440 hours of operation or every 12 months, whichever comes first. [40 CFR 63, ZZZZ]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. On and after October 19, 2013, the engine's spark plugs shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ]
24. On and after October 19, 2013, the engine's hoses and belts shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ]
25. On and after October 19, 2013, the permittee shall maintain monthly records that include any information necessary to demonstrate compliance with 40 CFR 63, ZZZZ. [40 CFR 63, ZZZZ]
26. On and after October 19, 2013, the permittee shall maintain monthly records of all performance tests, opacity and visible emissions observations and required maintenance performed on the air pollution control and monitoring equipment. [District Rule 1070 and 40 CFR 63, ZZZZ]
27. On and after October 19, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of the operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of the action(s) taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning operation and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070 and 40 CFR 63, ZZZZ]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-90-5 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
2,500 BBL FIXED-ROOF ORGANIC LIQUID STORAGE TANK (#2501) WITH A SHARED VAPOR RECOVERY SYSTEM (LISTED ON PERMIT UNIT S-37-8)

PERMIT UNIT REQUIREMENTS

1. Operation shall include vapor piping shared between tanks #S-37-90 and '-91, and connected to refinery vapor recovery system. [District NSR Rule] Federally Enforceable Through Title V Permit
2. This tank shall have no provisions for the heating of stored substances. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The tank shall be equipped with a fixed-roof with no holes or openings. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Tank P/V valve shall be set to within 10% of the maximum allowable working pressure of the tank. [District NSR Rule] Federally Enforceable Through Title V Permit
5. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
6. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
7. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
8. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
9. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
10. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Upon detection of a gas leak, defined as a VOC concentration of greater than 500 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3 and 40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit
12. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. Liquid leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
14. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
15. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
16. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
17. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
18. The operator shall submit to the APCO an operating plan as described in 40 CFR 60.113b(c) and shall operate the closed vent system and monitor the parameters of the system in accordance with the approved operating plan. The operator shall keep a record of the measured values of the parameters monitored in accordance with the approved operating plan. The operating plan shall be retained for the life of the control equipment. [40 CFR 60.113b(c), 60.115b(c)] Federally Enforceable Through Title V Permit
19. Storage vessel shall be equipped with a closed vent system designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections. Emissions from the closed vent system in excess of this limit shall be considered a leak. [40 CFR 60.112b(a)(3)(i), District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. Operator shall determine the presence of VOC leaks by EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases; 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane [40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit
21. VOC emissions from fugitive emissions sources in this permit unit shall not exceed 4.6 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. [District Rule 2201] Federally Enforceable Through Title V Permit

23. Operator shall maintain records to demonstrate compliance with fugitive VOC emissions limit of this permit annually. Compliance shall be demonstrated by calculation, using the correlation equations, zero default and 10,000 ppmv pegged factors set forth in the CAPCOA California implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-3a, February 1999, and the average emission concentrations of total organic compounds measured for each component during all inspections conducted during the prior 365 day period. [District Rule 2201] Federally Enforceable Through Title V Permit

24. Operator shall maintain a record showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. [40 CFR 60.116b(b)] Federally Enforceable Through Title V Permit

25. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

26. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart Kb (except 60.113b(c)) and SJVUAPCD Rule 4623 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

27. This unit commenced construction, modification, or reconstruction after July 23, 1984. Therefore, the requirements of 40 CFR 60 Subpart K and Ka do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-91-6 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
2,500 BBL FIXED-ROOF ORGANIC LIQUID STORAGE TANK (#2502) WITH A SHARED VAPOR RECOVERY SYSTEM (LISTED ON PERMIT UNIT S-37-8)

PERMIT UNIT REQUIREMENTS

1. Operation shall include vapor piping shared between tanks #S-37-90 and '-91, and connected to refinery vapor recovery system. [District NSR Rule] Federally Enforceable Through Title V Permit
2. This tank shall have no provisions for the heating of stored substances. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The tank shall be equipped with a fixed-roof with no holes or openings. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Tank P/V valve shall be set to within 10% of the maximum allowable working pressure of the tank. [District NSR Rule] Federally Enforceable Through Title V Permit
5. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
6. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
7. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
8. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
9. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
10. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Upon detection of a gas leak, defined as a VOC concentration of greater than 500 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3 and 40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit
12. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. Liquid leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
14. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
15. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
16. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
17. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
18. The operator shall submit to the APCO an operating plan as described in 40 CFR 60.113b(c) and shall operate the closed vent system and monitor the parameters of the system in accordance with the approved operating plan. The operator shall keep a record of the measured values of the parameters monitored in accordance with the approved operating plan. The operating plan shall be retained for the life of the control equipment. [40 CFR 60.113b(c), 60.115b(c)] Federally Enforceable Through Title V Permit
19. Storage vessel shall be equipped with a closed vent system designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections. Emissions from the closed vent system in excess of this limit shall be considered a leak. [40 CFR 60.112b(a)(3)(i), District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. Operator shall determine the presence of VOC leaks by EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases; 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane [40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit
21. VOC emissions from fugitive emissions sources in this permit unit shall not exceed 1.3 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Operator shall maintain records to demonstrate compliance with fugitive VOC emissions limit of this permit annually. Compliance shall be demonstrated by calculation, using the correlation equations, zero default and 10,000 ppmv pegged factors set forth in the CAPCOA California implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-3a, February 1999, and the average emission concentrations of total organic compounds measured for each component during all inspections conducted during the prior 365 day period. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Operator shall maintain a record showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. [40 CFR 60.116b(b)] Federally Enforceable Through Title V Permit
25. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
26. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart Kb (except 60.113b(c)) and SJVUAPCD Rule 4623 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
27. This unit commenced construction, modification, or reconstruction after July 23, 1984. Therefore, the requirements of 40 CFR 60 Subpart K and Ka do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-92-6 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
180 BHP INGERSOLL-RAND, MODEL JVG-6, NATURAL GAS-FIRED IC ENGINE (SERIAL # 6AJ450) WITH NON-SELECTIVE CATALYTIC REDUCTION (NSCR) TO SERVE HYDROGEN BOOSTER COMPRESSOR AT THE PLATFORMER UNIT (S-37-4)

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101, 5.1] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
3. Kern Oil and Refining Company shall operate and maintain controls as recommended by the emission control system supplier. [District NSR Rule] Federally Enforceable Through Title V Permit
4. NOx emission concentrations shall not exceed 25 ppm by volume at 15% O2 or exhaust emission concentrations shall be reduced by 96%. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
5. VOC emissions concentrations shall not exceed 250 ppmv at 15% O2. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
6. CO emission concentrations shall not exceed 2000 ppm by volume at 15% O2. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
7. Emissions from the engine shall neither exceed SOx (as SO2) - 0.0006 lb/MMBtu, nor PM10 - 0.011 lb/MMBtu. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Volume of fuel gas combusted shall not exceed 41,420 Scf/day. [District NSR Rule] Federally Enforceable Through Title V Permit
9. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. [In-stack O2 monitors may be allowed if approved by the APCO.] Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 2520, 9.3.2 & 9.4.2; 4701, 5.4; and 4702, 5.6 and 6.5] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2; 4701, 5.4; and 4702, 5.6 and 6.5] Federally Enforceable Through Title V Permit
11. All emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken by the portable analyzer shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701, 5.4 and 4702, 5.6] Federally Enforceable Through Title V Permit
12. NOx, CO, and VOC emissions shall be measured (source tested) not less than once every 24 months. [District Rules 4701, 6.3.1 and 4702, 6.3.1] Federally Enforceable Through Title V Permit
13. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081; 4701, 6.4; and 4702, 6.4] Federally Enforceable Through Title V Permit
14. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
15. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
16. Unit shall be fired only on PUC-regulated natural gas with a sulfur content of less than or equal to 1.0 grain/100 scf. [District Rules 2520, 9.3.2 and 4801; Kern County Rule 407] Federally Enforceable Through Title V Permit
17. The permittee shall maintain on file copies of all natural gas bills or fuel throughput records for a period of five years. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
19. The permittee shall maintain records of: (1) total hours of operation; (2) type and quantity of fuel used; (3) maintenance or modifications performed; (4) the date and time of NOx, CO, and O2 measurements; (5) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2; (6) make and model of exhaust gas analyzer; (7) exhaust gas analyzer calibration records; and (8) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701, 6.2 and 4702, 6.2] Federally Enforceable Through Title V Permit
20. The permittee shall operate a nonresettable fuel meter and a nonresettable elapsed operating time meter. In lieu of a nonresettable fuel meter, the owner or operator may use a non-resettable elapsed operating time meter in conjunction with the engine manufacturer's maximum rated fuel consumption to determine annual fuel usage. The owner or operator shall maintain the required meters in proper operating condition. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
21. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 4702 and 40 CFR 63, ZZZZ]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. On and after October 19, 2013, the permittee must 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. [40 CFR 63, ZZZZ]
23. On and after October 19, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63, ZZZZ]
24. On and after October 19, 2013, the engine's oil and filter shall be changed every 1,440 hours of operation or every 12 months, whichever comes first. [40 CFR 63, ZZZZ]
25. On and after October 19, 2013, the engine's spark plugs shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ]
26. On and after October 19, 2013, the engine's hoses and belts shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ]
27. On and after October 19, 2013, the permittee shall maintain monthly records that include any information necessary to demonstrate compliance with 40 CFR 63, ZZZZ. [40 CFR 63, ZZZZ]
28. On and after October 19, 2013, the permittee shall maintain monthly records of all performance tests, opacity and visible emissions observations and required maintenance performed on the air pollution control and monitoring equipment. [District Rule 1070 and 40 CFR 63, ZZZZ]
29. On and after October 19, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of the operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of the action(s) taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning operation and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070 and 40 CFR 63, ZZZZ]
30. The Permittee shall begin the daily recording of the inlet temperature to the catalyst bed by June 26, 2012 in order to ensure compliance with the requirements of 40 CFR 64, Compliance Assurance Monitoring (CAM). [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit
31. Pursuant to Rule 4702, beginning in 2014, the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by June 30 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4702 Table 2. [District Rule 4702]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-93-4 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
TRUCK LOADING RACK (RACK C), INCLUDING 6 ORGANIC LIQUID LOADING SPOTS

PERMIT UNIT REQUIREMENTS

1. This rack shall only be used to transfer organic liquids with a true vapor pressure (TVP) less than 1.5 psia at actual loading temperature. [District Rule 4624] Federally Enforceable Through Title V Permit
2. The permittee shall keep accurate daily records of organic liquid TVP, loading temperature and types of liquids loaded, for a period of five years, and shall make such records available for District inspection upon request. [District Rule 4624] Federally Enforceable Through Title V Permit
3. The TVP shall be determined whenever there is a change in the type of liquid being transferred. Organic liquid TVP shall be determined using one of the following methods: (1) Rule 4624, Appendix A, for any of the listed liquids provided the storage temperature listed in Appendix A is not exceeded at any time; (2) A material safety data sheet (MSDS) in place of TVP testing if the transferred organic liquid is not crude oil or a petroleum distillate; (3) TVP test by measuring the Reid Vapor Pressure (RVP) using ASTM D 323 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the storage container's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in Rule 4624, Appendix B. Appendix B is an excerpt from the oil and gas section of "ARB Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588", dated August 1989. As an alternative to using ASTM D 323, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO and EPA. The latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA, shall be used to determine the TVP of crude oil with an API gravity of 26 degrees or less, or for any API gravity that is specified in this test method. The API gravity of crude oil or petroleum distillate shall be determined using ASTM Method D 287 (Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 (Standard Practices for Manual Sampling of Petroleum and Petroleum Products). [District Rule 4624] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-94-7 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
RAILCAR LIQUID TRANSFER FACILITY INCLUDING 48 ORGANIC LIQUID TRANSFER HOSES, 6 BUTANE TRANSFER HOSES, 8 TRANSFER PUMPS, AND 1 TRANSFER COMPRESSOR (RACK W)

PERMIT UNIT REQUIREMENTS

1. There shall be no loading of organic liquids with TVP at actual transfer temperature of 1.5 psia or greater. [District Rule 4624] Federally Enforceable Through Title V Permit
2. The TVP shall be determined whenever there is a change to a new liquid not previously loaded. [District Rule 4624] Federally Enforceable Through Title V Permit
3. An operator may use a material safety data sheet (MSDS) in place of TVP testing if the organic liquid loaded is not crude oil or a petroleum distillate. [District Rule 4624] Federally Enforceable Through Title V Permit
4. Liquid TVP shall be determined using Appendix A or the applicable test method in Section 6.3 of District Rule 4624. [District Rule 4624] Federally Enforceable Through Title V Permit
5. Total number of disconnects shall not exceed 144 per day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. During hose disconnects the maximum liquid spillage for liquids shall not exceed 10 milliliters/disconnect based on an average from 3 consecutive disconnects. [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit
7. All unloaded liquids and gases shall be routed to one of the following systems: a vapor collection and control system; a fixed roof container that meets the control requirements specified in Rule 4623 (Storage of Organic Liquids); a floating roof container that meets the control requirements specified in Rule 4623 (Storage of Organic Liquids); or a pressure vessel equipped with an APCO-approved vapor recovery system that meets the control requirements specified in Rule 4623 (Storage of Organic Liquids); or a closed VOC emission control system. [District Rules 4623 and 4624] Federally Enforceable Through Title V Permit
8. Emissions from fugitive emissions components and excess liquid drainage from railcar gas/liquid transfer facility shall not exceed 3.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. For this Class 1 organic liquid transfer facility, the emission of VOC from the transfer operation shall not exceed 0.08 pounds per 1,000 gallons of organic liquid transferred. [District Rule 4624] Federally Enforceable Through Title V Permit
10. A leak is defined as the dripping of VOC-containing liquid at a rate of more than three (3) drops per minute; or for organic liquids other than gasoline, the detection of any gaseous or vapor emissions with a concentration of VOC greater than 1,000 ppmv above a background as methane when measured in accordance with the test method in Section 6.3.7; gasoline, a concentration of VOC greater than 10,000 ppmv, as methane, above background when measured in accordance with the test method in Section 6.3.7. Any liquid or gas coming from a component undergoing repair or replacement, or during sampling of process fluid from equipment into a container is not considered a leak provided such activities are accomplished as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4624] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. A gas or liquid leak is a violation of this permit and shall be reported as a deviation. [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit
12. Permittee shall maintain accurate component count and emissions calculated using CAPCOA Screening Range Emissions Factors for Marketing Terminals, from California Implementation Guidelines for Estimating Emissions of Fugitive Hydrocarbon Leaks at Marketing Terminals, Table IV-2b, February 1999. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The operator of an organic liquid transfer facility shall inspect the vapor collection system, the vapor disposal system, and each transfer rack handling organic liquids for leaks during transfer at least once every calendar quarter using the test method prescribed in Section 6.3.8 of Rule 4624. [District Rule 4624] Federally Enforceable Through Title V Permit
14. An operator may apply for a written approval from the APCO to change the inspection frequency from quarterly to annually provided no leaks were found during the inspections required under provisions of Sections 5.9.1 and 5.9.2 of Rule 4624 during five consecutive quarterly inspections. Upon identification of any leak during an annual inspection the frequency shall revert back to quarterly and the operator shall contact the APCO in writing within 14 days. [District Rule 4624] Federally Enforceable Through Title V Permit
15. A floating roof container that meets the applicable control requirements of Section 5.0 of Rule 4623 (Storage of Organic Liquids) shall be considered not leaking when receiving unloaded liquids for compliance with Rule 4624. [District Rule 4624] Federally Enforceable Through Title V Permit
16. All equipment that are found leaking shall be repaired or replaced within 72 hours. If the leaking component cannot be repaired or replaced within 72 hours, the component shall be taken out of service until such time the component is repaired or replaced. The repaired or replacement equipment shall be reinspected the first time the equipment is in operation after the repair or replacement. [District Rule 4624] Federally Enforceable Through Title V Permit
17. Operator shall keep records of the throughputs of materials transferred and the results of any required leak inspections. [District Rule 4624] Federally Enforceable Through Title V Permit
18. Daily records of the number of disconnects from railcar liquid/gas transfer facility shall be maintained, retained on the premises for a period of at least five years and made available for District inspection upon request. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
19. The permittee shall keep accurate daily records of TVP, transfer temperature, and types of liquids/gases transferred for a period of five years, and shall make such records available for District inspection upon request. [District Rules 2520 and 4624] Federally Enforceable Through Title V Permit
20. This unit is subject to Rule 4455 Leak Detection and Repair Conditions on the facility wide permit S-37-0. [District Rule 4455] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-95-8 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
10,000 BBL FIXED-ROOF ORGANIC LIQUID STORAGE TANK (#10003) VENTING TO A 2,000 LB CARBON CANISTER (SHARED WITH PERMIT UNIT S-37-96)

PERMIT UNIT REQUIREMENTS

1. Except as otherwise authorized by this permit, tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in gas-tight condition. Collected vapors shall be directed to approved control devices having a control efficiency of at least 95% by weight as determined by the test method specified in District Rule 4623. [District NSR Rule, District Rule 4623] Federally Enforceable Through Title V Permit
2. Tank shall be vented to vapor control system when storing organic liquids with a TVP of 0.0181 psi or greater. When storing organic liquids with a TVP less than 0.0181 psia or water that meets the VOC standard specified in the definition of "clean produced water" in Rule 1020, vapor control system may be disconnected. Vapor control requirements of Rule 4623 shall not be required when vapor control system is disconnected. Prior to removal of the vapor control system permittee shall provide to the District test results of TVP of the oil or VOC content of the clean produced water as applicable. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Throughput shall not exceed 28,767 gallons/day when storing organic liquids with a TVP less than of 0.0181 psi. There is no throughput limit when storing clean produced water. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Within one week after switching from storage of organic liquids with TVP less than 0.0181 psia to storage of organic liquids with TVP greater than 0.0181 psia, vapor control system fugitive emissions components shall be inspected by the facility operator to ensure compliance with the provisions of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from vapor control system requirement. If the tank stores crude oil or petroleum distillates, the operator shall also conduct an API gravity testing. [District Rules 2201 and 4623, 6.2.2] Federally Enforceable Through Title V Permit
6. Except for crude oil with a API gravity 26 degrees or less, the TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures from the oil and gas section of "ARB Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588," dated August 1989 (see Rule 4623, Appendix B). As an alternative to using ASTM D 323-94, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and US EPA. In lieu of performing a TVP test, an operator may use Appendix A of District Rule 4623 to determine the TVP of the stored organic liquid provided the storage temperature listed in Appendix A is not exceeded at any time. [District Rule 4623, 6.4.2 and 6.4.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

7. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. The TVP testing shall be conducted at the actual storage temperature of the organic liquid in the tank. [District Rules 2201 and 4623, 6.4.4] Federally Enforceable Through Title V Permit
8. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287-92 (2000) e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)." Sampling for API gravity shall be performed in accordance with ASTM Method D 4057-95 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit
9. The permittee shall keep accurate records of true vapor pressure, storage temperature and types of liquids stored, for a period of five years, and shall make such records available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
11. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
12. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
13. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
14. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
15. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
16. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
17. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
18. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

19. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
20. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
21. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
22. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
23. Carbon canister shall be replaced when vapor concentration exceeds 150% of the initial vapor concentration. If the initial vapor concentration is less than 7 ppmv the canister shall be replaced when the concentration is greater than 10 ppmv. [District NSR Rule] Federally Enforceable Through Title V Permit
24. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
25. VOC emissions from fugitive emissions sources in this permit unit shall not exceed 1.3 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
26. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. [District Rule 2201] Federally Enforceable Through Title V Permit
27. Operator shall maintain records to demonstrate compliance with fugitive VOC emissions limit of this permit annually. Compliance shall be demonstrated by calculation, using the correlation equations, zero default and 10,000 ppmv pegged factors set forth in the CAPCOA California implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-3a, February 1999, and the average emission concentrations of total organic compounds measured for each component during all inspections conducted during the prior 365 day period. [District Rule 2201] Federally Enforceable Through Title V Permit
28. The operator shall ensure that the granular activated carbon vapor control system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
29. Operator shall maintain records of dates and times of disconnection and connection of tank vapor control system. [District Rule 1070] Federally Enforceable Through Title V Permit
30. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
31. The permittee shall keep accurate records of each organic liquid stored in the tank, throughput, storage temperature, TVP, and API gravity. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
32. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

33. This unit commenced construction, modification, or reconstruction before June 11, 1973. Therefore, the requirements of 40 CFR 60 Subparts K, Ka, and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-96-7 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
10,000 BBL FIXED-ROOF ORGANIC LIQUID STORAGE TANK (#10004) VENTING TO A 2,000 LB CARBON CANISTER (SHARED WITH PERMIT UNIT S-37-95)

PERMIT UNIT REQUIREMENTS

1. Except as otherwise authorized by this permit, tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in gas-tight condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in District Rule 4623. [District NSR Rule, District Rule 4623] Federally Enforceable Through Title V Permit
2. Tank shall be vented to vapor control system when storing organic liquids with a TVP of 0.0181 psi or greater. When storing organic liquids with a TVP less than 0.0181 psia or water that meets the VOC standard specified in the definition of "clean produced water" in Rule 1020, vapor control system may be disconnected. Vapor control requirements of Rule 4623 shall not be required when vapor control system is disconnected. Prior to removal of the vapor control system permittee shall provide to the District test results of TVP of the oil or VOC content of the clean produced water as applicable. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Throughput shall not exceed 28,767 gallons/day when storing organic liquids with a TVP less than of 0.0181 psi. There is no throughput limit when storing clean produced water. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Within one week after switching from storage of organic liquids with TVP less than 0.0181 psia to storage of organic liquids with TVP greater than 0.0181 psia, vapor control system fugitive emissions components shall be inspected by the facility operator to ensure compliance with the provisions of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from vapor control system requirement. If the tank stores crude oil or petroleum distillates, the operator shall also conduct an API gravity testing. [District Rules 2201 and 4623, 6.2.2] Federally Enforceable Through Title V Permit
6. Except for crude oil with a API gravity 26 degrees or less, the TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures from the oil and gas section of "ARB Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588," dated August 1989 (see Rule 4623, Appendix B). As an alternative to using ASTM D 323-94, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and US EPA. In lieu of performing a TVP test, an operator may use Appendix A of District Rule 4623 to determine the TVP of the stored organic liquid provided the storage temperature listed in Appendix A is not exceeded at any time. [District Rule 4623, 6.4.2 and 6.4.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

7. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. The TVP testing shall be conducted at the actual storage temperature of the organic liquid in the tank. [District Rules 2201 and 4623, 6.4.4] Federally Enforceable Through Title V Permit
8. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287-92 (2000) e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)." Sampling for API gravity shall be performed in accordance with ASTM Method D 4057-95 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit
9. The permittee shall keep accurate records of true vapor pressure, storage temperature and types of liquids stored, for a period of five years, and shall make such records available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
11. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
12. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
13. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
14. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
15. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
16. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
17. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
18. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

19. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
20. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
21. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
22. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
23. Carbon canister shall be replaced when vapor concentration exceeds 150% of the initial vapor concentration. If the initial vapor concentration is less than 7 ppmv the canister shall be replaced when the concentration is greater than 10 ppmv. [District NSR Rule] Federally Enforceable Through Title V Permit
24. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
25. VOC emissions from fugitive emissions sources in this permit unit shall not exceed 1.3 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
26. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. [District Rule 2201] Federally Enforceable Through Title V Permit
27. Operator shall maintain records to demonstrate compliance with fugitive VOC emissions limit of this permit annually. Compliance shall be demonstrated by calculation, using the correlation equations, zero default and 10,000 ppmv pegged factors set forth in the CAPCOA California implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-3a, February 1999, and the average emission concentrations of total organic compounds measured for each component during all inspections conducted during the prior 365 day period. [District Rule 2201] Federally Enforceable Through Title V Permit
28. The operator shall ensure that the granular activated carbon vapor control system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
29. Operator shall maintain records of dates and times of disconnection and connection of tank vapor control system. [District Rule 1070] Federally Enforceable Through Title V Permit
30. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
31. The permittee shall keep accurate records of each organic liquid stored in the tank, throughput, storage temperature, TVP, and API gravity. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
32. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

33. This unit commenced construction, modification, or reconstruction before June 11, 1973. Therefore, the requirements of 40 CFR 60 Subparts K, Ka, and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-97-5 **EXPIRATION DATE:** 08/31/2022

SECTION: NE25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
3,000 BBL FIXED ROOF ORGANIC LIQUID STORAGE TANK (#3012) WITH A VAPOR CONTROL SYSTEM (LISTED ON PERMIT UNIT S-37-8)

PERMIT UNIT REQUIREMENTS

1. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in gas-tight condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in District Rule 4623. [District NSR Rule, District Rule 4623] Federally Enforceable Through Title V Permit
2. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
3. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
4. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
5. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
6. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
7. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
8. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
10. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
13. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
14. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
15. VOC emissions from fugitive emissions sources in this permit unit shall not exceed 4.0 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
16. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Operator shall maintain records to demonstrate compliance with fugitive VOC emissions limit of this permit annually. Compliance shall be demonstrated by calculation, using the correlation equations, zero default and 10,000 ppmv pegged factors set forth in the CAPCOA California implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-3a, February 1999, and the average emission concentrations of total organic compounds measured for each component during all inspections conducted during the prior 365 day period. [District Rule 2201] Federally Enforceable Through Title V Permit
18. This unit commenced construction, modification, or reconstruction before June 11, 1973. Therefore, the requirements of 40 CFR 60 Subparts K, Ka, and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-100-6 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
180 BHP INGERSOLL-RAND, MODEL JVG-6, GAS-FIRED IC ENGINE (SERIAL # 6BJ537) WITH NSCR DRIVING MAKEUP COMPRESSOR UNIT SERVING THE DIESEL HYDROTREATER (S-37-77)

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
2. Kern Oil and Refining Company shall operate and maintain controls as recommended by the emission control system supplier. [District NSR Rule] Federally Enforceable Through Title V Permit
3. NOx emission concentrations shall not exceed 25 ppm by volume at 15% O2 or exhaust emission concentrations shall be reduced by 96%. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
4. VOC emissions concentrations shall not exceed 250 ppmv at 15% O2. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
5. CO emission concentrations shall not exceed 2000 ppm by volume at 15% O2. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
6. Unit shall be fired only on natural gas with a sulfur content of less than or equal to 0.75 grains per 100 dry standard cubic feet of fuel gas. [District NSR Rule, District Rule 4801; and Kern County Rule 407] Federally Enforceable Through Title V Permit
7. Emissions from the engine shall neither exceed SOx (as SO2) - 0.00214 lb/1,000 scf of fuel burned, nor PM10 - 0.017 lb/1,000 scf of fuel burned. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Total volume of fuel gas combusted by the IC engine compressor shall not exceed 1,620 scf/hr. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Leaks from valves and connectors subject to a BACT requirement shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 100 ppmv above background when measured one (1) cm from potential source. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Leaks from pump and compressor seals subject to a BACT requirement shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 500 ppmv above background when measured one (1) cm from potential source. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. [In-stack O2 monitors may be allowed if approved by the APCO.] Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 2520, 9.3.2 & 9.4.2; 4701, 5.4; and 4702, 5.6 and 6.5] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2; 4701, 5.4; and 4702, 5.6 and 6.5] Federally Enforceable Through Title V Permit
13. All emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken by the portable analyzer shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701, 5.4 and 4702, 5.6] Federally Enforceable Through Title V Permit
14. NOx, CO, and VOC emissions shall be measured (source tested) not less than once every 24 months. [District Rules 4701, 6.3.1 and 4702, 6.3.1] Federally Enforceable Through Title V Permit
15. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081; 4701, 6.4; and 4702, 6.4] Federally Enforceable Through Title V Permit
16. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
17. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
18. If the engine is fired on natural gas certified by the supplier to have a sulfur content of 0.75 grains per 100 dscf or less, then the permittee shall maintain on file copies of all natural gas bills and supplier certifications for a period of five years. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
19. If the engine is not fired on natural gas certified by the supplier to have a sulfur content of 0.75 grains per 100 dscf or less, then the sulfur content of the natural gas being fired in the engine shall be determined using ASTM method D 1072, D 3031, D 4084 or D 3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. If the engine is not fired on natural gas certified by the supplier to have a sulfur content of 0.75 grains per 100 dscf or less, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. Permittee shall maintain accurate records of fuel gas BTU content, and daily records of volume and sulfur content of gas burned. [District Rule 1070] Federally Enforceable Through Title V Permit
22. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. The permittee shall maintain records of: (1) total hours of operation; (2) type and quantity of fuel used; (3) maintenance or modifications performed; (4) the date and time of NOx, CO, and O2 measurements; (5) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2; (6) make and model of exhaust gas analyzer; (7) exhaust gas analyzer calibration records; and (8) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701, 6.2 and 4702, 6.2] Federally Enforceable Through Title V Permit

24. The permittee shall install and operate a nonresettable fuel meter and a nonresettable elapsed operating time meter. In lieu of installing a nonresettable fuel meter, the owner or operator may use a non-resettable elapsed operating time meter in conjunction with the engine manufacturer's maximum rated fuel consumption to determine annual fuel usage. The owner or operator shall maintain the required meters in proper operating condition. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit

25. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 4702 and 40 CFR 63, ZZZZ]

26. On and after October 19, 2013, the permittee must 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. [40 CFR 63, ZZZZ]

27. On and after October 19, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63, ZZZZ]

28. On and after October 19, 2013, the engine's oil and filter shall be changed every 1,440 hours of operation or every 12 months, whichever comes first. [40 CFR 63, ZZZZ]

29. On and after October 19, 2013, the engine's spark plugs shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ]

30. On and after October 19, 2013, the engine's hoses and belts shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ]

31. On and after October 19, 2013, the permittee shall maintain monthly records that include any information necessary to demonstrate compliance with 40 CFR 63, ZZZZ. [40 CFR 63, ZZZZ]

32. On and after October 19, 2013, the permittee shall maintain monthly records of all performance tests, opacity and visible emissions observations and required maintenance performed on the air pollution control and monitoring equipment. [District Rule 1070 and 40 CFR 63, ZZZZ]

33. On and after October 19, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of the operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of the action(s) taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning operation and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070 and 40 CFR 63, ZZZZ]

34. The Permittee shall begin the daily recording of the inlet temperature to the catalyst bed by June 26, 2012 in order to ensure compliance with the requirements of 40 CFR 64, Compliance Assurance Monitoring (CAM). [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

35. Pursuant to Rule 4702, beginning in 2015, the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by June 30 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4702 Table 2. [District Rule 4702]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-101-6 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
180 BHP INGERSOLL-RAND, MODEL JVG-6, GAS-FIRED IC ENGINE (SERIAL # 6BJ518) WITH NSCR DRIVING RECYCLE COMPRESSOR UNIT SERVING THE DIESEL HYDROTREATER (#S 37-77)

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
2. Kern Oil and Refining Company shall operate and maintain controls as recommended by the emission control system supplier. [District NSR Rule] Federally Enforceable Through Title V Permit
3. NOx emission concentrations shall not exceed 25 ppm by volume at 15% O2 or exhaust emission concentrations shall be reduced by 96%. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
4. VOC emissions concentrations shall not exceed 250 ppmv at 15% O2. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
5. CO emission concentrations shall not exceed 2000 ppm by volume at 15% O2. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
6. Unit shall be fired only on natural gas with a sulfur content of less than or equal to 0.75 grains per 100 dry standard cubic feet of fuel gas. [District NSR Rule, District Rule 4801; and Kern County Rule 407] Federally Enforceable Through Title V Permit
7. Emissions from the engine shall neither exceed SOx (as SO2) - 0.00214 lb/1,000 scf of fuel burned, nor PM10 - 0.017 lb/1,000 scf of fuel burned. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Total volume of fuel gas combusted by the IC engine compressor shall not exceed 1,620 scf/hr. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Leaks from valves and connectors subject to a BACT requirement shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 100 ppmv above background when measured one (1) cm from potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
10. Leaks from pump and compressor seals subject to a BACT requirement shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 500 ppmv above background when measured one (1) cm from potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
11. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. [In-stack O2 monitors may be allowed if approved by the APCO.] Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 2520, 9.3.2 & 9.4.2; 4701, 5.4; and 4702, 5.6 and 6.5] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2; 4701, 5.4; and 4702, 5.6 and 6.5] Federally Enforceable Through Title V Permit
13. All emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken by the portable analyzer shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701, 5.4 and 4702, 5.6] Federally Enforceable Through Title V Permit
14. NOx, CO, and VOC emissions shall be measured (source tested) not less than once every 24 months. [District Rules 4701, 6.3.1 and 4702, 6.3.1] Federally Enforceable Through Title V Permit
15. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081; 4701, 6.4; and 4702, 6.4] Federally Enforceable Through Title V Permit
16. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
17. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
18. If the engine is fired on natural gas certified by the supplier to have a sulfur content of 0.75 grains per 100 dscf or less, then the permittee shall maintain on file copies of all natural gas bills and supplier certifications for a period of five years. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
19. If the engine is not fired on natural gas certified by the supplier to have a sulfur content of 0.75 grains per 100 dscf or less, then the sulfur content of the natural gas being fired in the engine shall be determined using ASTM method D 1072, D 3031, D 4084 or D 3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. If the engine is not fired on natural gas certified by the supplier to have a sulfur content of 0.75 grains per 100 dscf or less, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. Permittee shall maintain accurate records of fuel gas BTU content, and daily records of volume and sulfur content of gas burned. [District Rule 1070] Federally Enforceable Through Title V Permit
22. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. The permittee shall maintain records of: (1) total hours of operation; (2) type and quantity of fuel used; (3) maintenance or modifications performed; (4) the date and time of NOx, CO, and O2 measurements; (5) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2; (6) make and model of exhaust gas analyzer; (7) exhaust gas analyzer calibration records; and (8) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701, 6.2 and 4702, 6.2] Federally Enforceable Through Title V Permit

24. The permittee shall install and operate a nonresettable fuel meter and a nonresettable elapsed operating time meter. In lieu of installing a nonresettable fuel meter, the owner or operator may use a non-resettable elapsed operating time meter in conjunction with the engine manufacturer's maximum rated fuel consumption to determine annual fuel usage. The owner or operator shall maintain the required meters in proper operating condition. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit

25. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 4702 and 40 CFR 63, ZZZZ]

26. On and after October 19, 2013, the permittee must 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. [40 CFR 63, ZZZZ]

27. On and after October 19, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63, ZZZZ]

28. On and after October 19, 2013, the engine's oil and filter shall be changed every 1,440 hours of operation or every 12 months, whichever comes first. [40 CFR 63, ZZZZ]

29. On and after October 19, 2013, the engine's spark plugs shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ]

30. On and after October 19, 2013, the engine's hoses and belts shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ]

31. On and after October 19, 2013, the permittee shall maintain monthly records that include any information necessary to demonstrate compliance with 40 CFR 63, ZZZZ. [40 CFR 63, ZZZZ]

32. On and after October 19, 2013, the permittee shall maintain monthly records of all performance tests, opacity and visible emissions observations and required maintenance performed on the air pollution control and monitoring equipment. [District Rule 1070 and 40 CFR 63, ZZZZ]

33. On and after October 19, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of the operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of the action(s) taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning operation and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070 and 40 CFR 63, ZZZZ]

34. The Permittee shall begin the daily recording of the inlet temperature to the catalyst bed by June 26, 2012 in order to ensure compliance with the requirements of 40 CFR 64, Compliance Assurance Monitoring (CAM). [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

35. Pursuant to Rule 4702, beginning in 2015, the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by June 30 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4702 Table 2. [District Rule 4702]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-102-6 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
10,000 BBL (420,000 GALLON) FIXED ROOF ORGANIC LIQUID STORAGE TANK #10005 SERVED BY VAPOR CONTROL SYSTEM LISTED ON PTO S-37-8

PERMIT UNIT REQUIREMENTS

1. Tank shall vent only to vapor recovery system listed on permit S-37-8. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in District Rule 4623. [District NSR Rule, District Rule 4623] Federally Enforceable Through Title V Permit
3. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
4. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
5. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
6. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
7. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
8. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
10. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
14. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
15. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. VOC emissions from fugitive emissions sources in this permit unit shall not exceed 4.5 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
18. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Operator shall maintain records to demonstrate compliance with fugitive VOC emissions limit of this permit annually. Compliance shall be demonstrated by calculation, using the correlation equations, zero default and 10,000 ppmv pegged factors set forth in the CAPCOA California implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-3a, February 1999, and the average emission concentrations of total organic compounds measured for each component during all inspections conducted during the prior 365 day period. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

20. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

21. This unit commenced construction, modification, or reconstruction between May 18, 1978 and July 23, 1984. Therefore, the requirements of 40 CFR 60 Subpart K and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

22. Permittee shall comply with all applicable requirements of 40 CFR 60, Subpart Ka. [District Rule 4001] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-103-10 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
49.0 MMBTU/HR NATURAL-GAS/REFINERY FIRED FORCED AIR BOILER #11 WITH A NORTH AMERICAN MODEL 4796-24 MAGNA-FLAME BURNER AND FGR UTILIZING ELECTRIC OR STEAM FANS

PERMIT UNIT REQUIREMENTS

1. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
2. The duration of each startup and shutdown period for the 49.0 MMBtu/hr Coen dual-fired induced draft broiler shall not exceed 6.1 hours and 3.5 hours respectively. Emission limits of District Rule 4305 and 4306 shall be waived during periods of startup and shutdown. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
3. The combustion in the fuel gas combustion devices of gases released as a result of start-up, shutdown, upset, malfunction, or the result of relief valve leakage is exempt from the H2S or sulfur content requirement. [District Rules 2201, 4001, Subpart J, 60.104(a)(1)] Federally Enforceable Through Title V Permit
4. Particulate matter emissions shall not exceed 0.1 grain/dscf, calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
5. Total combined steam production shall not exceed 80,000 lbm/hr from this permit unit and permit S-37-6. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Emission rates shall not exceed any of the following: PM10: 0.005 lb/MMBtu; SOx (as SO2): 0.027 lb/MMBtu (@ 161 ppmv-H2S); NOx: 0.036 lb/MMBtu (@ 3% O2) VOC: 0.0048 lb/MMBtu; or CO: 0.2578 lb/MMBtu or 344 ppmv @ 3% O2. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
7. Source testing to demonstrate compliance with NOx, CO, and VOC emission limits shall be conducted not less than once every 12 months for NOx and CO, except as provided below. [District NSR Rule and District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
8. District witnessed source testing to demonstrate compliance with NOx and CO emission limits shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
9. If permittee fails any compliance demonstration for NOx and/or CO emission limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
10. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by CARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
11. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

13. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, and stack gas oxygen - EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit

14. Permittee shall comply with all applicable testing, recordkeeping, and reporting requirements specified in Rule 4001 - New Source Performance Standards, including but not limited to Subparts A and J. [District Rule 4001] Federally Enforceable Through Title V Permit

15. The permittee shall monitor and record the stack concentration of NOX, CO, and O2 at least once every month (in which a source test is not performed) using a portable analyzer that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305 and 4306]

16. If either the NOX or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305 and 4306]

17. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305 and 4306]

18. The permittee shall maintain records of: (1) the date and time of NOX, CO, and O2 measurements, (2) the O2 concentration in percent by volume and the measured NOX and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305 and 4306]

19. Refinery fuel gas burned in this unit shall be continuously monitored for H2S content and records of such measurements shall be maintained for a period of at least five years and exceedances of 161 ppmv H2S shall be reported as required by Rule 4001. [District Rule 4001] Federally Enforceable Through Title V Permit

20. The permittee shall maintain accurate records of the following: fuel usage and higher heating value (HHV); fuel gas sulfur content; and hourly steam production rate for this permit unit and permit S-37-6. [District Rule 1070 and 40CFR 60.48c(g)(2)] Federally Enforceable Through Title V Permit

21. Draeger tubes shall be used as an alternative method for measuring fuel gas H2S during scheduled maintenance or unscheduled interruptions of CEMs. Draeger tube use shall be limited to no more than 96 continuous hours and fuel gas H2S shall be checked a minimum of every two hours during scheduled maintenance or unscheduled interruptions of CEMs. Alternate method of measuring fuel gas H2S shall occur no more than 192 hours in any calendar year. [40CFR60.13(i)] Federally Enforceable Through Title V Permit

22. Operator shall maintain all records of the reason for alternative monitoring and required fuel gas H2S monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320]

24. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-107-4 **EXPIRATION DATE:** 08/31/2022

EQUIPMENT DESCRIPTION:
LPG, NATURAL GASOLINE, & MIXED LIGHT HYDROCARBON LOADING/UNLOADING RACK (RACK V) WITH VAPOR COLLECTION SYSTEM SERVING TANKS S-37-108 & -109

PERMIT UNIT REQUIREMENTS

1. Valves, flanges, and threaded connections shall be operated and maintained in leak free condition. A gas leak shall be defined as a reading of methane, in excess of 100 ppmv above the background when measured at distance of one (1) centimeter from potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Pump and compressor seals shall be operated and maintained in leak free condition. A gas leak shall be defined as a reading of methane, in excess of 500 ppmv above the background when measured at distance of one (1) centimeter from potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
3. All truck unloading lines and hoses and vapor return line and hoses shall be operated and maintained in leak-free condition. A leak shall be defined as a reading of methane, in excess of 100 ppmv above the background when measured at distance of one (1) centimeter from potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
4. All liquids remaining in loading/unloading arms shall be drained back into tank before disconnect. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Only LPG, natural gasoline, and mixed light hydrocarbons shall be loaded and unloaded. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Truck contents shall only be unloaded into pressure storage tanks operating with valid SJVUAPCD Permit to Operate. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Fugitive VOC emissions from components in the piping from loading/unloading rack to pressure tanks (S-37-108 & -109) shall not exceed 23.42 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Liquid drippage on disconnects shall not exceed 10 milliliters (mL)/disconnect. [District NSR Rule] Federally Enforceable Through Title V Permit
9. No more than 56 disconnects shall be allowed in any day without prior District approval. [District NSR Rule] Federally Enforceable Through Title V Permit
10. Vapor return lines shall be used whenever tank trucks are loading or unloading to return vapors to tank vapor space. [District NSR Rule] Federally Enforceable Through Title V Permit
11. For a Class 1 organic liquid transfer facility, the emission of VOC from the transfer operation shall not exceed 0.08 pounds per 1,000 gallons of organic liquid transferred. Compliance with the leak standards on this permit will serve to demonstrate compliance with this limit. [District Rule 4624]
12. The VOC from the transfer operation shall be routed to a pressure vessel equipped with an APCO-approved vapor recovery system that meets the control requirements specified in Rule 4623 (Storage of Organic Liquids). [District Rule 4624]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. All delivery tanks which previously contained organic liquids with a TVP 1.5 psia or greater at the storage container's maximum organic liquid storage temperature shall be filled only at Class 1 loading facilities using bottom loading equipment with a vapor collection and control system operating such that VOC emissions do not exceed 0.08 lb/1000 gallons loaded; or Class 2 loading facilities equipped with a system to control at least 95% of VOC displaced. [District Rule 4624] Federally Enforceable Through Title V Permit
14. Construction, reconstruction (as defined in District Rule 4001) or expansion of any top loading facility shall not be allowed. [District Rule 4624] Federally Enforceable Through Title V Permit
15. Loading and vapor collection and control equipment shall be designed, installed, maintained and operated such that there are no leaks or excess organic liquid drainage at disconnections. A liquid leak shall be defined as the dripping of organic compounds at a rate of more than three drops per minute. Excess liquid drainage shall be defined as exceeding 10 mL per disconnect. [District Rules 2201 and 4624]
16. During the loading of organic liquids, the operator shall perform and record the results of monthly leak inspections of the loading and vapor collection equipment at each loading arm. Leak inspections shall be conducted using sight, sound, smell and instrument methods to detect leaks. Instrument detection shall be conducted using EPA Method 21 and shall be measured at a distance of one centimeter from the potential source. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: A) Zero air (less than 10 ppm of hydrocarbon in air); and B) Mixture of methane or n-hexane and air at a concentration of about, but less than 100 ppmv (or 500 ppmv for pump and compressor seal leak inspection) methane or n-hexane. [District Rule 2520] Federally Enforceable Through Title V Permit
17. All equipment that are found leaking shall be repaired or replaced within 72 hours. If the leaking component cannot be repaired or replaced within 72 hours, the component shall be taken out of service until such time the component is repaired or replaced. The repaired or replacement equipment shall be reinspected the first time the equipment is in operation after the repair or replacement. [District Rule 4624]
18. Corrective steps shall be taken at any time the operator observes excess drainage at disconnect. In addition, the operator shall perform and record the results of monthly drainage inspections at disconnect for each loading arm. If no excess drainage conditions are found during five consecutive monthly inspections, the drainage inspection frequency may be changed from monthly to quarterly. However, if one or more excess drainage condition is found during a quarterly inspection, the inspection frequency shall return to monthly. [District Rule 2520, 9.1, 9.3.2, 9.4.2] Federally Enforceable Through Title V Permit
19. All inspections shall be documented with an inspection log. Inspection records shall include, at a minimum, 1) date of inspection, 2) location and description of any missing, loose, leaking, or damaged equipment and any malfunction requiring repair, 3) corrective steps taken to repair or replace the equipment, 4) test method and results for leak and drainage inspections, 5) location and description of any equipment to be inspected upon commencing operation after repair or replacement and 6) inspector name and signature. [District Rule 4624, 6.1.3]
20. Permittee shall maintain with the permit, accurate fugitive component counts (from loading/unloading rack to pressure tanks) and resulting emissions calculated using U.S. EPA publication EPA-453/R-95-017. [District NSR Rule] Federally Enforceable Through Title V Permit
21. Permittee shall maintain records of disconnects occurred in any one day on daily basis and shall make such records available for District inspection upon request. [District Rule 1070]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-108-3 **EXPIRATION DATE:** 08/31/2022

EQUIPMENT DESCRIPTION:
5,000 BBL SPHERICAL PRESSURE VESSEL STORING LPG, NATURAL GASOLINE, OR MIXED LIGHT HYDROCARBONS (TANK S-5000, EAST SPHERE)

PERMIT UNIT REQUIREMENTS

1. Pressure vessel shall maintain sufficient working pressure all the times that no organic liquid loss or VOC loss to the atmosphere shall occur. [District Rule 4623 & District NSR Rule] Federally Enforceable Through Title V Permit
2. Valves, flanges, and threaded connection shall be operated and maintained in leak free condition. A leak shall be defined as a reading of methane, in excess of 100 ppmv above the background when measured at distance of one (1) centimeter from potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Pump and compressor seals shall be operated and maintained in leak free condition. A leak shall be defined as a reading of methane, in excess of 500 ppmv above the background when measured at distance of one (1) centimeter from potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Fugitive VOC emissions from components in the piping from pressure tanks (S-37-108 & -109) to blending manifold shall not exceed 3.91 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Permittee shall maintain with the permit, accurate fugitive component counts (from pressure tanks to blending manifold) and resulting emissions calculated using U.S. EPA publication EPA-453/R-95-017. [District NSR Rule] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-109-3 **EXPIRATION DATE:** 08/31/2022

EQUIPMENT DESCRIPTION:
5,000 BBL SPHERICAL PRESSURE VESSEL STORING LPG, NATURAL GASOLINE, OR MIXED LIGHT HYDROCARBONS (TANK S-5001, WEST SPHERE)

PERMIT UNIT REQUIREMENTS

1. Pressure vessel shall maintain sufficient working pressure all the times that no organic liquid loss or VOC loss to the atmosphere shall occur. [District Rule 4623 & District NSR Rule] Federally Enforceable Through Title V Permit
2. Valves, flanges, and threaded connection shall be operated and maintained in leak free condition. A leak shall be defined as a reading of methane, in excess of 100 ppmv above the background when measured at distance of one (1) centimeter from potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Pump and compressor seals shall be operated and maintained in leak free condition. A leak shall be defined as a reading of methane, in excess of 500 ppmv above the background when measured at distance of one (1) centimeter from potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Fugitive VOC emissions from components in the piping from pressure tanks (S-37-108 & -109) to blending manifold shall not exceed 3.91 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Permittee shall maintain with the permit, accurate fugitive component counts (from pressure tanks to blending manifold) and resulting emissions calculated using U.S. EPA publication EPA-453/R-95-017. [District NSR Rule] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-111-7 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30E **RANGE:** 28E

EQUIPMENT DESCRIPTION:
55,000 BBL ORGANIC LIQUID INTERNAL FLOATING ROOF TANK (#55000), WELDED CONSTRUCTION WITH MECHANICAL SHOE PRIMARY SEAL AND RIM-MOUNTED SECONDARY SEAL

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102] Federally Enforceable Through Title V Permit
2. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623, 5.4.1, 5.3.2.1.1] Federally Enforceable Through Title V Permit
3. The cumulative length of all primary seal gaps greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623, 5.4.1, 5.3.2.1.1] Federally Enforceable Through Title V Permit
4. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623, 5.4.1, 5.3.2.1.1] Federally Enforceable Through Title V Permit
5. No continuous gap greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623, 5.4.1, 5.3.2.1.1] Federally Enforceable Through Title V Permit
6. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623, 5.4.1, 5.3.2.1.2] Federally Enforceable Through Title V Permit
7. The cumulative length of all secondary seal gaps greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623, 5.4.1, 5.3.2.1.2] Federally Enforceable Through Title V Permit
8. The metallic shoe-type seal shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 18 inches above the stored liquid surface. [District Rule 4623, 5.4.1, 5.3.2.1.3] Federally Enforceable Through Title V Permit
9. The maximum gap between the shoe and the tank shell shall be no greater than double the gap allowed by the seal gap criteria for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623, 5.4.1, 5.3.2.1.4] Federally Enforceable Through Title V Permit
10. There shall be no tears, holes or openings in the secondary seal or in the primary seal envelope surrounding the annular vapor space enclosed by the roof edge, stored liquid surface, shoe, and seal fabric. [District Rule 4623, 5.4.1, 5.3.2.1.5] Federally Enforceable Through Title V Permit
11. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.4.1, 5.3.2.1.6] Federally Enforceable Through Title V Permit
12. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623, 5.4.1, 5.3.2.1.7] Federally Enforceable Through Title V Permit
13. Pressure-vacuum valves shall be set to within ten (10) percent of the maximum allowable working pressure of the roof. [District Rule 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

14. All roof openings used for sampling and gauging, except pressure vacuum valves, shall be closed at all times, with no visible gaps and be leak free (as defined in Rule 4623), except when the roof opening is in use. [District Rule 4623] Federally Enforceable Through Title V Permit
15. Any roof drain shall be provided with a slotted membrane fabric cover, or equivalent, that covers at least 90% of the area of the opening. [District Rule 4623] Federally Enforceable Through Title V Permit
16. The permittee shall keep accurate records of Reid vapor pressure, storage temperature, daily tank throughput, and types of liquids stored, for a period of five years, and shall make such records available for District inspection upon request. [District Rules 2201 & 4623] Federally Enforceable Through Title V Permit
17. Daily tank throughput shall not exceed 30,000 bbl/day of fluid. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Reid vapor pressure of the stored liquid shall not exceed 11 psia. [District Rules 2201 & 4623] Federally Enforceable Through Title V Permit
19. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually inspect the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 5] Federally Enforceable Through Title V Permit
20. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 5] Federally Enforceable Through Title V Permit
21. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 5] Federally Enforceable Through Title V Permit
22. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 5] Federally Enforceable Through Title V Permit
23. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 5 shall constitute a violation of this rule. [District Rule 4623, Table 5] Federally Enforceable Through Title V Permit
24. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623, Table 5]
25. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 5] Federally Enforceable Through Title V Permit
26. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

27. This unit commenced construction, modification, or reconstruction prior to May 19, 1978. Therefore, the requirements of 40 CFR 60 Subpart Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

28. Permittee shall comply with all applicable requirements of 40 CFR 60, Subpart K. [District Rule 4001]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-114-6 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
SOLAR CENTAUR C-50 COGENERATION SYSTEM WITH NATURAL GAS FIRED SOLAR TURBINE, INC. GAS TURBINE ENGINE (GTE) WITH DRY LOW NOX (DLN) COMBUSTORS POWERING A 4.968 MEGAWATT ELECTRICAL GENERATOR, 23 MMBTU/HR NATURAL GAS FIRED DUCT BURNER, HEAT RECOVERY STEAM GENERATOR, SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM, AND OXIDATION CATALYST

PERMIT UNIT REQUIREMENTS

1. Heat recovery steam generator design shall provide space for additional catalysts if additional catalyst are necessary to achieve NOx or CO emissions limits. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Gas turbine engine lube oil vents, generator lube oil vents, and lube oil accumulator vents shall be equipped with mist eliminators. Lube oil vents shall not exhibit visible emission of 5% opacity or greater except for up to three minutes in any hour. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Gas turbine engine shall be equipped with continuously monitoring and totalizing fuel gas fuel flowmeter. Duct burner shall be equipped with continuously monitoring and totalizing fuel gas flowmeter. Selective catalytic reduction system shall be equipped with continuously monitoring ammonia injection flowmeter and continuously monitoring catalyst inlet temperature indicator. The permittee shall record the ammonia injection rate and catalyst inlet temperature at least once every 8 hours. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods. [District Rule 1081] Federally Enforceable Through Title V Permit
5. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Each startup and each shutdown shall not exceed three hours and one hour, respectively, in duration. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. [District Rule 4703] Federally Enforceable Through Title V Permit
8. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rule 4703] Federally Enforceable Through Title V Permit
9. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit
10. Gas turbine engine and duct burner shall be fired on natural gas, consisting primarily of methane and ethane, with a sulfur content no greater than 1.0 grains of sulfur compounds (as S) per 100 dry scf of natural gas. [District Rules 2201, 4001, and 40 CFR 60.332 and 40 CFR 60.334] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Sulfur content of the natural gas being fired in the turbine shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for eight (8) consecutive weeks, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the permittee must return to weekly testing until eight (8) consecutive weeks show compliance. Natural gas vendor test data consistent with the natural gas fuel sulfur content test method listed in this permit may be used as verification of compliance with the fuel sulfur content limit. [District Rule 4001 and 40 CFR 60.334(i)] Federally Enforceable Through Title V Permit
12. The permittee shall maintain records of natural gas fuel sulfur content verification. [District Rule 4001 and 40 CFR 60.334(h)] Federally Enforceable Through Title V Permit
13. Total heat input to the gas turbine engine and duct burner shall not exceed 674,520 MMBtu in any rolling twelve month period. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Ammonia shall be injected whenever the selective catalytic reduction system catalyst temperature exceeds the minimum ammonia injection temperature recommended by the manufacturer. The minimum ammonia injection rate shall not be less than 6.5 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
15. If the ammonia injection rate is less than the minimum ammonia injection rate the permittee shall return the ammonia injection rate above the minimum ammonia injection rate as soon as possible, but no longer than 8 hours after detection. If the ammonia injection rate is not returned above the minimum ammonia injection rate within 8 hours, the permittee shall notify the District within the following 1 hour and conduct a source test within 60 days of the first exceedance to demonstrate compliance with the applicable emission limits at the reduced ammonia injection rate. A District-approved portable analyzer may be used in lieu of a source test to demonstrate compliance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Emissions rates from gas turbine engine and duct burner, except during startup and shutdown, shall not exceed any of the following: NOx (as NO2) 5.0 ppmvd @ 15% O2; PM10 0.0069 lb/MMBtu; CO 10.0 ppmvd @ 15% O2; VOC 6.25 ppmvd @ 15% O2; or ammonia 10 ppmvd @ 15% O2. NOx emissions limit is a one hour average. All other emissions limits are three hour rolling averages. [District Rules 2201, 4703, 5.1.2, 5.2 and 7.2; and 40 CFR 60.332(a)(2)] Federally Enforceable Through Title V Permit
17. Emissions from gas turbine engine and duct burner shall not exceed any of the following: NOx (as NO2) 36.5 lb/day; SOx (as SO2) 5.8 lb/day; PM10 13.7 lb/day; CO 44.4 lb/day; or VOC 15.8 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Emissions in any rolling 12 month period from gas turbine engine and duct burner shall not exceed any of the following: NOx (as NO2) 12,411 lb; SOx (as SO2) 1,956 lb; PM10 4,650 lb; CO 15,109 lb; or VOC 5,396 lb. [District Rule 2201] Federally Enforceable Through Title V Permit
19. The exhaust gas concentration of NOx (as NO2), CO, and O2 shall be measured and recorded at least once a week using District approved portable analyzers. [District Rule 2201] Federally Enforceable Through Title V Permit
20. If the NOx and/or CO concentrations, as measured by the permittee with a portable analyzer, exceed the permitted emission limits, the permittee shall notify the District and return the NOx and CO concentrations to the permitted emission limits as soon as possible but no longer than eight (8) hours after detection. If the permittee's portable analyzer readings continue to exceed the permitted emission limits after eight (8) hour, the permittee shall notify the District within the following one (1) hour, and conduct a certified source test within 60 days to demonstrate compliance with permitted emissions limits. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

21. Source testing to determine NOx (as NO2), CO, VOC, ammonia emissions, and fuel gas sulfur content shall be conducted at least once every twelve months. SCR catalyst inlet temperature and ammonia injection rate shall be recorded during any source testing. [District Rules 1081 and 4703] Federally Enforceable Through Title V Permit

22. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any source test, and a source test plan must be submitted for approval 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

23. The following test methods shall be used NOx: EPA Method 7E or 20; PM10: EPA method 5 (front half and back half); CO: EPA method 10 or 10B; VOC: EPA method 18; O2: EPA Method 3, 3A, or 20; ammonia: BAAQMD ST-1B; natural gas fuel total reduced sulfur content: ASTM D1945, D3246, D5504, or D6228; and natural gas higher heating value (HHV): ASTM D3588, 1826, or 1945. [District Rules 1081, 2201, 4001, 40 CFR 60 Subpart GG, and District Rule 4703, 6.4.4 and 6.4.5] Federally Enforceable Through Title V Permit

24. The permittee shall maintain records of the date and time of all NOx, CO, and O2 measurements, the measured NO2 and CO concentrations corrected to 15% O2, and the O2 concentration. The records shall also include a description of any corrective action taken to maintain the emissions in the acceptable range. [District Rule 1070] Federally Enforceable Through Title V Permit

25. The permittee shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local startup and stop time, length and reason for reduced load periods, total hours of operation, the type and quantity of fuel used, duration of each start-up (or black start) and shutdown period, and the date, time, and duration of each primary re-ignition period. [District Rule 4703] Federally Enforceable Through Title V Permit

26. The permittee shall maintain records of daily and rolling twelve month natural gas consumption (MMBtu) of gas turbine engine and duct burner, daily and rolling twelve month calculated emissions, ammonia injection rate, and catalyst inlet temperature. [District Rule 2201] Federally Enforceable Through Title V Permit

27. All records required to be maintained by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-116-6 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
14.1 MMBTU/HR SPLITTER REBOILER HEATER SERVING PERMIT UNIT S-37-4

PERMIT UNIT REQUIREMENTS

1. Copies of all fuel invoices, gas purchase contract, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. Operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel [District NSR Rule and 2520, 9.4.2] Federally Enforceable Through Title V Permit
2. Refinery fuel gas supply to heater shall be equipped with continuous H2S monitor meeting the requirements of NSPS Subpart J. [District Rule 4001]
3. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. [District Rule 2520, 9.3.2; District Rule 4301, 5.2.1] Federally Enforceable Through Title V Permit
4. Particulate matter emissions shall not exceed 0.1 grain/dscf. Emissions of combustion contaminants shall not exceed 0.1 grain per cubic foot of gas calculated to 12% CO2 at dry standard conditions. Emissions of combustion contaminants shall not exceed ten (10) pounds per hour. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
5. Nitrogen oxide (NOx) emission concentrations in ppmv shall be referenced at dry stack gas conditions, and shall be calculated to 3.00 percent by volume stack gas oxygen and averaged over 60 minutes, and lb/MMBtu rates shall be calculated as lb NO2/MMBtu of heat input (hhv). [District Rules 4305, 5.0, 8.2, 4306, 5.0, 8.2 and 4351, 8.1] Federally Enforceable Through Title V Permit
6. Nitrogen oxide (NOx) emissions shall not exceed 0.036 lb NOx/MMBtu or 30 ppmv @ 3% O2 . [District Rule 4351, 5.2.2 and 5.4, and /or District Rule 4305, 5.1, and /or District Rule 4306, 5.1 and subsumed District Rule 4301] Federally Enforceable Through Title V Permit
7. Splitter reboiler process heater shall be equipped with John Zink PSMR and shall be fired exclusively on PUC or FERC regulated natural gas or refinery fuel gas. [District NSR Rule and District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit
8. The duration of each startup and shutdown period for the 14.1 MMBtu/hr Splitter Reboiler process heater shall not exceed 8.5 hours and 5.6 hours respectfully. Emission limits of District Rule 4305 and 4306 shall be waived during periods of startup and shutdown. [District Rules 4305, 5.5.6 and 4306, 5.3] Federally Enforceable Through Title V Permit
9. Daily fuel throughput shall not exceed 338,000 scf/day. [District NSR Rule and 4102] Federally Enforceable Through Title V Permit
10. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 2520, 9.3.2; District Rule 4801] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Compliance with sulfur compound emission limits may be demonstrated by firing this unit either on PUC or FERC regulated natural gas or refinery gas with a sulfur content of no more than 1 gr/100 scf (17 ppmv H2S) for PUC or FERC-regulated gas and 100 ppmv (100 ppmv H2S) for refinery fuel gas according to the H2S monitor installed downstream of the sulfur recovery unit. [District NSR Rule, 4301, 4801 and 2520, 9.3.2]
12. Fuel sulfur content shall not exceed 100 ppmv (as H2S). [District Rule 2201]
13. Emission rates for the 14.1 MMBtu/hr splitter reboiler process heater shall not exceed any of the following: PM10: 0.005 lb/MMBtu; NOx (as NO2): 0.036 lb/MMBtu or 30 ppmv @3% O2; VOC: 0.0028 lb/MMBtu; or CO: 239 ppmvd @ 3% O2. [District NSR Rule and District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit
14. Compliance source testing shall be conducted under conditions representative of normal operation. [District Rule 1081] Federally Enforceable Through Title V Permit
15. Process heaters exhaust stacks shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 1081] Federally Enforceable Through Title V Permit
16. Source testing to measure NOx and CO emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305 and 4306]
17. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305 and 4306]
18. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
19. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305 and 4306]
20. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305 and 4306]
21. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305 and 4306]
22. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305 and 4306]
23. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
24. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, and 4306]
25. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
26. The permittee shall monitor and record the stack concentration of NOX, CO, and O2 at least once every month (in which a source test is not performed) using a portable analyzer that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305 and 4306]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

27. If either the NOX or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305 and 4306]
28. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305 and 4306]
29. The permittee shall maintain records of: (1) the date and time of NOX, CO, and O2 measurements, (2) the O2 concentration in percent by volume and the measured NOX and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305 and 4306]
30. Draeger tubes shall be used as an alternative method for measuring fuel gas H2S during scheduled maintenance or unscheduled interruptions of CEMs. Draeger tube use shall be limited to no more than 96 continuous hours and fuel gas H2S shall be checked a minimum of every two hours during scheduled maintenance or unscheduled interruptions of CEMs. Alternate method of measuring fuel gas H2S shall occur no more than 192 hours in any calendar year. [40CFR60.13(i)] Federally Enforceable Through Title V Permit
31. Operator shall maintain all records of the reason for alternative monitoring and required fuel gas H2S monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
32. Permittee shall comply with all notification and recordkeeping requirements of 40 CFR 60.19. [District Rule 4001]
33. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320]
34. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-118-4 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
NAPHTHA FEED PRETREATMENT UNIT (NAPHTHA HYDROTREATER) WITH 12.6 MMBTU/HR CHARGE HEATER WITH JOHN ZINK COOLSTAR LOW NOX BURNER, 11.1 MMBTU/HR STRIPPER REBOILER HEATER WITH JOHN ZINK COOLSTAR LOW NOX BURNER, REACTOR VESSEL, HYDROGEN COMPRESSORS, HEAT EXCHANGERS, AND ASSOCIATED SEPARATOR VESSELS, KNOCKOUTS, PIPING, AND COMPONENTS

PERMIT UNIT REQUIREMENTS

1. Permittee shall comply with all applicable testing, recordkeeping, and reporting requirements specified in Rule 4001 - New Source Performance Standards, including but not limited to Subparts A and J. [District Rule 4001] Federally Enforceable Through Title V Permit
2. Heaters shall be fired only on purchased commercial natural gas, refinery fuel gas, or any combination thereof. [District Rule 2201, 4001] Federally Enforceable Through Title V Permit
3. Operator shall not burn in any fuel gas combustion device any fuel gas that contains hydrogen sulfide (H2S) in excess of 100 ppmv@ 0% O2. [District Rules 2201 ,2520, 9.4.2 and 4301, 5.2.1, & 40 CFR Part 60, Subpart J, 60.104(a)(1)] Federally Enforceable Through Title V Permit
4. The combustion in the fuel gas combustion devices of gases released as a result of start-up, shutdown, upset, malfunction, or the result of relief valve leakage is exempt from the H2S or sulfur content requirement. [District Rules 2201, 4001, Subpart J, 60.104(a)(1)] Federally Enforceable Through Title V Permit
5. All refinery fuel gas combusted in the heaters shall be monitored for H2S content by a continuous emissions monitoring (CEM) system. CEM shall be installed, calibrated, operated, and reported according to EPA guidelines as specified under 40 CFR 60, Subpart J, Specification 7, and general requirements. CEM results shall be calculated on a rolling three (3) hour basis. [District Rules 2201, 4001, Subpart J, 60.105(a)(4) and 60.105(a)(4)iii] Federally Enforceable Through Title V Permit
6. Operator shall report all rolling 3-hour periods during which the average concentration of H2S as measured by the H2S continuous monitoring system exceeds 100 ppmv@ 0% O2. [District Rules 2201, 4001, Subpart J, 60.105(e)(3)(ii)] Federally Enforceable Through Title V Permit
7. Emission rates from each heater, except during startup and shutdown, shall not exceed any of the following: NOx (as NO2): 25 ppmv @ 3% O2, VOC: 0.0055 lb/MMBtu, or CO: 150 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
8. PM10 emission rates from each heater shall not exceed 0.0076 lb/MMBtu. [District Rules 2201, 2520, 4201, 4301] Federally Enforceable Through Title V Permit
9. The duration of each startup and shutdown period for the charge heater shall not exceed 12.0 hours and 5.8 hours respectfully. The duration of each startup and shutdown period for the reboiler heater shall not exceed 12.0 hours and 5.0 hours respectfully. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
11. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit
12. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit
13. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit
14. Heater exhaust stacks shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 1081] Federally Enforceable Through Title V Permit
15. Source testing to demonstrate compliance with NOx and CO emission limits shall be conducted within 60 days of startup and not less than once every 12 months, except as provided below. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit
16. Source testing to demonstrate compliance with NOx and CO emission limits shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit
17. If permittee fails any compliance demonstration for NOx or CO emission limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit
18. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
19. Compliance source testing shall be conducted under conditions representative of normal operation. [District Rule 1081] Federally Enforceable Through Title V Permit
20. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
21. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, and stack gas oxygen - EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit
23. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(Amended December 16, 1993). [District Rule 1081, and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
24. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results used to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
25. Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
26. Test results submitted to the District from unit(s) representing a group of units may be used to demonstrate compliance with NOx limits for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. [District Rule 4305, 6.3.2 and 4351, 6.3] Federally Enforceable Through Title V Permit
27. The following conditions must be met for representative unit(s) used to demonstrate compliance for NOx limits for a group of units: 1) all units are initially source tested and emissions from all units in group are similar, 2) all units in group are similar in terms of rated heat input, make and series, operation conditions, fuel used, and control method, 3) the group is owned by a single owner and located at a single stationary source, and 4) all units in the group shall have received the same maintenance and tune-up procedures as the representative unit(s). [District Rule 4305, 6.3.2] Federally Enforceable Through Title V Permit
28. The number of representative units source tested to demonstrate compliance for NOx limits shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that when 3 source test cycles have been completed, all units in the entire group will have been tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
29. Nitrogen oxide (NOx) emission concentrations in ppmv shall be referenced at dry stack gas conditions, and shall be calculated to 3.00 percent by volume stack gas oxygen and averaged over 60 minutes, and lb/MMBtu rates shall be calculated as lb NO2/MMBtu of heat input (hhv). [District Rule 4305, 5.0, 8.2 and/or 4351, 8.1] Federally Enforceable Through Title V Permit
30. Draeger tubes shall be used as an alternative method for measuring fuel gas H2S during scheduled maintenance or unscheduled interruptions of CEMs. Draeger tube use shall be limited to no more than 96 continuous hours and fuel gas H2S shall be checked a minimum of every two hours during scheduled maintenance or unscheduled interruptions of CEMs. Alternate method of measuring fuel gas H2S shall occur no more than 192 hours in any calendar year. [40CFR60.13(i)] Federally Enforceable Through Title V Permit
31. Operator shall maintain all records of the reason for alternative monitoring and required fuel gas H2S monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
32. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320]
33. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320]
34. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, and 4306] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

35. VOC emission rate from fugitive components associated with this emissions unit shall not exceed 30.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

36. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. Permit holder shall update such records when new components are approved and installed. Components shall be screened and leak rate shall be measured in accordance with the frequency of inspection specified in Rule 4455 as applicable. [District Rule 2201] Federally Enforceable Through Title V Permit

37. As referenced in this permit, a fugitive component leak shall be defined as the lower of the level specified in applicable rules, permit conditions, or the following: pumps in light liquid service - 1,000 ppmv; compressors - 500 ppmv; pressure relief devices in gas/vapor service - 500 ppmv; valves in gas/vapor and light liquid service - 500 ppmv; agitators - 10,000 ppmv; pumps in heavy liquid service - 2,000 ppmv; valves, and connectors in heavy liquid service, instrumentation systems, and pressure relief devices in liquid service - 500 ppmv; connectors in gas/vapor service and in light liquid service - 500 ppmv. Component type and service referenced in this condition shall be as defined in 40 CFR 63 Subpart H. [District Rule 2201] Federally Enforceable Through Title V Permit

38. Permit unit shall comply with applicable District Rule 4001 (NSPS, Subpart GGG) requirements on facility wide permit S-37-0. [District Rule 4001] Federally Enforceable Through Title V Permit

39. This unit is subject to Rule 4455 Leak Detection and Repair Conditions on the facility wide permit S-37-0. [District Rule 4455] Federally Enforceable Through Title V Permit

40. Permit unit shall comply with applicable Rule 4001 (NSPS, Subpart QQQ) requirements. [District Rule 4001] Federally Enforceable Through Title V Permit

41. Each drain, receiving refinery wastewater from a process unit, shall be equipped with water seal controls. [40 CFR 60.692-2(a)(1)] Federally Enforceable Through Title V Permit

42. Each drain in active service, receiving refinery wastewater from a process unit, shall be checked by visual or physical inspection monthly for indications of low water levels or other conditions that would reduce the effectiveness of the water seal controls. [40 CFR 60.692-2(a)(2)] Federally Enforceable Through Title V Permit

43. Each drain out of active service shall be checked by visual or physical inspection weekly for indications of low water levels or other problems that could result in VOC emissions. As an alternative, the owner or operator may elect to install a tightly sealed cap or plug over a drain that is out of service, inspection shall be conducted initially and semiannually to ensure caps or plugs are in place and properly installed. Whenever low water levels or missing or improperly installed caps or plugs are identified, water shall be added or first efforts at repair shall be made as soon as practicable, but not later than 24 hours after detection, except if the repair is technically impossible without a complete or partial refinery or process unit shutdown. Repair of such equipment shall occur before the end of the next refinery or process unit shutdown [40 CFR 60.692-2(a) and 60.692-6] Federally Enforceable Through Title V Permit

44. Junction boxes in refinery wastewater systems shall be equipped with a cover and may have an open vent pipe. The vent pipe shall be at least 90 cm (3 ft) in length and shall not exceed 10.2 cm (4 in) in diameter. Junction box covers shall have a tight seal around the edge and shall be kept in place at all times, except during inspection and maintenance. [40 CFR 60.692-2(b)(1)] Federally Enforceable Through Title V Permit

45. Junction boxes in refinery wastewater systems shall be visually inspected semiannually to ensure that the cover is in place and to ensure that the cover has a tight seal around the edge. If a broken seal or gap is identified, first effort at repair shall be made as soon as practicable, but not later than 15 calendar days after the broken seal or gap is identified, except if the repair is technically impossible without a complete or partial refinery or process unit shutdown. Repair of such equipment shall occur before the end of the next refinery or process unit shutdown. [40 CFR 60.692-2(b)(3)(4) and 60.692-6] Federally Enforceable Through Title V Permit

46. Sewer lines, conveying refinery wastewater to wastewater treatment system, shall not be open to the atmosphere and shall be covered or enclosed in a manner so as to have no visual gaps or cracks in joints, seals, or other emission interfaces. [40 CFR 60.692-2(c)(1)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

47. The portion of each unburied sewer line shall be visually inspected semiannually for indication of cracks, gaps, or other problems that could result in VOC emissions. Whenever cracks, gaps, or other problems are detected, repairs shall be made as soon as practicable, but not later than 15 calendar days after identification, except if the repair is technically impossible without a complete or partial refinery or process unit shutdown. Repair of such equipment shall occur before the end of the next refinery or process unit shutdown. [40 CFR 60.692-2(c)(2)(3) and 60.692-6] Federally Enforceable Through Title V Permit

48. Refinery wastewater routed through new process drains and a new first common downstream junction box, either as part of a new individual drain system or an existing individual drain system, shall not be routed through a downstream catch basin. [40 CFR 60.692-2(e)] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-119-4 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
NAPHTHA REFORMER UNIT WITH 25.7 MMBTU/HR CHARGE HEATER #1 WITH JOHN ZINK SMR LOW NOX BURNER OR EQUIVALENT, 13.4 MMBTU/HR CHARGE HEATER #2 WITH JOHN ZINK SMR LOW NOX BURNER OR EQUIVALENT, 8.9 MMBTU/HR CHARGE HEATER #3 WITH JOHN ZINK SMR LOW NOX BURNER OR EQUIVALENT, 8.3 MMBTU/HR SPLITTER/STABILIZER HEATER WITH JOHN ZINK SMR LOW NOX BURNER OR EQUIVALENT, REACTOR VESSELS, HYDROGEN COMPRESSORS, HEAT EXCHANGERS, AND ASSOCIATED SEPARATOR VESSELS, KNOCKOUTS, PIPING, AND COMPONENTS

PERMIT UNIT REQUIREMENTS

1. Emission rates from each heater, except during startup and shutdown, shall not exceed any of the following: NOx (as NO2): 25 ppmv @ 3% O2, VOC: 0.0055 lb/MMBtu, or CO: 150 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
2. PM10 emission rates from each heater shall not exceed 0.0076 lb/MMBtu. [District Rules 2201, 2520, 4201, 4301] Federally Enforceable Through Title V Permit
3. The duration of each startup and shutdown period for reactor charge heaters #1, #2, and #3 shall not exceed 12.0 hours and 9.0 hours each respectfully. The duration of each startup and shutdown period for the splitter/stabilizer heater shall not exceed 8.5 hours and 5.0 hours respectfully. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
4. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
5. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

6. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit
7. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit
8. Heater exhaust stacks shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 1081] Federally Enforceable Through Title V Permit
9. Source testing to demonstrate compliance with NOx and CO emission limits shall be conducted within 60 days of startup and not less than once every 12 months, except as provided below. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit
10. Source testing to demonstrate compliance with NOx and CO emission limits shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit
11. If permittee fails any compliance demonstration for NOx or CO emission limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit
12. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
13. Compliance source testing shall be conducted under conditions representative of normal operation. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
15. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
16. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, and stack gas oxygen - EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit
17. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(Amended December 16, 1993). [District Rule 1081, and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
18. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results used to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
19. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit
20. Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

21. Test results submitted to the District from unit(s) representing a group of units may be used to demonstrate compliance with NOx limits for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. [District Rule 4305, 6.3.2 and 4351, 6.3] Federally Enforceable Through Title V Permit

22. The following conditions must be met for representative unit(s) used to demonstrate compliance for NOx limits for a group of units: 1) all units are initially source tested and emissions from all units in group are similar, 2) all units in group are similar in terms of rated heat input, make and series, operation conditions, fuel used, and control method, 3) the group is owned by a single owner and located at a single stationary source, and 4) all units in the group shall have received the same maintenance and tune-up procedures as the representative unit(s). [District Rule 4305, 6.3.2] Federally Enforceable Through Title V Permit

23. The number of representative units source tested to demonstrate compliance for NOx limits shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that when 3 source test cycles have been completed, all units in the entire group will have been tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

24. Nitrogen oxide (NOx) emission concentrations in ppmv shall be referenced at dry stack gas conditions, and shall be calculated to 3.00 percent by volume stack gas oxygen and averaged over 60 minutes, and lb/MMBtu rates shall be calculated as lb NO2/MMBtu of heat input (hhv). [District Rule 4305, 5.0, 8.2 and/or 4351, 8.1] Federally Enforceable Through Title V Permit

25. Draeger tubes shall be used as an alternative method for measuring fuel gas H2S during scheduled maintenance or unscheduled interruptions of CEMs. Draeger tube use shall be limited to no more than 96 continuous hours and fuel gas H2S shall be checked a minimum of every two hours during scheduled maintenance or unscheduled interruptions of CEMs. Alternate method of measuring fuel gas H2S shall occur no more than 192 hours in any calendar year. [40CFR60.13(i)] Federally Enforceable Through Title V Permit

26. Operator shall maintain all records of the reason for alternative monitoring and required fuel gas H2S monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

27. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320]

28. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320]

29. VOC emission rate from fugitive components associated with this emissions unit shall not exceed 77.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

30. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. Permit holder shall update such records when new components are approved and installed. Components shall be screened and leak rate shall be measured in accordance with the frequency of inspection specified in Rule 4455 as applicable. [District Rule 2201] Federally Enforceable Through Title V Permit

31. As referenced in this permit, a fugitive component leak shall be defined as the lower of the level specified in applicable rules, permit conditions, or the following: pumps in light liquid service - 1,000 ppmv; compressors - 500 ppmv; pressure relief devices in gas/vapor service - 500 ppmv; valves in gas/vapor and light liquid service - 500 ppmv; agitators - 10,000 ppmv; pumps in heavy liquid service - 2,000 ppmv; valves, and connectors in heavy liquid service, instrumentation systems, and pressure relief devices in liquid service - 500 ppmv; connectors in gas/vapor service and in light liquid service - 500 ppmv. Component type and service referenced in this condition shall be as defined in 40 CFR 63 Subpart H. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

32. Permit unit shall comply with applicable District Rule 4001 (NSPS, Subpart GGG) requirements on facility wide permit S-37-0. [District Rule 4001] Federally Enforceable Through Title V Permit

33. This unit is subject to Rule 4455 Leak Detection and Repair Conditions on the facility wide permit S-37-0. [District Rule 4455] Federally Enforceable Through Title V Permit

34. Permittee shall comply with all applicable testing, recordkeeping, and reporting requirements specified in Rule 4001 - New Source Performance Standards, including but not limited to Subparts A and J. [District Rule 4001] Federally Enforceable Through Title V Permit

35. Heaters shall be fired only on purchased commercial natural gas, refinery fuel gas, or any combination thereof. [District Rule 2201, 4001] Federally Enforceable Through Title V Permit

36. Operator shall not burn in any fuel gas combustion device any fuel gas that contains hydrogen sulfide (H2S) in excess of 100 ppmv@ 0% O2. [District Rules 2201 ,2520, 9.4.2 and 4301, 5.2.1, & 40 CFR Part 60, Subpart J, 60.104(a)(1)] Federally Enforceable Through Title V Permit

37. The combustion in the fuel gas combustion devices of gases released as a result of start-up, shutdown, upset, malfunction, or the result of relief valve leakage is exempt from the H2S or sulfur content requirement. [District Rules 2201, 4001, Subpart J, 60.104(a)(1)] Federally Enforceable Through Title V Permit

38. All refinery fuel gas combusted in the heaters shall be monitored for H2S content by a continuous emissions monitoring (CEM) system. CEM shall be installed, calibrated, operated, and reported according to EPA guidelines as specified under 40 CFR 60, Subpart J, Specification 7, and general requirements. CEM results shall be calculated on a rolling three (3) hour basis. [District Rules 2201, 4001, Subpart J, 60.105(a)(4) and 60.105(a)(4)iii] Federally Enforceable Through Title V Permit

39. Operator shall report all rolling 3-hour periods during which the average concentration of H2S as measured by the H2S continuous monitoring system exceeds 100 ppmv@ 0% O2. [District Rules 2201, 4001, Subpart J, 60.105(e)(3)(ii)] Federally Enforceable Through Title V Permit

40. Permit unit shall comply with applicable Rule 4001 (NSPS, Subpart QQQ) requirements. [District Rule 4001] Federally Enforceable Through Title V Permit

41. Each drain, receiving refinery wastewater from a process unit, shall be equipped with water seal controls. [40 CFR 60.692-2(a)(1)] Federally Enforceable Through Title V Permit

42. Each drain in active service, receiving refinery wastewater from a process unit, shall be checked by visual or physical inspection monthly for indications of low water levels or other conditions that would reduce the effectiveness of the water seal controls. [40 CFR 60.692-2(a)(2)] Federally Enforceable Through Title V Permit

43. Each drain out of active service shall be checked by visual or physical inspection weekly for indications of low water levels or other problems that could result in VOC emissions. As an alternative, the owner or operator may elect to install a tightly sealed cap or plug over a drain that is out of service, inspection shall be conducted initially and semiannually to ensure caps or plugs are in place and properly installed. Whenever low water levels or missing or improperly installed caps or plugs are identified, water shall be added or first efforts at repair shall be made as soon as practicable, but not later than 24 hours after detection, except if the repair is technically impossible without a complete or partial refinery or process unit shutdown. Repair of such equipment shall occur before the end of the next refinery or process unit shutdown [40 CFR 60.692-2(a) and 60.692-6] Federally Enforceable Through Title V Permit

44. Junction boxes in refinery wastewater systems shall be equipped with a cover and may have an open vent pipe. The vent pipe shall be at least 90 cm (3 ft) in length and shall not exceed 10.2 cm (4 in) in diameter. Junction box covers shall have a tight seal around the edge and shall be kept in place at all times, except during inspection and maintenance. [40 CFR 60.692-2(b)(1)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

45. Junction boxes in refinery wastewater systems shall be visually inspected semiannually to ensure that the cover is in place and to ensure that the cover has a tight seal around the edge. If a broken seal or gap is identified, first effort at repair shall be made as soon as practicable, but not later than 15 calendar days after the broken seal or gap is identified, except if the repair is technically impossible without a complete or partial refinery or process unit shutdown. Repair of such equipment shall occur before the end of the next refinery or process unit shutdown. [40 CFR 60.692-2(b)(3)(4) and 60.692-6] Federally Enforceable Through Title V Permit

46. Sewer lines, conveying refinery wastewater to wastewater treatment system, shall not be open to the atmosphere and shall be covered or enclosed in a manner so as to have no visual gaps or cracks in joints, seals, or other emission interfaces. [40 CFR 60.692-2(c)(1)] Federally Enforceable Through Title V Permit

47. The portion of each unburied sewer line shall be visually inspected semiannually for indication of cracks, gaps, or other problems that could result in VOC emissions. Whenever cracks, gaps, or other problems are detected, repairs shall be made as soon as practicable, but not later than 15 calendar days after identification, except if the repair is technically impossible without a complete or partial refinery or process unit shutdown. Repair of such equipment shall occur before the end of the next refinery or process unit shutdown. [40 CFR 60.692-2(c)(2)(3) and 60.692-6] Federally Enforceable Through Title V Permit

48. Refinery wastewater routed through new process drains and a new first common downstream junction box, either as part of a new individual drain system or an existing individual drain system, shall not be routed through a downstream catch basin. [40 CFR 60.692-2(e)] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-120-3 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
AMINE SYSTEM WITH ABSORBER VESSELS, KNOCKOUTS, HEAT EXCHANGERS, AND ASSOCIATED PIPING AND COMPONENTS. TREATED VAPOR RECOVERY GAS USED AS FUEL GAS FOR PROCESS HEATERS OR FLARED IN S-37-7

PERMIT UNIT REQUIREMENTS

1. VOC emission rate from fugitive components associated with this emissions unit shall not exceed 2.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. Permit holder shall update such records when new components are approved and installed. Components shall be screened and leak rate shall be measured in accordance with the frequency of inspection specified in Rule 4455 as applicable. [District Rule 2201] Federally Enforceable Through Title V Permit
3. As referenced in this permit, a fugitive component leak shall be defined as the lower of the level specified in applicable rules, permit conditions, or the following: pumps in light liquid service - 1,000 ppmv; compressors - 500 ppmv; pressure relief devices in gas/vapor service - 500 ppmv; valves in gas/vapor and light liquid service - 500 ppmv; agitators - 10,000 ppmv; pumps in heavy liquid service - 2,000 ppmv; valves, and connectors in heavy liquid service, instrumentation systems, and pressure relief devices in liquid service - 500 ppmv; connectors in gas/vapor service and in light liquid service - 500 ppmv. Component type and service referenced in this condition shall be as defined in 40 CFR 63 Subpart H. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Permit unit shall comply with applicable District Rule 4001 (NSPS, Subpart GGG) requirements on facility wide permit S-37-0. [District Rule 4001] Federally Enforceable Through Title V Permit
5. Permittee shall comply with all applicable testing, recordkeeping, and reporting requirements specified in Rule 4001 - New Source Performance Standards, including but not limited to Subpart A. [District Rule 4001] Federally Enforceable Through Title V Permit
6. Operators shall not depressurize any vessel containing VOCs unless the process unit turnaround is accomplished by employing one of the following operating procedures: The organic vapors shall either be recovered, added to the refinery fuel gas system and combusted; or controlled and piped to an appropriate firebox or incinerated for combustion; or flared, until the pressure within the process vessel is as close to atmospheric pressure as is possible. All process vessels shall be depressurized into the control facilities to less than 1020 mm Hg (5 psig) before venting/opening to atmosphere. All organic compounds which emerge from a refinery process vessel during the purging of said vessel and which otherwise would be emitted to the atmosphere shall be either directed to a flare or incinerator or shall be used for fuel until such disposition of emissions is not technically feasible or is less safe than atmospheric venting. [District Rule 4454, 4.0] Federally Enforceable Through Title V Permit
7. This unit is subject to Rule 4455 Leak Detection and Repair Conditions on the facility wide permit S-37-0. [District Rule 4455] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-121-4 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
SOUR WATER SYSTEM WITH STRIPPER COLUMN, STEAM REBOILER, KNOCKOUTS, HEAT EXCHANGERS, AND ASSOCIATED PIPING AND COMPONENTS

PERMIT UNIT REQUIREMENTS

1. VOC emission rate from fugitive components associated with this emissions unit shall not exceed 2.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. Permit holder shall update such records when new components are approved and installed. Components shall be screened and leak rate shall be measured in accordance with the frequency of inspection specified in Rule 4455 as applicable. [District Rule 2201] Federally Enforceable Through Title V Permit
3. As referenced in this permit, a fugitive component leak shall be defined as the lower of the level specified in applicable rules, permit conditions, or the following: pumps in light liquid service - 1,000 ppmv; compressors - 500 ppmv; pressure relief devices in gas/vapor service - 500 ppmv; valves in gas/vapor and light liquid service - 500 ppmv; agitators - 10,000 ppmv; pumps in heavy liquid service - 2,000 ppmv; valves, and connectors in heavy liquid service, instrumentation systems, and pressure relief devices in liquid service - 500 ppmv; connectors in gas/vapor service and in light liquid service - 500 ppmv. Component type and service referenced in this condition shall be as defined in 40 CFR 63 Subpart H. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Permittee shall comply with all applicable testing, recordkeeping, and reporting requirements specified in Rule 4001 - New Source Performance Standards, including but not limited to Subpart A. [District Rule 4001] Federally Enforceable Through Title V Permit
5. Permit unit shall comply with applicable District Rule 4001 (NSPS, Subpart GGG) requirements on facility wide permit S-37-0. [District Rule 4001] Federally Enforceable Through Title V Permit
6. Permit unit shall comply with applicable Rule 4001 (NSPS, Subpart QQQ) requirements. [District Rule 4001] Federally Enforceable Through Title V Permit
7. Each drain, receiving refinery wastewater from a process unit, shall be equipped with water seal controls. [40 CFR 60.692-2(a)(1)] Federally Enforceable Through Title V Permit
8. Each drain in active service, receiving refinery wastewater from a process unit, shall be checked by visual or physical inspection monthly for indications of low water levels or other conditions that would reduce the effectiveness of the water seal controls. [40 CFR 60.692-2(a)(2)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. Each drain out of active service shall be checked by visual or physical inspection weekly for indications of low water levels or other problems that could result in VOC emissions. As an alternative, the owner or operator may elect to install a tightly sealed cap or plug over a drain that is out of service, inspection shall be conducted initially and semiannually to ensure caps or plugs are in place and properly installed. Whenever low water levels or missing or improperly installed caps or plugs are identified, water shall be added or first efforts at repair shall be made as soon as practicable, but not later than 24 hours after detection, except if the repair is technically impossible without a complete or partial refinery or process unit shutdown. Repair of such equipment shall occur before the end of the next refinery or process unit shutdown [40 CFR 60.692-2(a) and 60.692-6] Federally Enforceable Through Title V Permit
10. Junction boxes in refinery wastewater systems shall be equipped with a cover and may have an open vent pipe. The vent pipe shall be at least 90 cm (3 ft) in length and shall not exceed 10.2 cm (4 in) in diameter. Junction box covers shall have a tight seal around the edge and shall be kept in place at all times, except during inspection and maintenance. [40 CFR 60.692-2(b)(1)] Federally Enforceable Through Title V Permit
11. Junction boxes in refinery wastewater systems shall be visually inspected semiannually to ensure that the cover is in place and to ensure that the cover has a tight seal around the edge. If a broken seal or gap is identified, first effort at repair shall be made as soon as practicable, but not later than 15 calendar days after the broken seal or gap is identified, except if the repair is technically impossible without a complete or partial refinery or process unit shutdown. Repair of such equipment shall occur before the end of the next refinery or process unit shutdown. [40 CFR 60.692-2(b)(3)(4) and 60.692-6] Federally Enforceable Through Title V Permit
12. Sewer lines, conveying refinery wastewater to wastewater treatment system, shall not be open to the atmosphere and shall be covered or enclosed in a manner so as to have no visual gaps or cracks in joints, seals, or other emission interfaces. [40 CFR 60.692-2(c)(1)] Federally Enforceable Through Title V Permit
13. The portion of each unburied sewer line shall be visually inspected semiannually for indication of cracks, gaps, or other problems that could result in VOC emissions. Whenever cracks, gaps, or other problems are detected, repairs shall be made as soon as practicable, but not later than 15 calendar days after identification, except if the repair is technically impossible without a complete or partial refinery or process unit shutdown. Repair of such equipment shall occur before the end of the next refinery or process unit shutdown. [40 CFR 60.692-2(c)(2)(3) and 60.692-6] Federally Enforceable Through Title V Permit
14. Refinery wastewater routed through new process drains and a new first common downstream junction box, either as part of a new individual drain system or an existing individual drain system, shall not be routed through a downstream catch basin. [40 CFR 60.692-2(e)] Federally Enforceable Through Title V Permit
15. Vacuum system exhaust gas shall either be collected, compressed, and added to refinery gas; controlled and combusted in an appropriate firebox or incinerator with at least 90 percent VOC control efficiency; or controlled by an equivalent method approved by the APCO. [District Rule 4453] Federally Enforceable Through Title V Permit
16. Operators shall not depressurize any vessel containing VOCs unless the process unit turnaround is accomplished by employing one of the following operating procedures: The organic vapors shall either be recovered, added to the refinery fuel gas system and combusted; or controlled and piped to an appropriate firebox or incinerated for combustion; or flared, until the pressure within the process vessel is as close to atmospheric pressure as is possible. All process vessels shall be depressurized into the control facilities to less than 1020 mm Hg (5 psig) before venting/opening to atmosphere. All organic compounds which emerge from a refinery process vessel during the purging of said vessel and which otherwise would be emitted to the atmosphere shall be either directed to a flare or incinerator or shall be used for fuel until such disposition of emissions is not technically feasible or is less safe than atmospheric venting. [District Rule 4454, 4.0] Federally Enforceable Through Title V Permit
17. This unit is subject to Rule 4455 Leak Detection and Repair Conditions on the facility wide permit S-37-0. [District Rule 4455] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-122-6 **EXPIRATION DATE:** 08/31/2022

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
CLAUS PROCESS SULFUR RECOVERY UNIT WITH REACTION FURNACE, THREE CONVERTER VESSELS, HYDROGENATION REACTOR, ENCLOSED SULFUR PIT WITH EDUCTOR VENT TO SULFUR PLANT, TAIL GAS TREATMENT UNIT INCLUDING AMINE SCRUBBING SYSTEM AND 2.5 MMBTU/HR INCINERATOR WITH JOHN ZINK VYD BURNER OR EQUIVALENT, KNOCKOUTS, HEAT EXCHANGERS, AND ASSOCIATED PIPING AND COMPONENTS

PERMIT UNIT REQUIREMENTS

1. VOC emission rate from fugitive components associated with this emissions unit shall not exceed 2.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. Permit holder shall update such records when new components are approved and installed. Components shall be screened and leak rate shall be measured in accordance with the frequency of inspection specified in Rule 4455 as applicable. [District Rule 2201] Federally Enforceable Through Title V Permit
3. As referenced in this permit, a fugitive component leak shall be defined as the lower of the level specified in applicable rules, permit conditions, or the following: pumps in light liquid service - 1,000 ppmv; compressors - 500 ppmv; pressure relief devices in gas/vapor service - 500 ppmv; valves in gas/vapor and light liquid service - 500 ppmv; agitators - 10,000 ppmv; pumps in heavy liquid service - 2,000 ppmv; valves, and connectors in heavy liquid service, instrumentation systems, and pressure relief devices in liquid service - 500 ppmv; connectors in gas/vapor service and in light liquid service - 500 ppmv. Component type and service referenced in this condition shall be as defined in 40 CFR 63 Subpart H. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Permit unit shall comply with applicable District Rule 4001 (NSPS, Subpart GGG) requirements on facility wide permit S-37-0. [District Rule 4001] Federally Enforceable Through Title V Permit
5. Permittee shall comply with all applicable testing, recordkeeping, and reporting requirements specified in Rule 4001 - New Source Performance Standards, including but not limited to Subparts A and J. [District Rule 4001] Federally Enforceable Through Title V Permit
6. Vacuum system exhaust gas shall either be collected, compressed, and added to refinery gas; controlled and combusted in an appropriate firebox or incinerator with at least 90 percent VOC control efficiency; or controlled by an equivalent method approved by the APCO. [District Rule 4453] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

7. Operators shall not depressurize any vessel containing VOCs unless the process unit turnaround is accomplished by employing one of the following operating procedures: The organic vapors shall either be recovered, added to the refinery fuel gas system and combusted; or controlled and piped to an appropriate firebox or incinerated for combustion; or flared, until the pressure within the process vessel is as close to atmospheric pressure as is possible. All process vessels shall be depressurized into the control facilities to less than 1020 mm Hg (5 psig) before venting/opening to atmosphere. All organic compounds which emerge from a refinery process vessel during the purging of said vessel and which otherwise would be emitted to the atmosphere shall be either directed to a flare or incinerator or shall be used for fuel until such disposition of emissions is not technically feasible or is less safe than atmospheric venting. [District Rule 4454, 4.0] Federally Enforceable Through Title V Permit
8. Equivalent test methods other than specified in Sections 6.4.1 through 6.4.5 may be used provided such test methods have received prior approval from the US EPA, ARB, and APCO. [District Rule 4455, 6.4] Federally Enforceable Through Title V Permit
9. Sulfur pit shall be enclosed and shall be vented to the sulfur plant for processing. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Sulfur production from Claus sulfur recovery plant shall not exceed 20 long-tons per day. [40 CFR 60.100(a)] Federally Enforceable Through Title V Permit
11. Tail gas incinerator shall be fired only on purchased commercial natural gas, refinery fuel gas, or any combination thereof. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Operator shall not burn in any fuel gas combustion device any fuel gas that contains hydrogen sulfide (H2S) in excess of 100 ppmv@ 0% O2. [District Rules 2201 ,2520, 9.4.2 and 4301, 5.2.1] Federally Enforceable Through Title V Permit
13. The combustion in the fuel gas combustion devices of gases released as a result of start-up, shutdown, upset, malfunction, or the result of relief valve leakage is exempt from the H2S or sulfur content requirement. [District Rules 2201, 4001, Subpart J, 60.104(a)(1)] Federally Enforceable Through Title V Permit
14. All refinery fuel gas combusted in the heaters shall be monitored for H2S content by a continuous emissions monitoring (CEM) system. CEM shall be installed, calibrated, operated, and reported according to EPA guidelines as specified under 40 CFR 60, Appendix B, Specification 7, and general requirements. CEM results shall be calculated on a rolling three (3) hour basis. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Operator shall report all rolling 3-hour periods during which the average concentration of H2S as measured by the H2S continuous monitoring system exceeds 100 ppmv@ 0% O2. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Except on days of startup or shutdown of the sulfur recovery unit, sulfur oxide emissions from incinerator exhaust shall not exceed 33.8 lb SOx (as SO2) per day. Permittee shall calculate emissions of SOx for each day based on measurements of exhaust gas flow rate and daily monitoring of SOx emission concentration. Exhaust gas flow rate shall be measured directly or calculated using a District-approved method. [District Rule 2201] Federally Enforceable Through Title V Permit
17. On days of startup or shutdown of the sulfur recovery unit, sulfur oxide emissions from incinerator exhaust shall not exceed 224.0 lb SOx (as SO2) per day. Permittee shall calculate emissions of SOx for each day based on exhaust gas flow rate and daily monitoring of SOx emission concentration. Exhaust gas flow rate shall be measured directly or calculated using a District-approved method. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Incinerator stack flow rate calculation method shall be verified for accuracy by annual source testing for stack gas flow rate using EPA Method 2 and 4. Should the annual source test not verify the calculated stack flow, the stack flow shall be modified by applying an equivalence factor equal to the ratio of the source test measured stack flow rate to the calculated stack flow rate corresponding to operating conditions at the date and time the source test was conducted, or other equivalence factor method approved by the District. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

19. SOx emissions shall be monitored using a District-approved portable analyzer system capable of measuring total SOx concentration as SO2 (ppmv) and which includes a water removal system that does not result in the entrainment of SOx or sulfur compounds in the collected condensate. Portable analyzer shall be operated and maintained in accordance with manufacturer's recommendations. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Sulfur oxide emissions from incinerator exhaust shall not exceed 12,718 lb SOx (as SO2) per year. Annual emissions shall be calculated as the sum of the daily emissions calculated for each day as required in this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
21. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 2520, 9.3.2; Kern County Rule 407; District Rule 4801] Federally Enforceable Through Title V Permit
22. Emission rates from incinerator exhaust, except during startup and shutdown, shall not exceed any of the following: NOx (as NO2): 95 ppmv @ 3% O2, VOC: 0.0055 lb/MMBtu, or CO: 150 ppmv @ 3% O2. [District Rules 2201, 2520, 4301] Federally Enforceable Through Title V Permit
23. PM10 emission rates from incinerator shall not exceed 0.0137 lb/MMBtu. [District Rules 2201, 2520, 4201, 4301] Federally Enforceable Through Title V Permit
24. The duration of each startup and shutdown period for the sulfur recovery unit shall not exceed 37.0 hours and 23.4 hours respectfully. [District Rule 2201] Federally Enforceable Through Title V Permit
25. Incinerator exhaust stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 1081] Federally Enforceable Through Title V Permit
26. Source testing to demonstrate compliance with NOx, CO, and SOx emission limits shall be conducted within 60 days of startup and not less than once every 12 months thereafter. [District Rule 2201] Federally Enforceable Through Title V Permit
27. Compliance with lb/day SOx emission limit shall be demonstrated by source testing of hourly SOx emissions in accordance with approved methods, and multiplying the results by 24 hours per day. [District Rule 2201] Federally Enforceable Through Title V Permit
28. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
29. Compliance source testing shall be conducted under conditions representative of normal operation. [District Rule 1081] Federally Enforceable Through Title V Permit
30. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
31. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
32. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, SOx (lb/hr) - EPA MEthod 6B or 8, and stack gas oxygen - EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit
33. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(Amended December 16, 1993). [District Rule 1081, and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
34. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results used to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

35. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit

36. Particulate matter emissions shall not exceed 0.1 grain/dscf at dry standard conditions. [District Rule 4201] Federally Enforceable Through Title V Permit

37. Draeger tubes shall be used as an alternative method for measuring fuel gas H2S during scheduled maintenance or unscheduled interruptions of CEMs. Draeger tube use shall be limited to no more than 96 continuous hours and fuel gas H2S shall be checked a minimum of every two hours during scheduled maintenance or unscheduled interruptions of CEMs. Alternate method of measuring fuel gas H2S shall occur no more than 192 hours in any calendar year. [40CFR60.13(i)] Federally Enforceable Through Title V Permit

38. Operator shall maintain all records of the reason for alternative monitoring and required fuel gas H2S monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

39. Permit unit shall comply with applicable Rule 4001 (NSPS, Subpart QQQ) requirements. [District Rule 4001] Federally Enforceable Through Title V Permit

40. Each drain, receiving refinery wastewater from a process unit, shall be equipped with water seal controls. [40 CFR 60.692-2(a)(1)] Federally Enforceable Through Title V Permit

41. Each drain in active service, receiving refinery wastewater from a process unit, shall be checked by visual or physical inspection monthly for indications of low water levels or other conditions that would reduce the effectiveness of the water seal controls. [40 CFR 60.692-2(a)(2)] Federally Enforceable Through Title V Permit

42. Each drain out of active service shall be checked by visual or physical inspection weekly for indications of low water levels or other problems that could result in VOC emissions. As an alternative, the owner or operator may elect to install a tightly sealed cap or plug over a drain that is out of service, inspection shall be conducted initially and semiannually to ensure caps or plugs are in place and properly installed. Whenever low water levels or missing or improperly installed caps or plugs are identified, water shall be added or first efforts at repair shall be made as soon as practicable, but not later than 24 hours after detection, except if the repair is technically impossible without a complete or partial refinery or process unit shutdown. Repair of such equipment shall occur before the end of the next refinery or process unit shutdown [40 CFR 60.692-2(a) and 60.692-6] Federally Enforceable Through Title V Permit

43. Junction boxes in refinery wastewater systems shall be equipped with a cover and may have an open vent pipe. The vent pipe shall be at least 90 cm (3 ft) in length and shall not exceed 10.2 cm (4 in) in diameter. Junction box covers shall have a tight seal around the edge and shall be kept in place at all times, except during inspection and maintenance. [40 CFR 60.692-2(b)(1)] Federally Enforceable Through Title V Permit

44. Junction boxes in refinery wastewater systems shall be visually inspected semiannually to ensure that the cover is in place and to ensure that the cover has a tight seal around the edge. If a broken seal or gap is identified, first effort at repair shall be made as soon as practicable, but not later than 15 calendar days after the broken seal or gap is identified, except if the repair is technically impossible without a complete or partial refinery or process unit shutdown. Repair of such equipment shall occur before the end of the next refinery or process unit shutdown. [40 CFR 60.692-2(b)(3)(4) and 60.692-6] Federally Enforceable Through Title V Permit

45. Sewer lines, conveying refinery wastewater to wastewater treatment system, shall not be open to the atmosphere and shall be covered or enclosed in a manner so as to have no visual gaps or cracks in joints, seals, or other emission interfaces. [40 CFR 60.692-2(c)(1)] Federally Enforceable Through Title V Permit

46. The portion of each unburied sewer line shall be visually inspected semiannually for indication of cracks, gaps, or other problems that could result in VOC emissions. Whenever cracks, gaps, or other problems are detected, repairs shall be made as soon as practicable, but not later than 15 calendar days after identification, except if the repair is technically impossible without a complete or partial refinery or process unit shutdown. Repair of such equipment shall occur before the end of the next refinery or process unit shutdown. [40 CFR 60.692-2(c)(2)(3) and 60.692-6] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

47. Refinery wastewater routed through new process drains and a new first common downstream junction box, either as part of a new individual drain system or an existing individual drain system, shall not be routed through a downstream catch basin. [40 CFR 60.692-2(e)] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-123-3 **EXPIRATION DATE:** 08/31/2022

EQUIPMENT DESCRIPTION:
481 HP CATERPILLAR DIESEL-FIRED EMERGENCY IC ENGINE MODEL 3408DITA POWERING AN EMERGENCY FIREWATER PUMP

PERMIT UNIT REQUIREMENTS

1. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102]
2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
4. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rule 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
5. If the IC engine is not fired on CARB certified diesel fuel with a supplier certified sulfur content less than 0.0015% by weight, then the owner or operator shall determine the sulfur content of each delivery of diesel fuel being fired in the IC engine to demonstrate compliance with the 0.0015% sulfur by weight limit. The sulfur content shall be determined using ASTM Method D 2622 or other EPA or CARB approved method with prior written approval by the APCO. [District Rule 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
6. Emissions from this engine shall not exceed any of the following limits: 6.83 g-NOx/bhp-hr, 1.08 g-CO/bhp-hr, or 0.21 g-VOC/bhp-hr. [District NSR Rule] Federally Enforceable Through Title V Permit
7. The PM10 emissions rate shall not exceed 0.25 g/bhp-hr based on US EPA certification using ISO 8178 test procedure. [District NSR Rule] Federally Enforceable Through Title V Permit
8. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
9. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
10. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. For testing purposes, the engine shall only be operated the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 - "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems", 1998 edition. Total hours of operation for all maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rule 4702, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
12. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, and the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.). For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
13. The permittee shall maintain monthly records of the type and source of fuel used including its sulfur content. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
14. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
15. On and after May 3, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ]
16. On and after May 3, 2013, the permittee must 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. [40 CFR 63 Subpart ZZZZ]
17. On and after May 3, 2013, the engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first [40 CFR 63 Subpart ZZZZ]
18. On and after May 3, 2013, the engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ]
19. On and after May 3, 2013, the engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ]
20. On and after May 3, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation [District Rule 1070 and 40 CFR 63 Subpart ZZZZ]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-125-3 **EXPIRATION DATE:** 08/31/2022

EQUIPMENT DESCRIPTION:
3,000 BBL (126,000 GALLON) FIXED ROOF ORGANIC LIQUID STORAGE TANK, #3013, SERVED BY THE VAPOR CONTROL SYSTEM OPERATING UNDER PERMIT S-37-8

PERMIT UNIT REQUIREMENTS

1. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in gas-tight condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in District Rule 4623. [District NSR Rule, District Rule 4623] Federally Enforceable Through Title V Permit
2. The closed vent system shall be operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections. Emissions from the closed vent system in excess of this limit shall be considered a leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
3. All gauge hatches, sampling hatches, piping, flanges, valves and all other openings and fittings shall be leak-free (as defined in Rule 4623). [District Rule 4623] Federally Enforceable Through Title V Permit
4. A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District NSR Rule and District Rule 4623] Federally Enforceable Through Title V Permit
5. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

8. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. VOC emissions from fugitive emissions sources in this permit unit shall not exceed 0.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. Permittee shall maintain accurate records of number of fugitive emissions components and calculated emissions using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-3a "1995 EPA Protocol Refinery Correlation Equations for Refineries and Marketing Terminals". [District NSR Rule and District Rule 1070] Federally Enforceable Through Title V Permit
13. The control efficiency of any VOC destruction device, measured and calculated as carbon, shall be determined by US EPA Method 25, except when the outlet concentration must be below 50 ppm in order to meet the standard, in which case US EPA Method 25A may be used. US EPA Method 18 may be used in lieu of US EPA Method 25 or US EPA Method 25A provided the identity and approximate concentrations of the analytes/compounds in the sample gas stream are known before analysis with the gas chromatograph and the gas chromatograph is calibrated for each of the known analytes/compounds to ensure that the VOC concentrations are neither under- or over-reported. [District Rule 4623, 6.4.6] Federally Enforceable Through Title V Permit
14. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b. [District Rule 4623, 6.2.5] Federally Enforceable Through Title V Permit
15. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. This unit commenced construction, modification, or reconstruction prior to May 19, 1978. Therefore, the requirements of 40 CFR 60 Subpart Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
17. Permittee shall comply with all applicable requirements of 40 CFR 60, Subpart K. [District Rule 4001] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-126-3 **EXPIRATION DATE:** 08/31/2022

EQUIPMENT DESCRIPTION:
55,000 BBL ORGANIC LIQUID STORAGE TANK #55002 WITH VAPOR BALANCE RETURN LINE FROM ORGANIC LIQUID LOADING RACK VAPOR RETURN PIPING AND VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-37-8

PERMIT UNIT REQUIREMENTS

1. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in District Rule 4623. [District NSR Rule, District Rule 4623] Federally Enforceable Through Title V Permit
2. Fugitive VOC emission rate from gas and light oil service fugitive component counts within 5 ft of the tank shall not exceed 10.1 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Fugitive VOC emission rate from gas and light oil service fugitive component counts greater than 5 ft from the tank on the vapor piping from the tank up to the tie-in point of the vapor control system header shall not exceed 2.4 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Operator shall maintain records to demonstrate compliance with fugitive VOC emissions limit of this permit annually. Compliance shall be demonstrated by calculation, using the correlation equations, zero default and 10,000 ppmv pegged factors set forth in the CAPCOA California implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-3a, February 1999, and the average emission concentrations of total organic compounds measured for each component during all inspections conducted during the prior 365 day period. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
7. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
8. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
9. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

11. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

12. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

13. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

14. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

15. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

16. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit

17. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

18. This unit commenced construction, modification, or reconstruction before June 11, 1973. Therefore, the requirements of 40 CFR 60 Subparts K, Ka, and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-127-4 **EXPIRATION DATE:** 08/31/2022

EQUIPMENT DESCRIPTION:
GASOLINE DISPENSING OPERATION WITH ONE 12,000 SPLIT (9,000 GALLONS GASOLINE/3,000 GALLONS DIESEL) STEEL TANK INSTITUTE FIREGUARD ABOVEGROUND STORAGE TANK SERVED BY OPW PHASE I ENHANCED VAPOR RECOVERY (EVR) SYSTEM (VR-401-C), STANDING LOSS CONTROL (VR-301-E), AND 1 FUELING POINT WITH 1 GASOLINE DISPENSING NOZZLE SERVED BY BALANCE PHASE II VAPOR RECOVERY SYSTEM (G-70-162-A)

PERMIT UNIT REQUIREMENTS

1. The volume of gasoline dispensed from this unit shall not exceed 518,344 gal/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The VOC emissions rate from this unit shall not exceed either of the following limits: 0.001063 lb-VOC/gal or 1.91 lb-VOC/fueling point-day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The Phase I, Phase II, and Standing Loss Control Vapor recovery systems shall be installed and maintained in accordance with the manufacturer specifications and the ARB Executive Orders specified in this permit, including applicable rules and regulations of the Division of Measurement Standards of the Department of Food and Agriculture, the Office of the State Fire Marshal of the Department of Forestry and Fire Protection, the Division of Occupational Safety and Health of the Department of Industrial Relations, and the Division of Water Quality of the State Water Resources Control Board that have been made conditions of the certification. [District Rules 4621 and 4622 and CH&SC 41950] Federally Enforceable Through Title V Permit
4. This gasoline storage and dispensing equipment shall not be used in retail sales, where gasoline dispensed by the unit is subject to payment of California sales tax on gasoline sales. [District Rule 4622] Federally Enforceable Through Title V Permit
5. he storage container shall be installed, maintained, and operated such that they are leak-free. [District Rule 4621] Federally Enforceable Through Title V Permit
6. The Phase I and Phase II vapor recovery systems and gasoline dispensing equipment shall be maintained without leaks as determined in accordance with the test method specified in this permit. [District Rules 4621 and 4622] Federally Enforceable Through Title V Permit
7. A leak is defined as the dripping of VOC-containing liquid at a rate of more than three (3) drops per minute, or the detection of any gaseous or vapor emissions with a concentration of total organic compound greater than 10,000 ppmv, as methane, above background when measured in accordance with EPA Test Method 21. [District Rules 4621 and 4622] Federally Enforceable Through Title V Permit
8. No gasoline delivery vessel shall be operated or be allowed to operate unless valid State of California decals are displayed on the cargo container, which attest to the vapor integrity of the container. [District Rule 4621] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. No person shall operate any ARB certified Phase II vapor recovery system or any portion thereof that has a major defect or an equipment defect that is identified in any applicable ARB Executive Order until the following conditions have been met: 1) the defect has been repaired, replaced, or adjusted as necessary to correct the defect; 2) the District has been notified, and the District has reinspected the system or authorized the system for use (such authorization shall not include the authority to operate the equipment prior to the correction of the defective components); and 3) all major defects, after repair, are duly entered into the Operations and Maintenance (O&M) manual. [District Rule 4622] Federally Enforceable Through Title V Permit

10. Upon identification of any major defects, the permittee shall tag "Out-of-Order" all dispensing equipment for which vapor recovery has been impaired. Tagged equipment shall be rendered inoperable and the tag(s) shall not be removed until the defective equipment has been repaired, replaced, or adjusted, as necessary. In the case of defects identified by the District, tagged equipment shall be rendered inoperable, and the tag shall not be removed until the District has been notified of the repairs, and the District has either reinspected the system or authorized the tagged equipment for use. [District Rule 4622] Federally Enforceable Through Title V Permit

11. The permittee shall implement a periodic maintenance inspection program for the certified Phase II vapor recovery system consistent with the requirements of this permit. The program shall be documented in an operation and maintenance (O&M) manual and shall at a minimum contain the following information: 1) copies of all vapor recovery performance tests; 2) all applicable ARB Executive Orders, Approval Letters, and District Permits; 3) the manufacturer's specifications and instructions for installation, operation, repair, and maintenance required pursuant to ARB Certification Procedure CP-201, and any additional instruction provided by the manufacturer; 4) system and/or component testing requirements, including test schedules and passing criteria for each of the standard tests required by this permit (the owner/operator may include any non-ARB required diagnostic and other tests as part of the testing requirements), and 5) additional O&M instructions, if any, that are designed to ensure compliance with the applicable rules, regulations, ARB Executive Orders, and District permit conditions, including replacement schedules for failure or wear prone components. [District Rule 4622] Federally Enforceable Through Title V Permit

12. The permittee shall conduct periodic maintenance inspections based on the greatest monthly throughput of gasoline dispensed by the facility in the previous year as follows: A) less than 2,500 gallons - one day per month; B) 2,500 to less than 25,000 gallons - one day per week; or C) 25,000 gallons or greater - five days per week. All inspections shall be documented within the O & M Manual. [District Rules 4621 and 4622] Federally Enforceable Through Title V Permit

13. Periodic maintenance inspections of the Phase I vapor recovery system shall include, at a minimum, verification that 1) the fill caps and vapor caps are not missing, damaged, or loose; 2) the fill cap gasket and vapor cap gaskets are not missing or damaged; 3) the fill adapter and vapor adapter are securely attached to the risers; 4) where applicable, the spring-loaded submerged fill tube seals properly against the coaxial tubing; 5) the dry break (poppet-valve) is not missing or damaged; and 6) the submerged fill tube is not missing or damaged. [District Rule 4621] Federally Enforceable Through Title V Permit

14. Periodic maintenance inspections of the Phase II vapor recovery system shall include, at a minimum, verification that 1) the following nozzle components are in place and in good condition as specified in ARB Executive Order as applicable: faceplate/facecone, bellows, latching device spring, vapor check valve, spout (proper diameter/vapor collection holes), insertion interlock mechanism, automatic shut-off mechanism, and hold open latch (unless prohibited by law or the local fire control authority); 2) the hoses are not torn, flattened or crimped; 3) the vapor path of the coaxial hoses associated with bellows equipped nozzles does not contain more than 100 ml of liquid if applicable; and 4) the vapor processing unit is functioning properly, for operations that are required to have or possess such a unit. [District Rule 4622] Federally Enforceable Through Title V Permit

15. In the event of a separation due to a drive off, the permittee shall, unless otherwise specified in the applicable ARB Executive Order, conduct a visual inspection of the affected equipment and either 1) perform qualified repairs on any damaged components and conduct applicable re-verification tests pursuant to the requirements of this permit, or 2) replace the affected nozzles, coaxial hoses, breakaway couplings, and any other damaged components with new or certified rebuilt components that are ARB certified. The activities shall be documented in accordance with the requirements of this permit before placing the affected equipment back in service. [District Rule 4622] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

16. The permittee shall conduct all periodic vapor recovery system performance tests specified in this permit, no more than 30 days before or after the required compliance testing date, unless otherwise required under the applicable ARB Executive Order. [District Rules 4621 and 4622] Federally Enforceable Through Title V Permit
17. The permittee shall perform and pass a Static Leak Test "Determination of Static Pressure Performance of Vapor Recovery Systems at Gasoline Dispensing Facilities with Aboveground Tanks" in accordance with the Executive Order specified in this permit for the Phase I Vapor Recovery System at least once every 12 months thereafter. [District Rules 4621 and 4622] Federally Enforceable Through Title V Permit
18. If a rotatable Phase I vapor adaptor is installed, the permittee shall perform and pass a Static Torque of Rotatable Phase I Adaptors test using ARB procedure TP-201.1B at least once every 36 months thereafter. [District Rule 4621] Federally Enforceable Through Title V Permit
19. For certified Phase II vapor recovery systems with liquid removal devices, the permittee shall perform and pass an ARB TP-201.6C Liquid Removal Test whenever the liquid in the vapor path exceeds 100 ml of liquid, or as required by the applicable ARB Executive Order. The amount of liquid in the vapor path shall be measured by lowering the gasoline dispensing nozzle into a container until such time that no more liquid drains from the nozzle. The amount of liquid drained into the container shall be measured using a graduated cylinder or graduated beaker. The vapor path shall be inspected according to the monitoring frequency as determined by monthly gasoline throughput. [District Rule 4622] Federally Enforceable Through Title V Permit
20. A person conducting testing of, or repairs to, a certified vapor recovery system shall be in compliance with District Rule 1177 (Gasoline Dispensing Facility Tester Certification). [District Rules 4621 and 4622] Federally Enforceable Through Title V Permit
21. A person performing installation of, or maintenance on, a certified Phase I or Phase II vapor recovery system shall be certified by the ICC for Vapor Recovery System Installation and Repair, or work under the direct and personal supervision of an individual physically present at the work site who is certified. The ICC certification shall be renewed every 24 months. [District Rules 4621 and 4622] Federally Enforceable Through Title V Permit
22. Proof of the ICC certification and all other certifications required by the Executive Order and installation and operation manual shall be made available onsite. [District Rules 4621 and 4622] Federally Enforceable Through Title V Permit
23. The permittee shall notify the District at least 7 days prior to each performance test. The test results shall be submitted to the District no later than 30 days after the completion of each test. [District Rule 4621] Federally Enforceable Through Title V Permit
24. The permittee shall maintain a copy of all test results. The test results shall be dated and shall contain the name, address, and telephone number of the company responsible for system installation and testing. [District Rule 4622] Federally Enforceable Through Title V Permit
25. The permittee shall maintain on the premises a log of any repairs made to the certified Phase I or Phase II vapor recovery system. The repair log shall include the following: 1) date and time of each repair; 2) the name and applicable certification numbers of the person(s) who performed the repair, and if applicable, the name, address and phone number of the person's employer; 3) description of service performed; 4) each component that was repaired, serviced, or removed; 5) each component that was installed as replacement, if applicable; and 6) receipts or other documents for parts used in the repair and, if applicable, work orders which shall include the name and signature of the person responsible for performing the repairs. [District Rule 4622] Federally Enforceable Through Title V Permit
26. The O&M manual shall be kept at the dispensing operation and made available to any person who operates, inspects, maintains, repairs, or tests the equipment at the operation as well as to District personnel upon request. [District Rule 4622] Federally Enforceable Through Title V Permit
27. The permittee shall maintain monthly and annual gasoline throughput records. [District Rules 4621 and 4622] Federally Enforceable Through Title V Permit
28. All records required by this permit shall be retained on-site for a period of at least five years and shall be made available for District inspection upon request. [District Rules 4621 and 4622] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-130-3 **EXPIRATION DATE:** 08/31/2022

EQUIPMENT DESCRIPTION:
74,000 BBL INTERNAL FLOATING ROOF ORGANIC LIQUID STORAGE TANK, WELDED CONSTRUCTION WITH METALLIC SHOE PRIMARY SEAL AND WIPER SECONDARY SEAL (TANK #74000)

PERMIT UNIT REQUIREMENTS

1. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623] Federally Enforceable Through Title V Permit
2. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
3. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
4. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623] Federally Enforceable Through Title V Permit
5. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623] Federally Enforceable Through Title V Permit
6. The cumulative length of all gaps between the tank shell and the secondary seal, greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623] Federally Enforceable Through Title V Permit
7. The metallic shoe-type seal shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 18 inches above the stored liquid surface. [District Rule 4623] Federally Enforceable Through Title V Permit
8. The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623] Federally Enforceable Through Title V Permit
9. There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
10. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
11. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
12. All openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10% of the maximum allowable working pressure of the roof, shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be leak-free, except when the device or appurtenance is in use. [District Rule 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use. [District Rule 4623] Federally Enforceable Through Title V Permit
14. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. [District Rule 4623] Federally Enforceable Through Title V Permit
15. Rim vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [District Rule 4623] Federally Enforceable Through Title V Permit
16. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The well shall have a slit fabric cover that covers at least 90% of the opening. The fabric cover must be impermeable. [District Rule 4623] Federally Enforceable Through Title V Permit
17. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover. The fabric sleeve must be impermeable. [District Rule 4623] Federally Enforceable Through Title V Permit
18. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. [District Rule 4623] Federally Enforceable Through Title V Permit
19. Permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
20. Permittee shall maintain the records of the internal floating roof landing activities that are performed pursuant to Rule 4623, Sections 5.3.1.3 and 5.4.3. The records shall include information on the true vapor pressure (TVP), API gravity, storage temperature, type of organic liquid stored in the tank, the purpose of landing the roof on its legs, the date of roof landing, duration the roof was on its legs, the level or height at which the tank roof was set to land on its legs, and the lowest liquid level in the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
21. This tank shall only store, place, or hold organic liquid with a tank vapor pressure (TVP) of less than, or equal to 7.96 psia under all storage conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
22. The total organic liquid throughput for tanks S-37-130 and '131 shall not exceed either of the following: 26,356 barrels per day or 9,620,000 barrels per year. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Combined VOC emission rate from tanks S-37-130 and '131 shall not exceed 20.5 lb/day and 7,466 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 2201] Federally Enforceable Through Title V Permit
25. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Vapor pressure of stored liquids shall be determined as described in section 6.4 of District Rule 4623. [District Rule 4623, 6.2] Federally Enforceable Through Title V Permit
27. Permittee shall submit the records of TVP testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP of the organic liquid, test methods used, and a copy of the test results. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

28. Permittee shall maintain monthly records of average daily crude oil throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, and TVP. [District Rule 2201] Federally Enforceable Through Title V Permit

29. Daily emissions will be determined based on using monthly throughput data and number of days per month. [District Rule 2520, 9.4] Federally Enforceable Through Title V Permit

30. The tank shall be equipped with a fixed roof with an internal floating type cover equipped with two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. [40 CFR 60.112b(a)(1)(ii)] Federally Enforceable Through Title V Permit

31. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal roof shall be floating on the liquid surface except during initial fill and when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. Whenever the permittee intends to land the roof on it's legs, the permittee shall notify the APCO in writing at least five days prior to performing the work. [District Rule 4623, and 40 CFR 60.112b(a)(i)] Federally Enforceable Through Title V Permit

32. Each opening in a non-contact internal floating roof, except for automatic bleeder vents (vacuum breaker vents) and rim space vents, shall provide a projection below the liquid surface. [District Rule 4623 and 40 CFR 60.112b(a)(1)(iii)] Federally Enforceable Through Title V Permit

33. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains shall be equipped with a cover, or a lid shall be maintained in a closed position at all times (i.e. no visible gaps) except when the device is in use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted in place except when they are in use. [District Rule 4623 and 40 CFR 60.112b(a)(1)(iv)] Federally Enforceable Through Title V Permit

34. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the leg roof supports. [District Rule 4623 and 40 CFR 60.112b(a)(1)(v)] Federally Enforceable Through Title V Permit

35. Rim vents shall be equipped with a gasket and shall be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [District Rule 4623 and 40 CFR 60.112b(a)(1)(vi)] Federally Enforceable Through Title V Permit

36. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The well shall have a slit fabric cover that covers at least 90 percent of the opening. The fabric cover must be impermeable. [District Rule 4623 and 40 CFR 60.112b(a)(1)(vii)] Federally Enforceable Through Title V Permit

37. Each penetration of the internal floating roof that allows for the passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover. The fabric sleeve must be impermeable. [District Rule 4623 and 40 CFR 60.112b(a)(1)(viii)] Federally Enforceable Through Title V Permit

38. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover. [40 CFR 60.112b(a)(1)(ix)] Federally Enforceable Through Title V Permit

39. The permittee shall visually inspect the internal floating roof, and its appurtenant parts, fittings, etc. and measure the gaps of the primary seal and/or secondary seal prior to filling the tank for newly constructed, repair, or rebuilt internal floating roof tanks. If holes, tears, or openings in the primary seal, the secondary seal, the seal fabric or defects in the internal floating roof or its appurtenant parts, components, fittings, etc., are found, they shall be repaired prior to filling the tank. [District Rule 4623 and 40 CFR 60.113b(a)(1)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

40. The permittee shall visually inspect, through the manholes, roof hatches, or other openings on the fixed roof, the internal floating roof and its appurtenant parts, fittings, etc., and the primary seal and/or secondary seal at least once every 12 months after the tank is initially filled with an organic liquid. There should be no visible organic liquid on the roof, tank walls, or anywhere. Other than the gap criteria specified by this rule, no holes, tears, or other openings are allowed that would permit the escape of vapors. Any defects found are violations of this rule. [District Rule 4623 and 40 CFR 60.113b(a)(2)] Federally Enforceable Through Title V Permit
41. The permittee shall maintain records of all visual inspections required by this permit. Each record shall identify the storage vessel on which the inspection was performed, the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings). [40 CFR 60.115b(a)(2)] Federally Enforceable Through Title V Permit
42. Operator shall maintain a record showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. The record shall be maintained for the life of the vessel. [40 CFR 60.116b(b)] Federally Enforceable Through Title V Permit
43. Operator shall keep a record of the liquids stored in this container, the period of storage, the storage temperature, the maximum true vapor pressure (TVP) of that liquid during the respective storage period and API gravity. [District Rule 4623 and 40 CFR 60.116b(c)] Federally Enforceable Through Title V Permit
44. Operator of each storage vessel, either with a design capacity greater than or equal to 151 m3 storing a liquid with a maximum true vapor pressure that is normally less than 0.75 psia or with a design capacity greater than or equal to 75 m3 but less than 151 m3 storing a liquid with a maximum true vapor pressure normally less than 4.0 psia, shall notify the APCO within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range. [40CFR 60.116b(d)] Federally Enforceable Through Title V Permit
45. For storage vessels operated above or below ambient temperatures, the operator shall calculate the maximum true vapor pressure based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service. [40 CFR 60.116b(e)(1)] Federally Enforceable Through Title V Permit
46. Maximum true vapor pressure, for crude oil or refined petroleum products, may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR 60.116b(e)(2)(i)] Federally Enforceable Through Title V Permit
47. Operator shall determine the true vapor pressure of each type of crude oil with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method from available data and record if the true vapor pressure is greater than 0.5 psia. [40 CFR 60.116b(e)(2)(ii)] Federally Enforceable Through Title V Permit
48. Operator shall determine the true vapor pressure of each VOL, other than crude oil or refined petroleum products, from standard reference texts, by ASTM Method D2879, or by using an appropriate method approved by EPA. [40 CFR 60.116b(e)(3)] Federally Enforceable Through Title V Permit
49. Operator of a tank storing a waste mixture of indeterminate or variable composition shall determine the highest maximum true vapor pressure for the range of liquid compositions to be stored prior to the initial filling, using methods specified for maximum true vapor pressure in this permit. [40 CFR 60.116b(f)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

50. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1) Date of inspection and names and titles of company personnel doing the inspection. 2) Tank identification number and Permit to Operate number. 3) Measurements of the gaps between the tank shell and primary and secondary seals. 4) Leak-free status of the tank and floating roof deck fittings. Records of the leak-free status shall include the vapor concentration values measured in parts per million by volume (ppmv). 5) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6) Any corrective actions or repairs performed on the tank in order to comply with rule 4623 and the date(s) such actions were taken. [District Rule 4623 and 40 CFR 60.115b(a)(3)] Federally Enforceable Through Title V Permit

51. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually inspect the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4326, Table 5] Federally Enforceable Through Title V Permit

52. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 5] Federally Enforceable Through Title V Permit

53. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 5] Federally Enforceable Through Title V Permit

54. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 5] Federally Enforceable Through Title V Permit

55. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 5 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 5 shall constitute a violation of this rule. [District Rule 4623, Table 5] Federally Enforceable Through Title V Permit

56. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623, Table 5] Federally Enforceable Through Title V Permit

57. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 5] Federally Enforceable Through Title V Permit

58. Records shall be kept of each inspection performed. Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings). [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

59. This unit commenced construction, modification, or reconstruction after July 23, 1984. Therefore, the requirements of 40 CFR 60 Subpart K and Ka do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-131-3 **EXPIRATION DATE:** 08/31/2022

EQUIPMENT DESCRIPTION:
74,000 BBL INTERNAL FLOATING ROOF ORGANIC LIQUID STORAGE TANK, WELDED CONSTRUCTION WITH METALLIC SHOE PRIMARY SEAL AND WIPER SECONDARY SEAL (TANK #74001)

PERMIT UNIT REQUIREMENTS

1. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623] Federally Enforceable Through Title V Permit
2. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
3. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
4. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623] Federally Enforceable Through Title V Permit
5. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623] Federally Enforceable Through Title V Permit
6. The cumulative length of all gaps between the tank shell and the secondary seal, greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623] Federally Enforceable Through Title V Permit
7. The metallic shoe-type seal shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 18 inches above the stored liquid surface. [District Rule 4623] Federally Enforceable Through Title V Permit
8. The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623] Federally Enforceable Through Title V Permit
9. There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
10. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
11. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
12. All openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10% of the maximum allowable working pressure of the roof, shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be leak-free, except when the device or appurtenance is in use. [District Rule 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use. [District Rule 4623] Federally Enforceable Through Title V Permit
14. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. [District Rule 4623] Federally Enforceable Through Title V Permit
15. Rim vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [District Rule 4623] Federally Enforceable Through Title V Permit
16. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The well shall have a slit fabric cover that covers at least 90% of the opening. The fabric cover must be impermeable. [District Rule 4623] Federally Enforceable Through Title V Permit
17. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover. The fabric sleeve must be impermeable. [District Rule 4623] Federally Enforceable Through Title V Permit
18. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. [District Rule 4623] Federally Enforceable Through Title V Permit
19. Permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
20. Permittee shall maintain the records of the internal floating roof landing activities that are performed pursuant to Rule 4623, Sections 5.3.1.3 and 5.4.3. The records shall include information on the true vapor pressure (TVP), API gravity, storage temperature, type of organic liquid stored in the tank, the purpose of landing the roof on its legs, the date of roof landing, duration the roof was on its legs, the level or height at which the tank roof was set to land on its legs, and the lowest liquid level in the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
21. This tank shall only store, place, or hold organic liquid with a tank vapor pressure (TVP) of less than, or equal to 7.96 psia under all storage conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
22. The total organic liquid throughput for tanks S-37-130 and '131 shall not exceed either of the following: 26,356 barrels per day or 9,620,000 barrels per year. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Combined VOC emission rate from tanks S-37-130 and '131 shall not exceed 20.5 lb/day and 7,466 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 2201] Federally Enforceable Through Title V Permit
25. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Vapor pressure of stored liquids shall be determined as described in section 6.4 of District Rule 4623. [District Rule 4623, 6.2] Federally Enforceable Through Title V Permit
27. Permittee shall submit the records of TVP testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP of the organic liquid, test methods used, and a copy of the test results. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

28. Permittee shall maintain monthly records of average daily crude oil throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, and TVP. [District Rule 2201] Federally Enforceable Through Title V Permit

29. Daily emissions will be determined based on using monthly throughput data and number of days per month. [District Rule 2520, 9.4] Federally Enforceable Through Title V Permit

30. The tank shall be equipped with a fixed roof with an internal floating type cover equipped with two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. [40 CFR 60.112b(a)(1)(ii)] Federally Enforceable Through Title V Permit

31. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal roof shall be floating on the liquid surface except during initial fill and when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. Whenever the permittee intends to land the roof on it's legs, the permittee shall notify the APCO in writing at least five days prior to performing the work. [District Rule 4623, and 40 CFR 60.112b(a)(i)] Federally Enforceable Through Title V Permit

32. Each opening in a non-contact internal floating roof, except for automatic bleeder vents (vacuum breaker vents) and rim space vents, shall provide a projection below the liquid surface. [District Rule 4623 and 40 CFR 60.112b(a)(1)(iii)] Federally Enforceable Through Title V Permit

33. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains shall be equipped with a cover, or a lid shall be maintained in a closed position at all times (i.e. no visible gaps) except when the device is in use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted in place except when they are in use. [District Rule 4623 and 40 CFR 60.112b(a)(1)(iv)] Federally Enforceable Through Title V Permit

34. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the leg roof supports. [District Rule 4623 and 40 CFR 60.112b(a)(1)(v)] Federally Enforceable Through Title V Permit

35. Rim vents shall be equipped with a gasket and shall be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [District Rule 4623 and 40 CFR 60.112b(a)(1)(vi)] Federally Enforceable Through Title V Permit

36. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The well shall have a slit fabric cover that covers at least 90 percent of the opening. The fabric cover must be impermeable. [District Rule 4623 and 40 CFR 60.112b(a)(1)(vii)] Federally Enforceable Through Title V Permit

37. Each penetration of the internal floating roof that allows for the passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover. The fabric sleeve must be impermeable. [District Rule 4623 and 40 CFR 60.112b(a)(1)(viii)] Federally Enforceable Through Title V Permit

38. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover. [40 CFR 60.112b(a)(1)(ix)] Federally Enforceable Through Title V Permit

39. The permittee shall visually inspect the internal floating roof, and its appurtenant parts, fittings, etc. and measure the gaps of the primary seal and/or secondary seal prior to filling the tank for newly constructed, repair, or rebuilt internal floating roof tanks. If holes, tears, or openings in the primary seal, the secondary seal, the seal fabric or defects in the internal floating roof or its appurtenant parts, components, fittings, etc., are found, they shall be repaired prior to filling the tank. [District Rule 4623 and 40 CFR 60.113b(a)(1)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

40. The permittee shall visually inspect, through the manholes, roof hatches, or other openings on the fixed roof, the internal floating roof and its appurtenant parts, fittings, etc., and the primary seal and/or secondary seal at least once every 12 months after the tank is initially filled with an organic liquid. There should be no visible organic liquid on the roof, tank walls, or anywhere. Other than the gap criteria specified by this rule, no holes, tears, or other openings are allowed that would permit the escape of vapors. Any defects found are violations of this rule. [District Rule 4623 and 40 CFR 60.113b(a)(2)] Federally Enforceable Through Title V Permit
41. The permittee shall maintain records of all visual inspections required by this permit. Each record shall identify the storage vessel on which the inspection was performed, the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings). [40 CFR 60.115b(a)(2)] Federally Enforceable Through Title V Permit
42. Operator shall maintain a record showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. The record shall be maintained for the life of the vessel. [40 CFR 60.116b(b)] Federally Enforceable Through Title V Permit
43. Operator shall keep a record of the liquids stored in this container, the period of storage, the storage temperature, the maximum true vapor pressure (TVP) of that liquid during the respective storage period and API gravity. [District Rule 4623 and 40 CFR 60.116b(c)] Federally Enforceable Through Title V Permit
44. Operator of each storage vessel, either with a design capacity greater than or equal to 151 m3 storing a liquid with a maximum true vapor pressure that is normally less than 0.75 psia or with a design capacity greater than or equal to 75 m3 but less than 151 m3 storing a liquid with a maximum true vapor pressure normally less than 4.0 psia, shall notify the APCO within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range. [40CFR 60.116b(d)] Federally Enforceable Through Title V Permit
45. For storage vessels operated above or below ambient temperatures, the operator shall calculate the maximum true vapor pressure based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service. [40 CFR 60.116b(e)(1)] Federally Enforceable Through Title V Permit
46. Maximum true vapor pressure, for crude oil or refined petroleum products, may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR 60.116b(e)(2)(i)] Federally Enforceable Through Title V Permit
47. Operator shall determine the true vapor pressure of each type of crude oil with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method from available data and record if the true vapor pressure is greater than 0.5 psia. [40 CFR 60.116b(e)(2)(ii)] Federally Enforceable Through Title V Permit
48. Operator shall determine the true vapor pressure of each VOL, other than crude oil or refined petroleum products, from standard reference texts, by ASTM Method D2879, or by using an appropriate method approved by EPA. [40 CFR 60.116b(e)(3)] Federally Enforceable Through Title V Permit
49. Operator of a tank storing a waste mixture of indeterminate or variable composition shall determine the highest maximum true vapor pressure for the range of liquid compositions to be stored prior to the initial filling, using methods specified for maximum true vapor pressure in this permit. [40 CFR 60.116b(f)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

50. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1) Date of inspection and names and titles of company personnel doing the inspection. 2) Tank identification number and Permit to Operate number. 3) Measurements of the gaps between the tank shell and primary and secondary seals. 4) Leak-free status of the tank and floating roof deck fittings. Records of the leak-free status shall include the vapor concentration values measured in parts per million by volume (ppmv). 5) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6) Any corrective actions or repairs performed on the tank in order to comply with rule 4623 and the date(s) such actions were taken. [District Rule 4623 and 40 CFR 60.115b(a)(3)] Federally Enforceable Through Title V Permit

51. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually inspect the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4326, Table 5] Federally Enforceable Through Title V Permit

52. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 5] Federally Enforceable Through Title V Permit

53. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 5] Federally Enforceable Through Title V Permit

54. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 5] Federally Enforceable Through Title V Permit

55. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 5 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 5 shall constitute a violation of this rule. [District Rule 4623, Table 5] Federally Enforceable Through Title V Permit

56. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623, Table 5] Federally Enforceable Through Title V Permit

57. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 5] Federally Enforceable Through Title V Permit

58. Records shall be kept of each inspection performed. Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings). [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

59. This unit commenced construction, modification, or reconstruction after July 23, 1984. Therefore, the requirements of 40 CFR 60 Subpart K and Ka do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-138-3 **EXPIRATION DATE:** 08/31/2022

EQUIPMENT DESCRIPTION:
ORGANIC LIQUID TRANSFER FACILITY WITH FOUR TRANSFER RACKS (RACK X)

PERMIT UNIT REQUIREMENTS

1. Permittee shall transfer no more than 23,016 gallons per day through this operation. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The true vapor pressure of liquids transferred shall not exceed 0.05 psi at transfer temperature. [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit
3. Loading losses shall not exceed 0.087 lb VOC/1,000 gallon transferred. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Permittee shall keep daily and annual records of the volume of organic liquids transferred, the true vapor pressure (TVP) and temperature of the liquids transferred, and the type of liquids transferred. Such records shall be maintained, retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit
5. The TVP shall be determined whenever there is a change in the type of liquid being transferred. Organic liquid TVP shall be determined using one of the following methods: (1) Rule 4624, Appendix A, for any of the listed liquids provided the storage temperature listed in Appendix A is not exceeded at any time; (2) A material safety data sheet (MSDS) in place of TVP testing if the transferred organic liquid is not crude oil or a petroleum distillate; (3) TVP test by measuring the Reid Vapor Pressure (RVP) using ASTM D 323 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the storage container's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in Rule 4624, Appendix B. Appendix B is an excerpt from the oil and gas section of "ARB Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588", dated August 1989. As an alternative to using ASTM D 323, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO and EPA. The latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA, shall be used to determine the TVP of crude oil with an API gravity of 26 degrees or less, or for any API gravity that is specified in this test method. The API gravity of crude oil or petroleum distillate shall be determined using ASTM Method D 287 (Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 (Standard Practices for Manual Sampling of Petroleum and Petroleum Products). [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-139-3 **EXPIRATION DATE:** 08/31/2022

EQUIPMENT DESCRIPTION:
CRUDE OIL UNLOADING RACK (NORTH OF TANK #80000) WITH TWO UNLOADING STATIONS, TRANSFER PUMP, AND ASSOCIATED HOSES, VALVES, FLANGES, AND THREADED CONNECTIONS - LANE 1 SOUTH (RACK AA)

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Only crude oil shall be unloaded through this equipment without prior approval by the District through Authority to Construct. [District Rule 2020] Federally Enforceable Through Title V Permit
3. Crude oil unloaded through this equipment shall only be routed to a fixed roof or floating roof storage tank which meets the control requirements of Rule 4623, "Storage of Organic Liquids." [District Rule 4624] Federally Enforceable Through Title V Permit
4. The transfer rack shall be maintained and operated such that there are no leaks and no excess organic liquid drainage at disconnections. Excess organic liquid drainage is defined as more than ten (10) milliliters of liquid drainage as determined by computing the average drainage from three consecutive disconnects. [District Rule 4624] Federally Enforceable Through Title V Permit
5. A liquid leak is defined as the dripping of VOC-containing liquid at a rate of more than three (3) drops per minute. A gaseous leak is defined as the detection of any gaseous or vapor emissions with a concentration of VOC greater than 1,000 ppmv above a background when measured with a portable hydrocarbon detection instrument in accordance with EPA Method 21. Any liquid or gas coming from a component undergoing repair or replacement, or during sampling of process fluid from equipment into a container is not considered a leak provided such activities are accomplished as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4624] Federally Enforceable Through Title V Permit
6. At least once every calendar quarter, during transfer of organic liquids, the operator shall inspect the unloading rack components for leaks according to EPA Method 21. [District Rule 4624] Federally Enforceable Through Title V Permit
7. All equipment that are found leaking shall be repaired or replaced within 72 hours. If the leaking component cannot be repaired or replaced within 72 hours, the component shall be taken out of service until such time the component is repaired or replaced. The repaired or replacement equipment shall be reinspected the first time the equipment is in operation after the repair or replacement. [District Rule 4624] Federally Enforceable Through Title V Permit
8. The operator shall keep records of daily liquid throughput and the results of any required leak inspections. The record shall be maintained for a period of five years and be made available to the APCO, ARB, or EPA during normal business hours. [District Rule 4624] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-140-3 **EXPIRATION DATE:** 08/31/2022

EQUIPMENT DESCRIPTION:
CRUDE OIL UNLOADING RACK (NORTH OF TANK #80000) WITH TWO UNLOADING STATIONS, TRANSFER PUMP, AND ASSOCIATED HOSES, VALVES, FLANGES, AND THREADED CONNECTIONS - LANE 2 MIDDLE (RACK AA)

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Only crude oil shall be unloaded through this equipment without prior approval by the District through Authority to Construct. [District Rule 2020] Federally Enforceable Through Title V Permit
3. Crude oil unloaded through this equipment shall only be routed to a fixed roof or floating roof storage tank which meets the control requirements of Rule 4623, "Storage of Organic Liquids." [District Rule 4624] Federally Enforceable Through Title V Permit
4. The transfer rack shall be maintained and operated such that there are no leaks and no excess organic liquid drainage at disconnections. Excess organic liquid drainage is defined as more than ten (10) milliliters of liquid drainage as determined by computing the average drainage from three consecutive disconnects. [District Rule 4624] Federally Enforceable Through Title V Permit
5. A liquid leak is defined as the dripping of VOC-containing liquid at a rate of more than three (3) drops per minute. A gaseous leak is defined as the detection of any gaseous or vapor emissions with a concentration of VOC greater than 1,000 ppmv above a background when measured with a portable hydrocarbon detection instrument in accordance with EPA Method 21. Any liquid or gas coming from a component undergoing repair or replacement, or during sampling of process fluid from equipment into a container is not considered a leak provided such activities are accomplished as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4624] Federally Enforceable Through Title V Permit
6. At least once every calendar quarter, during transfer of organic liquids, the operator shall inspect the unloading rack components for leaks according to EPA Method 21. [District Rule 4624] Federally Enforceable Through Title V Permit
7. All equipment that are found leaking shall be repaired or replaced within 72 hours. If the leaking component cannot be repaired or replaced within 72 hours, the component shall be taken out of service until such time the component is repaired or replaced. The repaired or replacement equipment shall be reinspected the first time the equipment is in operation after the repair or replacement. [District Rule 4624] Federally Enforceable Through Title V Permit
8. The operator shall keep records of daily liquid throughput and the results of any required leak inspections. The record shall be maintained for a period of five years and be made available to the APCO, ARB, or EPA during normal business hours. [District Rule 4624] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-141-3 **EXPIRATION DATE:** 08/31/2022

EQUIPMENT DESCRIPTION:
ORGANIC LIQUID UNLOADING RACK NORTH OF TANK #80000 WITH TWO UNLOADING HOSES, TRANSFER PUMP, AND ASSOCIATED VALVES, FLANGES, AND THREADED CONNECTIONS - LANE 3 NORTH (RACK AA)

PERMIT UNIT REQUIREMENTS

1. Transfer rack shall be maintained and operated in accordance with the manufacturer's specifications, and operated such that there are no leaks or excess organic liquid drainage at disconnections as defined herein. [District Rule 4624, 5.6]
2. All liquids unloaded through this unloading rack shall be routed to tanks which meet the requirements of Rule 4623, "Storage of Organic Liquids." [District Rule 4624]
3. Total number of disconnects shall not exceed 48 per day. [District Rule 2201]
4. During hose disconnects the maximum liquid spillage for liquids shall not exceed 10 milliliters/disconnect based on an average from 3 consecutive disconnects. [District Rule 2201 and 4624]
5. Emissions from light liquid components shall not exceed 0.14 lb-VOC/day. [District Rule 2201]
6. Permittee shall maintain accurate component count and emissions calculated using CAPCOA Average Emission Factors for Marketing Terminals, from California Implementation Guidelines for Estimating Emissions of Fugitive Hydrocarbon Leaks at Marketing Terminals, Table IV-1b, February 1999. [District Rule 2201]
7. For this Class 1 organic liquid transfer operation, the emission of VOC from the transfer operation shall not exceed 0.08 pounds per 1,000 gallons of organic liquid transferred. [District Rule 4624, 5.1]
8. A leak is defined as the dripping of VOC-containing liquid at a rate of more than three (3) drops per minute; or for organic liquids other than gasoline, the detection of any gaseous or vapor emissions with a concentration of VOC greater than 1,000 ppmv above a background as methane when measured in accordance with the test method in Section 6.3.7. Any liquid or gas coming from a component undergoing repair or replacement, or during sampling of process fluid from equipment into a container is not considered a leak provided such activities are accomplished as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4624, 3.17]
9. The operator shall inspect the vapor collection system, the vapor disposal system, and each transfer rack handling organic liquids for leaks during transfer at least once every month. Leak inspections shall be conducted using sight, sound, smell and instrument methods to detect leaks. Instrument detection shall be conducted using EPA Method 21 and shall be measured at a distance of one centimeter from the potential source. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: A) Zero air (less than 10 ppm of hydrocarbon in air); and B) Mixture of methane or n-hexane and air at a concentration of about, but less than 1,000 ppm methane or n-hexane. [District Rules 2520 and 4624] Federally Enforceable Through Title V Permit
10. Corrective steps shall be taken at any time the operator observes a leak or excess drainage at disconnect. All equipment found leaking shall be repaired or replaced within 72 hours. If the leaking component cannot be repaired or replaced within 72 hours, the component shall be taken out of service until such time the component is repaired or replaced. The repaired or replaced equipment shall be reinspected the first time the equipment is in operation after the repair or replacement. [District Rule 4624, 5.9.3]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. All inspections shall be documented with an inspection log. Inspection records shall include, at a minimum, 1) date of inspection, 2) location and description of any missing, loose, leaking, or damaged equipment and any malfunction requiring repair, 3) corrective steps taken to repair or replace the equipment, 4) test method and results for leak and drainage inspections, 5) location and description of any equipment to be inspected upon commencing operation after repair or replacement and 6) inspector name and signature. [District Rule 4624, 6.1.3]
12. Permittee shall keep records of daily unloading rack throughput and the results of any required leak inspections. [District Rule 4624, 6.1.3]
13. Permittee shall keep records of daily number of truck unloading disconnects. [District Rules 1070 and 2201]
14. Records shall be retained for a minimum of five years and shall be made readily available to the APCO, ARB, or EPA during normal business hours and submitted upon request to the APCO, ARB, or EPA. [District Rules 1070 and 4624]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-142-3 **EXPIRATION DATE:** 08/31/2022

EQUIPMENT DESCRIPTION:
RESIDUAL OIL TRANSFER RACK (FROM TRUCKS TO REFINERY OR REVERSE) EAST OF TANK #10000, WITH TWO TRANSFER POINTS, TRANSFER PUMP, AND ASSOCIATED HOSES, VALVES, FLANGES, AND THREADED CONNECTIONS (RACK U)

PERMIT UNIT REQUIREMENTS

1. Only residual oil shall be loaded/unloaded through this equipment without prior approval by the District through Authority to Construct. [District Rule 2020] Federally Enforceable Through Title V Permit
2. Residual oil loaded/unloaded through this equipment shall have a true vapor pressure (TVP) less than 1.5 psia at maximum storage container temperature. [District Rule 4624] Federally Enforceable Through Title V Permit
3. The TVP shall be determined whenever there is a change in the type of liquid being transferred. Organic liquid TVP shall be determined using one of the following methods: (1) Rule 4624, Appendix A, for any of the listed liquids provided the storage temperature listed in Appendix A is not exceeded at any time; (2) A material safety data sheet (MSDS) in place of TVP testing if the transferred organic liquid is not crude oil or a petroleum distillate; (3) TVP test by measuring the Reid Vapor Pressure (RVP) using ASTM D 323 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the storage container's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in Rule 4624, Appendix B. Appendix B is an excerpt from the oil and gas section of "ARB Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588", dated August 1989. As an alternative to using ASTM D 323, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO and EPA. The latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA, shall be used to determine the TVP of crude oil with an API gravity of 26 degrees or less, or for any API gravity that is specified in this test method. The API gravity of crude oil or petroleum distillate shall be determined using ASTM Method D 287 (Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 (Standard Practices for Manual Sampling of Petroleum and Petroleum Products). [District Rule 4624] Federally Enforceable Through Title V Permit
4. Permittee shall maintain accurate daily records of the TVP of liquids transferred. [District Rule 4624] Federally Enforceable Through Title V Permit
5. Records required by this permit shall be retained for a minimum of five years and shall be made readily available to the APCO, ARB, or EPA during normal business hours and submitted upon request to the APCO, ARB, or EPA. [District Rule 4624] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-143-3 **EXPIRATION DATE:** 08/31/2022

EQUIPMENT DESCRIPTION:
RESIDUAL OIL TRANSFER RACK (FROM TRUCKS TO REFINERY OR REVERSE) NORTHWEST OF TANK #10006, WITH ONE TRANSFER POINT, TRANSFER PUMP, AND ASSOCIATED HOSES, VALVES, FLANGES, AND THREADED CONNECTIONS (RACK Y)

PERMIT UNIT REQUIREMENTS

1. Only residual oil shall be loaded/unloaded through this equipment without prior approval by the District through Authority to Construct. [District Rule 2020] Federally Enforceable Through Title V Permit
2. Residual oil loaded/unloaded through this equipment shall have a true vapor pressure (TVP) less than 1.5 psia at maximum storage container temperature. [District Rule 4624] Federally Enforceable Through Title V Permit
3. The TVP shall be determined whenever there is a change in the type of liquid being transferred. Organic liquid TVP shall be determined using one of the following methods: (1) Rule 4624, Appendix A, for any of the listed liquids provided the storage temperature listed in Appendix A is not exceeded at any time; (2) A material safety data sheet (MSDS) in place of TVP testing if the transferred organic liquid is not crude oil or a petroleum distillate; (3) TVP test by measuring the Reid Vapor Pressure (RVP) using ASTM D 323 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the storage container's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in Rule 4624, Appendix B. Appendix B is an excerpt from the oil and gas section of "ARB Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588", dated August 1989. As an alternative to using ASTM D 323, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO and EPA. The latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA, shall be used to determine the TVP of crude oil with an API gravity of 26 degrees or less, or for any API gravity that is specified in this test method. The API gravity of crude oil or petroleum distillate shall be determined using ASTM Method D 287 (Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 (Standard Practices for Manual Sampling of Petroleum and Petroleum Products). [District Rule 4624] Federally Enforceable Through Title V Permit
4. Permittee shall maintain accurate daily records of the TVP of liquids transferred. [District Rule 4624] Federally Enforceable Through Title V Permit
5. Records required by this permit shall be retained for a minimum of five years and shall be made readily available to the APCO, ARB, or EPA during normal business hours and submitted upon request to the APCO, ARB, or EPA. [District Rule 4624] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-147-1 **EXPIRATION DATE:** 08/31/2022

EQUIPMENT DESCRIPTION:
ORGANIC LIQUID UNLOADING RACK (RACK S) - SOUTH OF DIESEL TANK FARM

PERMIT UNIT REQUIREMENTS

1. Transfer Rack S shall be used only for unloading. [District Rule 2201] Federally Enforceable Through Title V Permit
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. Transfer rack shall be maintained and operated in accordance with the manufacturer's specifications, and operated such that there are no leaks or excess organic liquid drainage at disconnections as defined herein. [District Rule 4624] Federally Enforceable Through Title V Permit
4. All liquids and gases from the transfer operation shall be routed to one of the following systems: a vapor collection and control system; a fixed roof container that meets the control requirements specified in Rule 4623 (Storage of Organic Liquids); a floating roof container that meets the control requirements specified in Rule 4623 (Storage of Organic Liquids); or a pressure vessel equipped with an APCO-approved vapor recovery system that meets the control requirements specified in Rule 4623 (Storage of Organic Liquids); or a closed VOC emission control system. [District Rules 4623 and 4624] Federally Enforceable Through Title V Permit
5. A floating roof container that meets the applicable control requirements of Section 5.0 of Rule 4623 (Storage of Organic Liquids) shall be considered not leaking when receiving unloaded liquids for compliance with Rule 4624. [District Rule 4624] Federally Enforceable Through Title V Permit
6. Total number of disconnects shall not exceed 20 per day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. During hose disconnects the maximum liquid spillage for liquids shall not exceed 10 milliliters/disconnect based on an average from 3 consecutive disconnects. [District Rule 2201 and 4624] Federally Enforceable Through Title V Permit
8. Emissions from light liquid components shall not exceed 3.1 lb-VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Permittee shall maintain accurate component count and emissions calculated using CAPCOA Average Emission Factors for Marketing Terminals, from California Implementation Guidelines for Estimating Emissions of Fugitive Hydrocarbon Leaks at Marketing Terminals, Table IV-2b, February 1999. [District Rule 2201] Federally Enforceable Through Title V Permit
10. For this Class 1 organic liquid transfer operation, the emission of VOC from the transfer operation shall not exceed 0.08 pounds per 1,000 gallons of organic liquid transferred. [District Rule 4624] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. A leak is defined as the dripping of VOC-containing liquid at a rate of more than three (3) drops per minute; or for organic liquids other than gasoline, the detection of any gaseous or vapor emissions with a concentration of VOC greater than 1,000 ppmv above a background as methane when measured in accordance with the test method in Section 6.3.8 or alternative method approved in writing by the APCO and EPA. Any liquid or gas coming from a component undergoing repair or replacement, or during sampling of process fluid from equipment into a container is not considered a leak provided such activities are accomplished as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4624] Federally Enforceable Through Title V Permit
12. Permittee shall inspect the loading rack for leaks during transfer at least once every calendar quarter using the test method prescribed in Section 6.3.8 of Rule 4624 or alternative method approved in writing by the APCO and EPA. [District Rule 4624] Federally Enforceable Through Title V Permit
13. An operator may apply for a written approval from the APCO to change the inspection frequency from quarterly to annually provided no leaks were found during the inspections required under provisions of Sections 5.9.1 and 5.9.2 of Rule 4624 during five consecutive quarterly inspections. Upon identification of any leak during an annual inspection the frequency shall revert back to quarterly and the operator shall contact the APCO in writing within 14 days. [District Rule 4624] Federally Enforceable Through Title V Permit
14. Corrective steps shall be taken at any time the operator observes a leak or excess drainage at disconnect. All equipment found leaking shall be repaired or replaced within 72 hours. If the leaking component cannot be repaired or replaced within 72 hours, the component shall be taken out of service until such time the component is repaired or replaced. The repaired or replaced equipment shall be reinspected the first time the equipment is in operation after the repair or replacement. [District Rule 4624] Federally Enforceable Through Title V Permit
15. All inspections shall be documented with an inspection log. Inspection records shall include, at a minimum, 1) date of inspection, 2) location and description of any missing, loose, leaking, or damaged equipment and any malfunction requiring repair, 3) corrective steps taken to repair or replace the equipment, 4) test method and results for leak and drainage inspections, 5) location and description of any equipment to be inspected upon commencing operation after repair or replacement and 6) inspector name and signature. [District Rule 4624] Federally Enforceable Through Title V Permit
16. Permittee shall keep records of daily unloading rack throughput and the results of any required leak inspections. [District Rule 4624] Federally Enforceable Through Title V Permit
17. Permittee shall keep records of daily number of truck unloading disconnects. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
18. Records shall be retained for a minimum of five years and shall be made readily available to the APCO, ARB, or EPA during normal business hours and submitted upon request to the APCO, ARB, or EPA. [District Rules 1070 and 4624] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-148-1 **EXPIRATION DATE:** 08/31/2022

EQUIPMENT DESCRIPTION:
54,000 BBL EXTERNAL FLOATING ROOF ORGANIC LIQUID STORAGE TANK WITH EITHER A DUAL WIPER SEAL WITH DRIP CURTAIN OR PRIMARY METAL SHOE SEAL WITH SECONDARY WIPER SEAL

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. Emissions from the components serving the tank shall not exceed 1.9 lb-VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Operator shall maintain records to demonstrate compliance with fugitive VOC emissions limit of this permit annually. Compliance shall be demonstrated by calculation, using the correlation equations, zero default and 10,000 ppmv pegged factors set forth in the CAPCOA California implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-3a, February 1999, and the average emission concentrations of total organic compounds measured for each component during all inspections conducted during the prior 365 day period. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The True Vapor Pressure (TVP) of the organic liquid stored shall be less than 11 psia. [District Rules 2201 and 4623 and 40 CFR 60.110b(b)] Federally Enforceable Through Title V Permit
7. Organic liquid throughput shall not exceed 25,000 bbl/day based on a monthly average. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Maximum annual organic liquid throughput shall not exceed 3,125,860 bbl/year. [District Rule 2201] Federally Enforceable Through Title V Permit
9. This tank shall be equipped with a floating roof consisting of a pontoon-type or double-deck-type cover which rests upon the surface of the liquid being stored and is equipped with a closure device between the tank shell and roof edge consisting of a primary and a secondary seal. [District Rules 2201 and 4623, 5.3.1 and 40 CFR 60.112b(a)(2) & (i)] Federally Enforceable Through Title V Permit
10. The external floating roof shall float on the surface of the stored liquid at all times (i.e., off the roof leg supports) except during the initial fill until the roof is lifted off the leg supports and when the tank is completely emptied and subsequently refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. Whenever the permittee intends to land the roof on its legs, the permittee shall notify the APCO in writing at least five calendar days prior to performing the work. The tank must be in compliance with this rule before it may land on its legs. [District Rule 4623, 5.3.1.3 and 40CFR 60.112b(a)(2)(iii)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Primary seal (lower seal) shall be either a mechanical shoe seal or a liquid-mounted seal. [40CFR 60.112b(a)(2)(i) and 60.112b(a)(2)(i)(A)] Federally Enforceable Through Title V Permit

12. This tank shall be maintained in a leak-free condition, except for the primary and secondary seals, roof deck fittings and floating roof automatic bleeder vents, and as allowed by Section 5.2 and applicable provisions of Table 3 through Table 5, and Section 5.7.5.4. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit

13. A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background, except for primary and secondary seals, floating roof deck fittings, and floating roof automatic bleeder vents is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit

14. Accumulated area of gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal shall not exceed 212 sq cm per meter of tank diameter, and the width of any gap shall not exceed 3.81 cm. [40CFR 60.113b(b)(4)(i)] Federally Enforceable Through Title V Permit

15. Accumulated area of gaps between the tank wall and the secondary seal shall not exceed 21.2 sq cm per meter of tank diameter, and the width of any portion of any gap shall not exceed 1.27 cm (1/2 inch). [40 CFR 60.112b(b)(4)(ii)(C)] Federally Enforceable Through Title V Permit

16. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623, 5.3.2.1.1] Federally Enforceable Through Title V Permit

17. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1] Federally Enforceable Through Title V Permit

18. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1] Federally Enforceable Through Title V Permit

19. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623, 5.3.2.1.1] Federally Enforceable Through Title V Permit

20. The cumulative length of all gaps between the tank shell and the secondary seal, greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623, 5.3.2.1.2] Federally Enforceable Through Title V Permit

21. The metallic shoe-type seal shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 24 inches above the stored liquid surface. [District Rule 4623, 5.3.2.1.3] Federally Enforceable Through Title V Permit

22. The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623, 5.3.2.1.4] Federally Enforceable Through Title V Permit

23. There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623, 5.3.2.1.5 and 40 CFR 60.112b(b)(4)(ii)(C)] Federally Enforceable Through Title V Permit

24. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.3.2.1.6] Federally Enforceable Through Title V Permit

25. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623, 5.3.2.1.7] Federally Enforceable Through Title V Permit

26. Secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion. [40CFR 60.112b(a)(2)(i)(B)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

27. All openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10% of the maximum allowable working pressure of the roof, shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be gas tight, except when the device or appurtenance is in use [District Rule 4623, 5.5.1] Federally Enforceable Through Title V Permit

28. Except for automatic bleeder vents, rim vents, and pressure relief vents, each opening in a non-contact external floating roof shall provide a projection below the liquid surface. [District Rule 4623, 5.5.2.2.1] Federally Enforceable Through Title V Permit

29. Except for automatic bleeder vents and rim vents, roof drains, and leg sleeves, each opening in the roof shall be equipped with a gasketed cover, seal, or lid that shall be maintained in a closed position at all times (i.e., no visible gap) except when in actual use. [District Rule 4623, 5.5.2.2.2] Federally Enforceable Through Title V Permit

30. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. [District Rule 4623, 5.5.2.2.3, 5.5.2.1.3 and 40CFR 60.112b(a)(2)(ii)]] Federally Enforceable Through Title V Permit

31. Rim vents shall be equipped with a gasket and shall be set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. [District Rule 4623, 5.5.2.2.4 and 40CFR 60.112b(a)(2)(ii)] Federally Enforceable Through Title V Permit

32. Each emergency roof drain shall be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening. The fabric cover must be impermeable if the liquid is drained into the contents of the tanks. [District Rule 4623, 5.5.2.2.5] Federally Enforceable Through Title V Permit

33. External floating roof legs shall be equipped with vapor socks or vapor barriers in order to maintain a gas-tight condition so as to prevent VOC emissions from escaping through the roof leg opening. [District Rule 4623, 5.5.2.2.6] Federally Enforceable Through Title V Permit

34. All wells and similar fixed projections through the floating roof shall provide a projection below the liquid surface. [District Rule 4623, 5.5.2.3.1] Federally Enforceable Through Title V Permit

35. The solid guidepole well shall be equipped with a pole wiper and a gasketed cover, seal or lid which shall be in a closed position at all times (i.e., no visible gap) except when the well is in use. [District Rule 4623, 5.5.2.3.2] Federally Enforceable Through Title V Permit

36. The gap between the pole wiper and the solid guidepole shall be added to the gaps measured to determine compliance with the secondary seal requirement, and in no case shall exceed 1/2 inch. [District Rule 4623, 5.5.2.3.3] Federally Enforceable Through Title V Permit

37. The permittee shall make the primary seal envelope available for unobstructed inspection by the APCO on an annual basis at locations selected along its circumference at random by the APCO. In the case of riveted tanks with toroid-type seals, a minimum of eight locations shall be made available; in all other cases, a minimum of four locations shall be made available. If the APCO suspects a violation may exist the APCO may require such further unobstructed inspection of the primary seal as may be necessary to determine the seal condition for its entire circumference. [District Rule 4623, 6.1.1] Federally Enforceable Through Title V Permit

38. Operator shall submit a tank inspection plan to the APCO for approval. The plan shall include an inventory of the tanks subject to this rule and a tank inspection schedule. A copy of the operator's tank safety procedures shall be made available to the APCO upon request. The tank inventory shall include tank's identification number, PTO number, maximum tank capacity, dimensions of tank (height and diameter), organic liquid stored, type of primary and secondary seal, type of floating roof (internal or external floating roof), construction date of tank, and location of tank. Any revision to a previously approved tank inspection schedule shall be submitted to the APCO for approval prior to conducting an inspection. [District Rule 4623, 6.1.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

39. Operator shall inspect all floating tanks within 60 days of initial startup and at least once every 12 months to determine compliance with the requirements of this rule. The actual gap measurements of the floating roof primary and secondary seals shall be recorded. The inspection results shall be submitted to the APCO as specified in Section 6.3.5. [District Rule 4623, 6.1.3.1 and 40 CFR 60.113b(b)(1)(i) & (ii)] Federally Enforceable Through Title V Permit

40. Operator shall inspect the primary and secondary seals for compliance with the requirements of this rule every time a tank is emptied or degassed. Actual gap measurements shall be performed when the liquid level is static but not more than 48 hours after the tank roof is re-floated. [District Rule 4623, 6.1.3.2 and 40 CFR 60.113b(b)(6)] Federally Enforceable Through Title V Permit

41. Operator shall also perform gap measurements on primary seals during hydrostatic testing of the vessel. [40CFR 60.113b(b)(1)(i)] Federally Enforceable Through Title V Permit

42. If unit is out of service for a period of one year or more, subsequent refilling with volatile organic liquid shall be considered initial fill in accordance with the conditions of this permit. [40CFR60.113b(b)(1)(iii)] Federally Enforceable Through Title V Permit

43. Permittee shall maintain the records of the external floating roof landing activities that are performed pursuant to Rule 4623, Sections 5.3.1.3 and 5.4.3. The records shall include information on the maximum true vapor pressure (TVP), API gravity, storage temperature, type of organic liquid stored in the tank, the purpose of landing the roof on its legs, the date of roof landing, duration the roof was on its legs, the level or height at which the tank roof was set to land on its legs, and the lowest liquid level in the tank. [District Rule 4623, 6.3.7 and 40 CFR 60.116b(c)] Federally Enforceable Through Title V Permit

44. An operator shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1) Date of inspection and names and titles of company personnel doing the inspection. 2) Tank identification number and Permit to Operate number. 3) Measurements of the gaps between the tank shell and primary and secondary seals. 4) Leak-free status of the tank and floating roof deck fittings. Records of the leak-free status shall include the vapor concentration values measured in parts per million by volume (ppmv). 5) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6) Any corrective actions or repairs performed on the tank in order to comply with rule 4623 and the date(s) such actions were taken. [District Rule 4623, 6.3.5 and 40CFR 60.115b(b)(4)] Federally Enforceable Through Title V Permit

45. Operator shall notify the APCO 30 days in advance of any gap measurements required by this permit to afford the APCO opportunity to have an observer present. [40CFR 60.113b(b)(5)] Federally Enforceable Through Title V Permit

46. If the external floating roof has defects, or the primary seal or secondary seal has holes, tears, or other openings in the seal or seal fabric, the operator shall repair the items as necessary so that none of these conditions exist before filling or refilling the storage vessel with VOL. [40CFR 60.113b(b)(6)(i)] Federally Enforceable Through Title V Permit

47. For all visual inspections required by this permit, the operator shall notify the APCO in writing at least 30 days prior to the filling or refilling of each storage vessel to afford the APCO the opportunity to inspect the storage vessel prior to refilling, except when notification is specifically allowed otherwise by this permit. [40CFR 60.113b(b)(6)(ii)] Federally Enforceable Through Title V Permit

48. If a visual inspection required by this permit is not planned and the operator could not have known about the inspection 30 days in advance of refilling the tank, the operator shall notify the APCO at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so it is received by the APCO at least 7 days prior to the refilling. [40CFR 60.113b(b)(6)(ii)] Federally Enforceable Through Title V Permit

49. Operator shall record the vessel on which the measurement was performed, date of the seal gap measurement, raw data obtained in the measurement process in accordance with the conditions of this permit. [40CFR 60.115b(b)(3)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

50. Within 60 days of performing the seal gap measurements required by this permit, the operator shall furnish the APCO with a report containing the date of measurement, raw data obtained in the measurement process, and all such gap calculations as required by this permit. [40CFR 60.115b(b)(2)] Federally Enforceable Through Title V Permit

51. If the seals do not meet the required specifications of this permit, operator shall repair or empty the storage vessel within 45 days of identification. [40CFR 60.113b(b)(4)] Federally Enforceable Through Title V Permit

52. Operator shall maintain a record showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. The record shall be maintained for the life of the vessel. [40 CFR 60.116b(b)] Federally Enforceable Through Title V Permit

53. Operator shall determine the true vapor pressure of each type of crude oil with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method from available data and record if the true vapor pressure is greater than 0.5 psia. [40 CFR 60.116b(e)(2)(ii)] Federally Enforceable Through Title V Permit

54. Operator shall determine the true vapor pressure of each VOL, other than crude oil or refined petroleum products, from standard reference texts, by ASTM Method D2879, or by using an appropriate method approved by EPA. [40 CFR 60.116b(e)(3)(iii)] Federally Enforceable Through Title V Permit

55. For storage vessels operated above or below ambient temperatures, the operator shall calculate the maximum true vapor pressure based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service. [40 CFR 60.116b(e)(1)] Federally Enforceable Through Title V Permit

56. Maximum true vapor pressure, for crude oil or refined petroleum products, may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR 60.116b(e)(2)(i)] Federally Enforceable Through Title V Permit

57. Operator of a tank storing a waste mixture of indeterminate or variable composition shall determine the highest maximum true vapor pressure for the range of liquid compositions to be stored prior to the initial filling, using methods specified for maximum true vapor pressure in this permit. [40CFR 60.116b(f)] Federally Enforceable Through Title V Permit

58. Permittee shall determine the true vapor pressure (TVP) of the organic liquid, using methods specified for maximum true vapor pressure in this permit, upon initial filling, and whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 2201] Federally Enforceable Through Title V Permit

59. As used in this permit, the term "source or type" shall mean liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids stored in this unit to determine which are from common source. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

60. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287-92 (2000) e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057-95 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products". [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit

61. The TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in Appendix B. Appendix B is an excerpt from the oil and gas section of "ARB Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588", dated August 1989. As an alternative to using ASTM D 323-94, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and US EPA. [District Rule 4623, 6.4.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

62. The latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and US EPA, shall be used to determine the TVP of crude oil with an API gravity of 26 degrees or less, or for any API gravity that is specified in this test method. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit

63. Operator shall maintain monthly and annual records of the tank's throughput. [District Rule 2201] Federally Enforceable Through Title V Permit

64. All records shall be retained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 4623 and 1070] Federally Enforceable Through Title V Permit

65. Operator of each storage vessel with a design capacity greater than or equal to 151 cu m storing a liquid with a maximum true vapor pressure that is normally less than 0.75 psia shall notify the APCO within 30 days when the maximum true vapor pressure of the liquid exceeds 0.75 psia. [40CFR 60.116b(d)] Federally Enforceable Through Title V Permit

66. This unit commenced construction, modification, or reconstruction after July 23, 1984. Therefore, the requirements of 40 CFR 60 Subpart K and Ka do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-149-1 **EXPIRATION DATE:** 08/31/2022

EQUIPMENT DESCRIPTION:
4 MMSCF/DAY LPG RECOVERY UNIT INCLUDING GAS COMPRESSION, MEMBRANE SEPARATION, REFRIGERATION, SOLID PHASE DRYING/ DEHYDRATION, AND FRACTIONATION

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. LPG and pentane liquid products shall be sent to existing storage facilities. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Total fugitive emissions rate from valves, pumps, flanges, others, and connectors from components in this permit unit shall be periodically calculated as described below using the California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities (February 1999), Table IV-3a:CAPCOA-Revised 1995 EPA Correlation Equations and Factors for Refineries and Marketing Terminals (as described in the following conditions) and shall not exceed 27.7 lb/day. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
5. A leak shall be defined as a reading of methane, in excess of 100 ppmv for valves and connectors and in excess of 500 ppmv for pump and compressor seals above background when measured per EPA Method 21 and an Inspection and Maintenance Program pursuant to District Rule 4455. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Permit holder shall maintain accurate records of component counts and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), CAPCOA-Revised 1995 EPA Correlation Equations and Factors for Refineries and Marketing Terminals. Permit holder shall update such records when new components are installed. Components shall be screened and leak rate shall be measured at least once each quarter. If compliance with the daily emission limit is shown during each of five (5) consecutive quarterly inspections, the inspection frequency may be changed from quarterly to annual. If any annual inspection shows non-compliance with the daily emission limit, then quarterly inspections shall be resumed. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Permit unit shall comply with applicable Rule 4001 (NSPS, Subpart QQQ) requirements. [District Rule 4001] Federally Enforceable Through Title V Permit
8. Each drain, receiving refinery wastewater from a process unit, shall be equipped with water seal controls. [40 CFR 60.692-2(a)(1)] Federally Enforceable Through Title V Permit
9. Each drain in active service, receiving refinery wastewater from a process unit, shall be checked by visual or physical inspection monthly for indications of low water levels or other conditions that would reduce the effectiveness of the water seal controls. [40 CFR 60.692-2(a)(2)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Each drain out of active service shall be checked by visual or physical inspection weekly for indications of low water levels or other problems that could result in VOC emissions. As an alternative, the owner or operator may elect to install a tightly sealed cap or plug over a drain that is out of service, inspection shall be conducted initially and semiannually to ensure caps or plugs are in place and properly installed. Whenever low water levels or missing or improperly installed caps or plugs are identified, water shall be added or first efforts at repair shall be made as soon as practicable, but not later than 24 hours after detection, except if the repair is technically impossible without a complete or partial refinery or process unit shutdown. Repair of such equipment shall occur before the end of the next refinery or process unit shutdown [40 CFR 60.692-2(a) and 60.692-6] Federally Enforceable Through Title V Permit
11. Junction boxes in refinery wastewater systems shall be equipped with a cover and may have an open vent pipe. The vent pipe shall be at least 90 cm (3 ft) in length and shall not exceed 10.2 cm (4 in) in diameter. Junction box covers shall have a tight seal around the edge and shall be kept in place at all times, except during inspection and maintenance. [40 CFR 60.692-2(b)(1)] Federally Enforceable Through Title V Permit
12. Junction boxes in refinery wastewater systems shall be visually inspected semiannually to ensure that the cover is in place and to ensure that the cover has a tight seal around the edge. If a broken seal or gap is identified, first effort at repair shall be made as soon as practicable, but not later than 15 calendar days after the broken seal or gap is identified, except if the repair is technically impossible without a complete or partial refinery or process unit shutdown. Repair of such equipment shall occur before the end of the next refinery or process unit shutdown. [40 CFR 60.692-2(b)(3)(4) and 60.692-6] Federally Enforceable Through Title V Permit
13. Sewer lines, conveying refinery wastewater to wastewater treatment system, shall not be open to the atmosphere and shall be covered or enclosed in a manner so as to have no visual gaps or cracks in joints, seals, or other emission interfaces. [40 CFR 60.692-2(c)(1)] Federally Enforceable Through Title V Permit
14. The portion of each unburied sewer line shall be visually inspected semiannually for indication of cracks, gaps, or other problems that could result in VOC emissions. Whenever cracks, gaps, or other problems are detected, repairs shall be made as soon as practicable, but not later than 15 calendar days after identification, except if the repair is technically impossible without a complete or partial refinery or process unit shutdown. Repair of such equipment shall occur before the end of the next refinery or process unit shutdown. [40 CFR 60.692-2(c)(2)(3) and 60.692-6] Federally Enforceable Through Title V Permit
15. Refinery wastewater routed through new process drains and a new first common downstream junction box, either as part of a new individual drain system or an existing individual drain system, shall not be routed through a downstream catch basin. [40 CFR 60.692-2(e)] Federally Enforceable Through Title V Permit
16. This unit is subject to 40 CFR 60 Subpart GGGa requirements on the facility wide permit S-37-0. [40 CFR 60.480a] Federally Enforceable Through Title V Permit
17. The requirements of 40 CFR 60 Subpart GGG do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-150-1 **EXPIRATION DATE:** 08/31/2022

EQUIPMENT DESCRIPTION:
3000 BBL ORGANIC LIQUID STORAGE TANK VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-37-8

PERMIT UNIT REQUIREMENTS

1. All piping, valves, and fittings shall be constructed and maintained in a leak free condition. [District Rules 2201and 4623] Federally Enforceable Through Title V Permit
2. A leak free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
3. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rules 2201and 4623] Federally Enforceable Through Title V Permit
4. VOC fugitive emissions from the components affixed to the tank and on piping from tank to vapor control system trunk line shall not exceed 0.7 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permittee shall maintain with the permit accurate fugitive component counts for components affixed to the tank and on piping from the tank to the vapor control system trunk line and resulting emissions calculated using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method . [District Rules 2201] Federally Enforceable Through Title V Permit
6. Operator shall maintain records to demonstrate compliance with fugitive VOC emissions limit of this permit annually. Compliance shall be demonstrated by calculation, using the correlation equations, zero default and 10,000 ppmv pegged factors set forth in the CAPCOA California implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-3a, February 1999, and the average emission concentrations of total organic compounds measured for each component during all inspections conducted during the prior 365 day period. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
8. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take on of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rules 2201and 4623] Federally Enforceable Through Title V Permit
10. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
11. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
12. Except as otherwise provided in this permit, the operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2201] Federally Enforceable Through Title V Permit
13. All records required by this permit shall be retained for a minimum period of 5 years and shall be made available to the APCO, ARB and US EPA upon request. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
14. This unit commenced construction, modification, or reconstruction before June 11, 1973. Therefore, the requirements of 40 CFR 60 Subparts K, Ka, and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

ATTACHMENT B

Previous Title V Operating Permit

Permit to Operate

FACILITY: S-37 **EXPIRATION DATE:** 08/31/2016

LEGAL OWNER OR OPERATOR: KERN OIL & REFINING CO
MAILING ADDRESS: 7724 E PANAMA LN
BAKERSFIELD, CA 93307-9210

FACILITY LOCATION: PANAMA LN & WEEDPATCH HWY
BAKERSFIELD, CA 93307-9210

FACILITY DESCRIPTION: PETROLEUM REFINING

The Facility's Permit to Operate may include Facility-wide Requirements as well as requirements that apply to specific permit units.

This Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require prior District approval. This permit shall be posted as prescribed in District Rule 2010.

Seyed Sadredin
Executive Director / APCO

Arnaud Marjollet
Director of Permit Services

San Joaquin Valley
Air Pollution Control District

FACILITY: S-37-0-2 **EXPIRATION DATE:** 08/31/2016

FACILITY-WIDE REQUIREMENTS

1. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
2. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
3. The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
4. Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (12/20/07). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
5. The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.8.1 and 9.13.1] Federally Enforceable Through Title V Permit
6. A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit
7. Every application for a permit required under Rule 2010 (12/17/92) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit
8. The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit
9. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

10. The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.5.1] Federally Enforceable Through Title V Permit

11. Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520 (6/21/01). [District Rules 2520, 9.5.2 and 1100, 7.0] Federally Enforceable Through Title V Permit

12. If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit. [District Rule 2520, 9.7] Federally Enforceable Through Title V Permit

13. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.8.2] Federally Enforceable Through Title V Permit

14. The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.8.3] Federally Enforceable Through Title V Permit

15. The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.8.4] Federally Enforceable Through Title V Permit

16. 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 permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.8.5] Federally Enforceable Through Title V Permit

17. The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.9] Federally Enforceable Through Title V Permit

18. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 2520, 9.13.2.1] Federally Enforceable Through Title V Permit

19. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.13.2.2] Federally Enforceable Through Title V Permit

20. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.13.2.3] Federally Enforceable Through Title V Permit

21. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.13.2.4] Federally Enforceable Through Title V Permit

22. No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (02/17/05). If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and County Rules 401 (in all eight counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

23. No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating with a VOC content in excess of the corresponding limit specified in Table of Standards 1 effective until 12/30/10 or Table of Standards 2 effective on and after 1/1/11 of District Rule 4601 (12/17/09) for use or sale within the District. [District Rule 4601, 5.1] Federally Enforceable Through Title V Permit

24. All VOC-containing materials subject to Rule 4601 (12/17/09) shall be stored in closed containers when not in use. [District Rule 4601, 5.4] Federally Enforceable Through Title V Permit

25. The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.3 (12/17/09). [District Rule 4601, 6.1 and 6.3] Federally Enforceable Through Title V Permit

26. With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.13.1 and 10.0] Federally Enforceable Through Title V Permit

27. If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR Part 82, Subpart F. [40 CFR 82 Subpart F] Federally Enforceable Through Title V Permit

28. If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR Part 82, Subpart B. [40 CFR Part 82, Subpart B] Federally Enforceable Through Title V Permit

29. Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8021] Federally Enforceable Through Title V Permit

30. Outdoor handling, storage and transport of any bulk material which emits dust shall comply with the requirements of District Rule 8031, unless specifically exempted under Section 4.0 of Rule 8031 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8031] Federally Enforceable Through Title V Permit

31. An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8041] Federally Enforceable Through Title V Permit

32. Whenever open areas are disturbed, or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8051] Federally Enforceable Through Title V Permit

33. Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8061] Federally Enforceable Through Title V Permit

34. Any unpaved vehicle/equipment area that anticipates more than 50 Average annual daily Trips (AADT) shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 150 vehicle trips per day (VDT) shall comply with the requirements of Section 5.1.2 of District Rule 8071. On each day that 25 or more VDT with 3 or more axles will occur on an unpaved vehicle/equipment traffic area, the owner/operator shall comply with the requirements of Section 5.1.3 of District Rule 8071. On each day when a special event will result in 1,000 or more vehicles that will travel/park on an unpaved area, the owner/operator shall comply with the requirements of Section 5.1.4 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (9/16/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8071] Federally Enforceable Through Title V Permit

35. Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

36. The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.16] Federally Enforceable Through Title V Permit

37. The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2] Federally Enforceable Through Title V Permit

38. When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permits shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit

39. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Rule 401 (Madera, Fresno, Kern, Kings, San Joaquin, Stanislaus, Tulare and Merced), Rule 110 (Fresno, Stanislaus, San Joaquin), Rule 109 (Merced), Rule 113 (Madera), Rule 111 (Kern, Tulare, Kings), and Rule 202 (Fresno, Kern, Tulare, Kings, Madera, Stanislaus, Merced, San Joaquin). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

40. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (2/17/05); 4601 (12/17/09); 8021 (8/19/2004); 8031 (8/19/2004); 8041 (8/19/2004); 8051 (8/19/2004); 8061 (8/19/2004); and 8071 (9/16/2004). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

41. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin January 1 of each year, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days of the end of the reporting period. [District Rule 2520] Federally Enforceable Through Title V Permit

42. Permit unit shall comply with applicable District Rule 4001 (NSPS, Subpart GGG) requirements. [District Rule 4001] Federally Enforceable Through Title V Permit

43. The owner or operator may apply to the Administrator for a determination of equivalency for any means of emission limitation that achieves a reduction in emissions of VOC at least equivalent to the reduction in emissions of VOC achieved by the controls required in Subpart GGG. In doing so the owner or operator shall comply with the requirements of 40 CFR 60.484. [40 CFR 60.592(c)] Federally Enforceable Through Title V Permit

44. Affected facilities for which construction or modification commenced after January 4, 1983 shall comply with applicable requirements of 40CFR, Subpart GGG. [40CFR60.590(a)]]

45. Each Subpart GGG pump in light liquid service (PLLS) shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485(b), except as provided in 40 CFR 60.482-1(c) and 40 CFR 60.482-2(d), (e), and (f). Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. A leak is detected if an instrument reading of 10,000 ppm or greater is measured or if there are indications of liquids dripping from the pump seal. [40 CFR 60.482-2(a) and (b)]

46. When a leak is detected for each PLLS, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. [40 CFR 60.482-2(c)] Federally Enforceable Through Title V Permit

47. Any Subpart GGG PLLS equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of 40 CFR 60.482-2(a) provided the requirements specified in 40 CFR 60.482-2(d)(1) through (6) are met. [40 CFR 60.482(d)] Federally Enforceable Through Title V Permit

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48. Any Subpart GGG PLLS that is designated, as described in 40 CFR 60.486(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 60.482-2(a), (c), and (d) if the pump meets the requirements specified in 40 CFR 60.482-2(e)(1), (2), and (3). [40 CFR 60.482-2(e)] Federally Enforceable Through Title V Permit

49. If any Subpart GGG PLLS is equipped with a closed vent system capable of capturing and transporting leakage from the seal or seals to a control device that complies with the requirements of 40 CFR 60.482-10, it is exempt from the requirements of 40 CFR 60.482-2(a) through (e). [40 CFR 60.482-2(f)] Federally Enforceable Through Title V Permit

50. Any Subpart GGG pump in PLLS that is designated, as described in 40 CFR 60.486(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of 40 CFR 60.482-2(a) and 40 CFR 60.482-2(d)(4) through (6) if: 1). The owner or operator of the pump demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-2(a); and 2) The owner or operator of the pump has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in 40 CFR 60.482-2(c) if a leak is detected. [40 CFR 60.482-2(g)] Federally Enforceable Through Title V Permit

51. Except during pressure releases, each Subpart GGG pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in 40 CFR 60.485(c). [40 CFR 60.482-4(a)] Federally Enforceable Through Title V Permit

52. After each pressure release, the Subpart GGG pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in 40 CFR 60.482-9. No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in 40 CFR 60.485(c). [40 CFR 60.482-4(b)] Federally Enforceable Through Title V Permit

53. Any Subpart GGG pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in 40 CFR 60.482-10 is exempted from the requirements of 40 CFR 60.482-4(a) and (b). [40 CFR 60.482-4(c)] Federally Enforceable Through Title V Permit

54. Any pressure relief device that is equipped with a rupture disk upstream of the Subpart GGG pressure relief device is exempt from the 40 CFR 60.482-4(a) and (b), provided the owner or operator complies with the requirements in 40 CFR 60.482-4(d)(2) of this section. After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 60.482-9. [40 CFR 60.482-4(d)] Federally Enforceable Through Title V Permit

55. Except for in-situ sampling systems and sampling systems without purges, each Subpart GGG sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR 60.482-1(c). Each closed-purge, closed-loop, or closed-vent system shall comply with the requirements specified in 40 CFR 60.482-5(b)(1), (2), (3), and (4). [40 CFR 60.482-5(a), (b), and (c)] Federally Enforceable Through Title V Permit

56. Each Subpart GGG open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR 60.482-1(c). The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line. When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with this condition at all other times. [40 CFR 60.482-6(a) and (c)] Federally Enforceable Through Title V Permit

57. Each Subpart GGG open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed. [40 CFR 60.482-6(b)] Federally Enforceable Through Title V Permit

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58. Subpart GGG open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of 40 CFR 60.482-6(a), (b) and (c). [40 CFR 60.482-6(d)] Federally Enforceable Through Title V Permit

59. Subpart GGG open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in 40 CFR 60.482-6(a) through (c) are exempt from the requirements of 40 CFR 60.482-6(a) through (c). [40 CFR 60.482-6(e)] Federally Enforceable Through Title V Permit

60. Each Subpart GGG valve in gas/vapor service and in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485(b) and shall comply with 40 CFR 60.482-7(b) through (e), except as provided in 40 CFR 60.482-7(f), (g), and (h), 40 CFR 60.483-1, 40 CFR 60.483-2, and 40 CFR 60.482-1(c). A leak is detected if an instrument reading of 10,000 ppm or greater is measured. [40 CFR 60.482-7(a) and (b)] Federally Enforceable Through Title V Permit

61. Any Subpart GGG valve in gas/vapor service or in light liquid service for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected. If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months. [40 CFR 60.482-7(c)] Federally Enforceable Through Title V Permit

62. When a leak is detected for any Subpart GGG valve in gas/vapor service or in light liquid service, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices specified in 40 CFR 60.482-7(e)(1), (2), (3), and (4), where practicable. [40 CFR 60.482-7(d) and (e)] Federally Enforceable Through Title V Permit

63. Any Subpart GGG valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 60.482-7(a) if the valve meets the requirements specified in 40 CFR 60.482-7(f)(1), (2), and (3). [40 CFR 60.482-7(f)] Federally Enforceable Through Title V Permit

64. Any Subpart GGG valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7(a) if: 1) The owner or operator of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-7(a); and 2) The owner or operator of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times. [40 CFR 60.482-7(g)] Federally Enforceable Through Title V Permit

65. Any Subpart GGG valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(f)(2), as a difficult-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7(a) if: 1) The owner or operator of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface; 2) The process unit within which the valve is located either becomes an affected facility through 40 CFR 60.14 or 40 CFR 60.15 or the owner or operator designates less than 3.0 percent of the total number of valves as difficult-to-monitor; and 3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year. [40 CFR 60.482-7(h)] Federally Enforceable Through Title V Permit

66. The owner or operator may elect to comply with the applicable provisions for Subpart GGG valves in gas/vapor service and in light liquid service as specified in 40 CFR 60.483-1 and 60.483-2. [40 CFR 60.592(b)] Federally Enforceable Through Title V Permit

67. If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and Subpart GGG valves in heavy liquid service, Subpart GGG pressure relief devices in light liquid or heavy liquid service, and Subpart GGG connectors, the owner or operator shall follow either one of the following procedures: 1) The owner or operator shall monitor the equipment within 5 days by the method specified in 40 CFR 60.485(b) and shall comply with the requirements of 40 CFR 60.482-8(b) through (d); or 2) The owner or operator shall eliminate the visual, audible, olfactory, or other indication of a potential leak. A leak is detected if an instrument reading of 10,000 ppm or greater is measured. [40 CFR 60.482-8(a) and (b)] Federally Enforceable Through Title V Permit

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68. When a leak is detected in Subpart GGG pumps and valves in heavy liquid service, Subpart GGG pressure relief devices in light liquid or heavy liquid service, and Subpart GGG connectors, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices described under 40 CFR 60.482-7(e). [40 CFR 60.482-8(c) and (d)] Federally Enforceable Through Title V Permit

69. Delay of Subpart GGG leak repair will be allowed if the repair is technologically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown. Delay of repair is allowed for equipment which is isolated from the process and which does not remain in VOC service. Delay of repair beyond a process unit shutdown will be allowed for a valve, if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown. [40 CFR 60.482-9(a)(b)(e)] Federally Enforceable Through Title V Permit

70. Delay of Subpart GGG leak repair for valves will be allowed if the owner or operator demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair and when repair procedures are effected and when repair procedures ar effected, the purged material is collected and destroyed or recovered in a control device complying with 40 CFR 60.482-10. Delay of leak repair for pumps will be allowed if the repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and repair is completed as soon as practicable, but no later than 6 months after the leak was detected. [40 cfr 60.482-9(c)(d)] Federally Enforceable Through Title V Permit

71. For Subpart GGG closed vent systems and control devices, vapor recovery systems shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, whichever is less stringent. [40 CFR 60.482-10(b)] Federally Enforceable Through Title V Permit

72. For Subpart GGG closed vent systems and control devices, enclosed combustion devices shall be designed and operated to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816 degrees C. [40 CFR 60.482-10(c)] Federally Enforceable Through Title V Permit

73. Except as provided in 40 CFR 60.482-10(i) through (k), each Subpart GGG closed vent system used to comply with the provisions of Subpart GGG shall be inspected according to the procedures and schedule specified in 40 CFR 60.482-10(f)(1) and (f)(2). Leaks, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, shall be repaired as soon as practicable except as provided in 40 CFR 60.482-10(h). A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. Repair shall be completed no later than 15 calendar days after the leak is detected. [40 CFR 60.482-10(f) and (g)] Federally Enforceable Through Title V Permit

74. Delay of repair of a Subpart GGG closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown. [40 CFR 60.482-10(h)] Federally Enforceable Through Title V Permit

75. If a Subpart GGG vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2). [40 CFR 60.482-10(i)] Federally Enforceable Through Title V Permit

76. Any parts of the Subpart GGG closed vent system that are designated, as described in 40 CFR 60.482-10(l)(1), as unsafe to inspect are exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR 60.482-10 (j)(1) and (j)(2). [40 CFR 60.482-10(j)] Federally Enforceable Through Title V Permit

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77. Any parts of the Subpart GGG closed vent system that are designated, as described in 40 CFR 60.482-10(l)(2), as difficult to inspect are exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR 60.482-10(k)(1) through (k)(3). [40 CFR 60.482-10(k)] Federally Enforceable Through Title V Permit

78. The owner or operator shall record the following information: 1) Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment; 2) Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment; 3) For each inspection during which a leak is detected, a record of the information specified in 40 CFR 60.486(c); 4) For each inspection conducted in accordance with 40 CFR 60.485(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected; and 5) For each visual inspection conducted in accordance with 40 CFR 60.482-10(f)(1)(ii) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected. [40 CFR 60.482-10(l)] Federally Enforceable Through Title V Permit

79. Closed vent systems and control devices used to comply with provisions Subpart GGG shall be operated at all times when emissions may be vented to them. [40 CFR 60.482-10(m)] Federally Enforceable Through Title V Permit

80. In conducting the Subpart GGG performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in 40 CFR 60, Appendix A or other methods and procedures as specified in 40 CFR 60.485, except as provided in 40 CFR 60.8(b). [40 CFR 60.485(a)] Federally Enforceable Through Title V Permit

81. The owner or operator shall determine compliance with the standards in 40 CFR 60.482, 60.483, and 60.484 as follows: Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21. The following calibration gases shall be used: (i) Zero air (less than 10 ppm of hydrocarbon in air); and (ii) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [40 CFR 60.485(b)] Federally Enforceable Through Title V Permit

82. The owner or operator shall determine compliance with the no detectable emission standards in 40 CFR 60.482-2(e), 60.482-3(i), 60.482-4, 60.482-7(f), and 60.482-10(e) as follows: 1) The requirements of 40 CFR 60.485(b) shall apply. 2) Method 21 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance. [40 CFR 60.485(c)] Federally Enforceable Through Title V Permit

83. The owner or operator shall test each piece of Subpart GGG equipment unless demonstrated that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used: 1) Procedures that conform to the general methods in ASTM E260-73, 91, or 96, E168-67, 77, or 92, E169-63, 77, or 93 (incorporated by reference as seen in 40 CFR 60.17) shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment; 2) Organic compounds that are considered by the Administrator to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid; and 3) Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Administrator disagrees with the judgment, the previous two procedures as specified in 40 CFR 60.485(d)(1) and (2) shall be used to resolve the disagreement. [40 CFR 60.485(d)] Federally Enforceable Through Title V Permit

84. The owner or operator shall demonstrate that the Subpart GGG equipment is in light liquid service by showing that all the following conditions apply: 1) The vapor pressure of one or more of the components is greater than 0.3 kPa at 20 øC (1.2 in. H2O at 68 degrees F). Standard reference texts or ASTM D2879-83, 96, or 97 (incorporated by reference as seen in 40 CFR 60.17) shall be used to determine the vapor pressures; 2) The total concentration of the pure components having a vapor pressure greater than 0.3 kPa at 20 degrees Celsius is equal to or greater than 20 percent by weight; and 3) The fluid is a liquid at operating conditions. [40 CFR 60.485(e)] Federally Enforceable Through Title V Permit

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85. Samples used in conjunction with 40 CFR 60.485(d), (e), and (g) shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare. [40 CFR 60.485(f)] Federally Enforceable Through Title V Permit

86. An owner or operator of more than one affected facility subject to the provisions Subpart GGG may comply with the recordkeeping requirements for these facilities in one recordkeeping system if the system identifies each record by each facility. [40 CFR 60.486(a)] Federally Enforceable Through Title V Permit

87. When each Subpart GGG leak is detected as specified in 40 CFR 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following requirements apply: 1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment; 2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR 60.482-7(c) and no leak has been detected during those 2 months; and 3) The identification on equipment except on a valve, may be removed after it has been repaired. [40 CFR 60.486(b)] Federally Enforceable Through Title V Permit

88. When each Subpart GGG leak is detected as specified in 40 CFR 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following information shall be recorded in a log and shall be kept for 5 years in a readily accessible location: 1) The instrument and operator identification numbers and the equipment identification number; 2) The date the leak was detected and the dates of each attempt to repair the leak; 3) Repair methods applied in each attempt to repair the leak; 4) ``Above 10,000" if the maximum instrument reading measured by the methods specified in 40 CFR 60.485(a) after each repair attempt is equal to or greater than 10,000 ppm; 5) ``Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak; 6) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown; 7) The expected date of successful repair of the leak if a leak is not repaired within 15 days; 8) Dates of process unit shutdown that occur while the equipment is unrepaired; and 9) The date of successful repair of the leak. [40 CFR 60.486(c) and District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

89. The following information pertaining to the design requirements for Subpart GGG closed vent systems and control devices described in 40 CFR 60.482-10 shall be recorded and kept in a readily accessible location: 1) Detailed schematics, design specifications, and piping and instrumentation diagrams; 2) The dates and descriptions of any changes in the design specifications; 3) A description of the parameter or parameters monitored, as required in 40 CFR 60.482-10(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring; 4) Periods when the closed vent systems and control devices required in 40 CFR 60.482-2, 60.482-3, 60.482-4, and 60.482-5 are not operated as designed, including periods when a flare pilot light does not have a flame; and 5) Dates of startups and shutdowns of the closed vent systems and control devices required in 40 CFR 60.482-2, 60.482-3, 60.482-4, and 60.482-5. [40 CFR 60.486(d)] Federally Enforceable Through Title V Permit

90. The following information pertaining to all equipment subject to the requirements in 40 CFR 60.482-1 to 60.482-10 shall be recorded in a log that is kept in a readily accessible location: 1) A list of identification numbers for equipment subject to the requirements of Subpart GGG; 2) (i) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 40 CFR 60.482-2(e), 60.482-3(i) and 60.482-7(f). (ii) The designation of equipment as subject to the requirements of 40 CFR 60.482-2(e), 60.482-3(i) and 60.482-7(f) shall be signed by the owner or operator; 3) A list of equipment identification numbers for pressure relief devices required to comply with 60.482-4; 4) (i) The dates of each compliance test as required in 40 CFR 60.482-2(e), 60.482-3(i), 60.482-4, and 60.482-7(f). (ii) The background level measured during each compliance test. (iii) The maximum instrument reading measured at the equipment during each compliance test; and 5) A list of identification numbers for equipment in vacuum service. [40 CFR 60.486(e)] Federally Enforceable Through Title V Permit

91. The following information pertaining to all Subpart GGG valves subject to the requirements of 40 CFR 60.482-7(g) and (h) and to all Subpart GGG pumps subject to the requirements of 40 CFR 60.482-2(g) shall be recorded in a log that is kept in a readily accessible location: 1) A list of identification numbers for valves and pumps that are designated as unsafe-to-monitor, an explanation for each valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump; and 2) A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve. [40 CFR 60.486(f)] Federally Enforceable Through Title V Permit

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92. The following information shall be recorded for Subpart GGG valves complying with 40 CFR 60.483-2: 1) A schedule of monitoring; 2) The percent of valves found leaking during each monitoring period. [40 CFR 60.486(g)] Federally Enforceable Through Title V Permit

93. The following information shall be recorded in a log that is kept in a readily accessible location: 1) Design criterion required in 40 CFR 60.482-2(d)(5) and 60.482-3(e)(2) and explanation of the design criterion; and 2) Any changes to this criterion and the reasons for the changes. [40 CFR 60.486(h)] Federally Enforceable Through Title V Permit

94. The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in 40 CFR 60.480(d): 1) An analysis demonstrating the design capacity of the affected facility; 2) A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol; and 3) An analysis demonstrating that equipment is not in VOC service. [40 CFR 60.486(i)] Federally Enforceable Through Title V Permit

95. Information and data used to demonstrate that a piece of equipment is not in Subpart GGG VOC service shall be recorded in a log that is kept in a readily accessible location. [40 CFR 60.486(j)] Federally Enforceable Through Title V Permit

96. The provisions of 40 CFR 60.7 (b) and (d) do not apply to affected facilities subject to Subpart GGG. [40 CFR 60.486(k)] Federally Enforceable Through Title V Permit

97. All Subpart GGG semiannual reports to the Administrator shall include the following information, summarized from the information in 40 CFR 60.486: 1) Process unit identification; 2) For each month during the semiannual reporting period, i) Number of valves for which leaks were detected as described in 40 CFR 60.482-7(b) or 40 CFR 60.483-2, (ii) Number of valves for which leaks were not repaired as required in 40 CFR 60.482-7(d)(1), (iii) Number of pumps for which leaks were detected as described in 40 CFR 60.482-2(b) and (d)(6)(i), (iv) Number of pumps for which leaks were not repaired as required in 40 CFR 60.482-2(c)(1) and (d)(6)(ii), (v) Number of compressors for which leaks were detected as described in 40 CFR 60.482-3(f), (vi) Number of compressors for which leaks were not repaired as required in 40 CFR 60.482-3(g)(1), and (vii) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible; 3) Dates of process unit shutdowns which occurred within the semiannual reporting period; 4) Revisions to items reported in the semiannual report if changes have occurred since the initial report, as required in 40 CFR 60.487 (a) and (b), or subsequent revisions to the initial report. [40 CFR 60.487(c)] Federally Enforceable Through Title V Permit

98. An owner or operator electing to comply with the provisions of 40 CFR 60.483-1 and 60.483-2 shall notify the Administrator of the alternative standard selected 90 days before implementing either of the provisions. [40 CFR 60.487(d)] Federally Enforceable Through Title V Permit

99. An owner or operator shall report the results of all performance tests in accordance with 40 CFR 60.8 of the General Provisions. The provisions of 40 CFR 60.8(d) do not apply to affected facilities subject to the provisions of Subpart GGG except that an owner or operator must notify the Administrator of the schedule for the initial performance tests at least 30 days before the initial performance tests. [40 CFR 60.487(e)] Federally Enforceable Through Title V Permit

100. The Subpart GGG semiannual reporting requirements of 40 CFR 60.487(a), (b), and (c) remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with the requirements of 40 CFR 60.487(a), (b), and (c), provided that they comply with the requirements established by the State. [40 CFR 60.487(f)] Federally Enforceable Through Title V Permit

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101. Compressors are exempt from the standards of Subpart GGG if the owner or operator demonstrates that a compressor is in hydrogen service. Each compressor is presumed not to be in hydrogen service unless an owner or operator demonstrates that the piece of equipment is in hydrogen service. For a piece of equipment to be considered in hydrogen service, it must be determined that the percent hydrogen content can be reasonably expected always to exceed 50 percent by volume. For purposes of determining the percent hydrogen content in the process fluid that is contained in or contacts a compressor, procedures that conform to the general method described in ASTM E-260, E-168, or E-169 shall be used. An owner or operator may use engineering judgment to demonstrate that the percent content exceeds 50 percent by volume, provided the engineering judgment demonstrates that the content clearly exceeds 50 percent by volume. When an owner or operator and the Administrator do not agree on whether a piece of equipment is in hydrogen service, however, the procedures that conform to the general method described in ASTM E-260, E-168, or E-169 shall be used to resolve the disagreement. If an owner or operator determines that a piece of equipment is in hydrogen service, the determination can be revised only after following the procedures that conform to the general method described in ASTM E-260, E-168, or E-169. [40 CFR 60.593(b)] Federally Enforceable Through Title V Permit

102. For compliance with Subpart GGG, an owner or operator may use the following provision in addition to 40 CFR 60.485(e): Equipment is in light liquid service if the percent evaporated is greater than 10 percent at 150 øC as determined by ASTM Method D86-78, 82, 90, 95, or 96. [40 CFR 60.593(d)] Federally Enforceable Through Title V Permit

103. Equipment that is in vacuum service is excluded from the requirements of 40 CFR 60.482-2 to 40 CFR 60.482-10 if it is identified as required in 40 CFR 60.486(e)(5). [40 CFR 60.482-1(d)] Federally Enforceable Through Title V Permit

104. Except for complying with the applicable requirements of Sections 6.1 and 7.3, the requirements of this rule shall not apply to 1) components subject to Rule 4623 (adopted 5/19/05), 2) pressure relief devices, pumps, and compressors equipped with a closed vent system as defined in Section 3.0, 3) components buried below ground, 4) components exclusively handling liquid streams which have less than 10 percent by weight (<10 wt%) evaporation at 150 C, 5) components exclusively handling liquid streams with a VOC content less than ten percent by weight (<10 wt%), 6) components exclusively handling gas/vapor streams with a VOC content of less than one percent by weight (<1wt%), 7) components incorporated in lines exclusively in vacuum service, 8) components exclusively handling commercial natural gas, and 9) one-half inch nominal or less stainless steel tube fittings which have been demonstrated to the Air Pollution Control Officer (APCO) to be leak-free based on initial inspection. [District Rule 4455, 4.1 & 4.2] Federally Enforceable Through Title V Permit

105. Except for components subject to Rule 4623 (Storage of Organic Liquids) or for components included in the inspection and maintenance (I&M) program implemented pursuant to Section 5.7 of Rule 4623, the operator shall not use any component that leaks in excess of the allowable leak standards of Rule 4455, or is found to be in violation of the provisions specified in Section 5.1.3. A component identified as leaking in excess of an allowable leak standard may be used provided it has been identified with a tag for repair, has been repaired, or is awaiting re-inspection after repair, within the applicable time period specified within the rule. [District Rule 4455, 5.1.1] Federally Enforceable Through Title V Permit

106. Each hatch shall be closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4455, 5.1.2] Federally Enforceable Through Title V Permit

107. The operator shall be in violation of Rule 4455 if any District inspection demonstrates that one or more of the conditions in Section 5.1.4 (Leak Standards) exist at the facility. [District Rule 4455, 5.1.3.1] Federally Enforceable Through Title V Permit

108. Except for annual operator inspection described in Section 5.1.3.2.3, any operator inspection that demonstrates that one or more of the conditions in Section 5.1.4 exist at the facility shall not constitute a violation of Rule 4455 if the leaking components are repaired as soon as practicable but not later than the time frame specified in Rule 4455. Such components shall not be counted towards determination of compliance with the provisions of Section 5.1.4. [District Rule 4455, 5.1.3.2.1] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

109. Leaking components detected during operator inspection pursuant Section 5.1.3.2.1 that are not repaired, replaced, or removed from operation as soon as practicable but not later than the time frame specified in Rule 4455 shall be counted toward determination of compliance with the provisions of Section 5.1.4. [District Rule 4455, 5.1.3.2.2] Federally Enforceable Through Title V Permit

110. Any operator inspection conducted annually for a component type (including operator annual inspections pursuant to Section 5.2.5, 5.2.6, 5.2.7, or 5.2.8) that demonstrates one or more of the conditions in Section 5.1.4 exist at the facility shall constitute a violation of Rule 4455 regardless of whether or not the leaking components are repaired, replaced, or removed from operation within the allowable repair time frame specified in Rule 4455. [District Rule 4455, 5.1.3.2.3] Federally Enforceable Through Title V Permit

111. A component shall be considered leaking if one or more of the conditions specified in Sections 5.1.4.1 through 5.1.4.4 of Rule 4455 exist at the facility. Readings shall be taken as methane using a portable hydrocarbon detection instrument and shall be made in accordance with the methods specified in Section 6.4.1 of Rule 4455. [District Rule 4455, 5.1.4] Federally Enforceable Through Title V Permit

112. The operator shall audio-visually inspect for leaks all accessible operating pumps, compressors and Pressure Relief Devices (PRDs) in service at least once every 24 hours, except when operators do not report to the facility for that given 24 hours. Any identified leak that cannot be immediately repaired shall be reinspected within 24 hours using a portable analyzer. If a leak is found, it shall be repaired as soon as practical but not later than the time frame specified in Table 3. [District Rule 4455, 5.2.1 & 5.2.2] Federally Enforceable Through Title V Permit

113. The operator shall inspect all components at least once every calendar quarter, except for inaccessible components, unsafe-to-monitor components and pipes. Inaccessible components, unsafe-to-monitor components and pipes shall be inspected in accordance with the requirements set forth in Sections 5.2.5, 5.2.6, and 5.2.7. New, replaced, or repaired fittings, flanges and threaded connections shall be inspected immediately after being placed into service. Components shall be inspected using EPA Method 21. [District Rule 4455, 5.2.3, 5.2.4, 5.2.5, 5.2.6 & 5.2.7] Federally Enforceable Through Title V Permit

114. The operator may apply for a written approval from the APCO to change the inspection frequency from quarterly to annually for a component type, provided the operator meets all the criteria specified in Sections 5.2.8.1 through 5.2.8.3. This approval shall apply to accessible component types, specifically designated by the APCO, except pumps, compressors, and PRDs which shall continue to be inspected on a quarterly basis. [District Rule 4455, 5.2.8] Federally Enforceable Through Title V Permit

115. An annual inspection frequency approved by the APCO shall revert to quarterly inspection frequency for a component type if either the operator inspection or District inspection demonstrates that a violation of the provisions of Sections 5.1, 5.2 and 5.3 of the rule exists for that component type, or the APCO issued a Notice of Violation for violating any of the provisions of Rule 4455 during the annual inspection period for that component type. When the inspection frequency changes from annual to quarterly inspections, the operator shall notify the APCO in writing within five (5) calendar days after changing the inspection frequency, giving the reason(s) and date of change to quarterly inspection frequency. [District Rule 4455, 5.2.9 & 5.2.10] Federally Enforceable Through Title V Permit

116. The operator shall initially inspect a process PRD that releases to the atmosphere as soon as practicable but not later than 24 hours after the time of the release. To insure that the process PRD is operating properly, and is leak-free, the operator shall re-inspect the process PRD not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the date of the release using EPA Method 21. If the process PRD is found to be leaking at either inspection, the PRD leak shall be treated as if the leak was found during quarterly operator inspections. [District Rule 4455, 5.2.11] Federally Enforceable Through Title V Permit

117. Except for process PRD, a component shall be inspected within 15 calendar days after repairing the leak or replacing the component using EPA Method 21. [District Rule 4455, 5.2.12] Federally Enforceable Through Title V Permit

118. A District inspection in no way fulfills any of the mandatory inspection requirements that are placed upon operators and cannot be used or counted as an inspection required of an operator. Any attempt by an operator to count such District inspections as part of the mandatory operator's inspections is considered to be willful circumvention and is a violation of this rule. [District Rule 4455, 5.2.13] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

119. Upon detection of a leaking component, the operator shall affix to that component a weatherproof readily visible tag that contains the information specified in Section 5.3.3. The tag shall remain affixed to the component until the leaking component has been repaired or replaced; has been re-inspected using EPA Method 21; and is found to be in compliance with the requirements of Rule 4455. [District Rule 4455, 5.3.1 5.3.2 and 5.3.3] Federally Enforceable Through Title V Permit

120. An operator shall minimize all component leaks immediately to the extent possible, but not later than one (1) hour after detection of leaks in order to stop or reduce leakage to the atmosphere. [District Rule 4455, 5.3.4] Federally Enforceable Through Title V Permit

121. If the leak has been minimized but the leak still exceeds the applicable leak standards of Rule 4455, an operator shall repair or replace the leaking component, vent the leaking component to a closed vent system, or remove the leaking component from operation as soon as practicable but not later than the time period specified in Table 3. For each calendar quarter, the operator may be allowed to extend the repair period as specified in Table 3, for a total number of leaking components, not to exceed 0.05 percent of the number of components inspected, by type, rounded upward to the nearest integer where required. [District Rule 4455, 5.3.5] Federally Enforceable Through Title V Permit

122. If the leaking component is an essential component or a critical component and which cannot be immediately shut down for repairs, the operator shall minimize the leak within one hour after detection of the leak. If the leak has been minimized, but the leak still exceeds any of the applicable leak standards of Rule 4455, the essential component or critical component shall be repaired or replaced to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection, whichever comes earlier. [District Rule 4455 5.3.6] Federally Enforceable Through Title V Permit

123. For any component that has incurred five repair actions for major gas leaks or major liquid leaks, or any combination of major gas leaks and major liquid leaks within a continuous 12-month period, the operator shall comply with at least one of the requirements specified in Sections 5.3.7.1, 5.3.7.2, 5.3.7.3, or 5.3.7.4 by the applicable deadlines specified in Sections 5.3.7.5 and 5.3.7.6. If the original leaking component is replaced with a new like-in-kind component before incurring five repair actions for major leaks within 12-consecutive months, the repair count shall start over for the new component. An entire compressor or pump need not be replaced provided the compressor part(s) or pump part(s) that have incurred five repair actions as described in Section 5.3.7 are brought into compliance with at least one of the requirements of Sections 5.3.7.1 through 5.3.7.6. [District Rule 4455, 5.3.7] Federally Enforceable Through Title V Permit

124. The operator shall monitor process PRD by using electronic process control instrumentation that allows for real time continuous parameter monitoring or by using telltale indicators for the process PRD where parameter monitoring is not feasible. [District Rule 4455, 5.4.1] Federally Enforceable Through Title V Permit

125. After a release from a process PRD in excess of 500 pounds of VOC in a continuous 24-hour period, the operator shall immediately conduct a failure analysis and implement corrective actions as soon as practicable but not later than 30 days to prevent the reoccurrence of similar release. For refineries processing greater than 20,000 barrels of crude oil per day, any subsequent release in excess of 500 pounds of VOC within a continuous 24-hour period shall be subject to the requirements of Section 5.4.5. [District Rule 4455, 5.4.3 & 5.4.4] Federally Enforceable Through Title V Permit

126. The operator of a refinery processing greater than 20,000 barrels of crude oil per day shall connect all process PRDs serving that process equipment to an APCO-approved closed vent system as defined in Section 3.0 if any of the conditions specified in Sections 5.4.5.1 and 5.4.5.2 occurs. Process PRDs subject to the provisions of Section 5.4.5 shall be connected to an APCO-approved closed-vent system as soon as practicable, but no later than the first turnaround after the requirement to connect becomes effective. [District Rule 4455, 5.4.5] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

127. All major components and critical components shall be physically identified clearly and visibly for inspection, repair, and recordkeeping purposes. The physical identification shall consist of labels, tags, manufacturer's nameplate identifier, serial number, or model number, or other system approved by the APCO that enables an operator or District personnel to locate each individual component. The operator shall replace tags or labels that become missing or unreadable as soon as practicable but not later than 24 hours after discovery. The operator shall comply with the requirements of Sections 6.1.4 if there is any change in the description of major components or critical components. [District Rule 4455, 5.5.1 & 5.5.2] Federally Enforceable Through Title V Permit

128. The operator shall keep a copy of the operator management plan at the facility and make it available to the APCO, ARB and US EPA upon request. By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved operator management plan. [District Rule 4455, 6.1.2 & 6.1.4] Federally Enforceable Through Title V Permit

129. The operator shall maintain an inspection log containing, at a minimum, 1) total number of components inspected, and total number and percentage of leaking components found by component types, 2) location, type, name or description of each leaking component, and description of any unit where the leaking component is found, 3) date of leak detection and method of leak detection, 4) for gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak, 5) date of repair, replacement, or removal from operation of leaking components, 6) identification and location of essential component and critical components found leaking that cannot be repaired until the next process unit turnaround or not later one year after leak detection, whichever comes earlier, 7) methods used to minimize the leak from essential components and critical components that cannot be repaired until the next process unit turnaround or not later one year after leak detection, whichever comes earlier, 8) after the component is repaired or is replaced, the date of reinspection and the leak concentration in ppmv, 9) inspector's name, business mailing address, and business telephone number, and 10) the facility operator responsible for the inspection and repair program shall sign and date the inspection log certifying the accuracy of the information recorded in the log. [District Rule 4455, 6.2.1] Federally Enforceable Through Title V Permit

130. Records of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components, including a copy of current calibration gas certification from the vendor of said calibration gas cylinder, the date of calibration, concentration of calibration gas, analyzer reading of calibration gas before adjustment, instrument reading of calibration gas after adjustment, calibration gas expiration date, and calibration gas cylinder pressure at the time of calibration. [District Rule 4455, 6.2.3] Federally Enforceable Through Title V Permit

131. The operator shall notify the APCO, by telephone or other methods approved by the APCO, of any process PRD release described in Sections 5.4.4 and 5.4.5, and any release in excess of the reportable quantity limits as stipulated in 40 CFR, Part 117, Part 302 and Part 355, including any release in excess of 100 pounds of VOC, within one hour of such occurrence or within one hour of the time said person knew or reasonably should have known of its occurrence. [District Rule 4455, 6.3.1] Federally Enforceable Through Title V Permit

132. The operator shall submit a written report to the APCO within thirty (30) calendar days following a PRD release subject to 6.3.1. The written report shall include 1) process PRD type, size, and location, 2) date, time and duration of the process PRD release, 3) types of VOC released and individual amounts, in pounds, including supporting calculations, 4) cause of the process PRD release, and 5) corrective actions taken to prevent a subsequent process PRD release. [District Rule 4455 6.3.2] Federally Enforceable Through Title V Permit

133. Copies of all records shall be retained for a minimum of five (5) years after the date of an entry. Such records shall be made available to the APCO, ARB, or US EPA upon request. [District Rule 4455, 6.2.2, 6.2.3 & 6.2.4] Federally Enforceable Through Title V Permit

134. Measurements of gaseous leak concentrations shall be conducted according to US EPA Method 21 using an appropriate portable hydrocarbon detection instrument calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in US EPA Method 21 or the manufacturer's instruction, as appropriate, not more than 30 days prior to its use. The operator shall record the calibration date of the instrument. [District Rule 4455, 6.4.1] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

135. The VOC content of exempt streams shall be determined using American Society of Testing and Materials (ASTM) D 1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 for liquids. [District Rule 4455, 6.4.2] Federally Enforceable Through Title V Permit

136. For exempt streams, the percent by volume liquid evaporated at 150 deg C shall be determined using ASTM D 86. [District Rule 4455, 6.4.3] Federally Enforceable Through Title V Permit

137. Equivalent test methods other than specified in Sections 6.4.1 through 6.4.5 may be used provided such test methods have received prior approval from the US EPA, ARB, and APCO. [District Rule 4455, 6.4] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-1-13 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
120 MMBTU/HR CRUDE UNIT INCLUDING ONE DESALTER, 4 FRACTIONATION VESSELS, STRIPPER, 2 ACCUMULATORS, LIGHT NAPHTHA STABILIZER, KNOCKOUT DRUM SCRUBBER, 60 MMBTU/HR TULSA HEATERS INC. PROCESS HEATER, 60 MMBTU/HR BORN HEATER AND 35 HEAT EXCHANGERS

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grain/dscf. Emissions of combustion contaminants shall not exceed 0.1 grain per cubic foot of gas calculated to 12% CO2 at dry standard conditions. Emissions of combustion contaminants shall not exceed ten (10) pounds per hour. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
2. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. [District Rule 2520, 9.3.2 and District Rule 4301, 5.2.1] Federally Enforceable Through Title V Permit
3. The duration of each startup and shutdown period of the 60 MMBtu/hr Born heater and 60 MMBtu Tulsa heater shall not exceed 9.7 hours and 6.4 hours respectfully. Emission limits of District Rules 4305 and 4306 shall be waived during periods of startup and shutdown. [District Rules 4305, Section 5.5.6, District Rule 4306 Section 5.3] Federally Enforceable Through Title V Permit
4. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown. [District Rules 4305, 5.5.6.2, and 4306, 5.3.2] Federally Enforceable Through Title V Permit
5. Crude unit heaters shall be fired solely on treated refinery fuel gas or purchased natural gas. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Refinery fuel gas supply shall be equipped with continuous H2S monitor meeting the requirements of NSPS Subpart J. [District Rule 4001] Federally Enforceable Through Title V Permit
7. Sulfur content of refinery fuel gas burned in crude unit heaters shall not to exceed 100 ppmv (as H2S). [District NSR Rule] Federally Enforceable Through Title V Permit
8. Sulfur content of natural gas burned in crude unit heaters shall not exceed 1 gr S/100 scf (16.9 ppmv H2S). [District NSR Rule] Federally Enforceable Through Title V Permit
9. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 2520, 9.3.2; Kern County Rule 407, District Rule 4801] Federally Enforceable Through Title V Permit
10. Except for components subject to Rule 4623 (Storage of Organic Liquids) or for components included in the inspection and maintenance (I&M) program implemented pursuant to Section 5.7 of Rule 4623, the operator shall not use any component that leaks in excess of the allowable leak standards of Rule 4455, or is found to be in violation of the provisions specified in Section 5.1.3. A component identified as leaking in excess of an allowable leak standard may be used provided it has been identified with a tag for repair, has been repaired, or is awaiting re-inspection after repair, within the applicable time period specified within the rule. [District Rule 4455, 5.1.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Each hatch shall be closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4455, 5.1.2] Federally Enforceable Through Title V Permit

12. The operator shall be in violation of Rule 4455 if any District inspection demonstrates that one or more of the conditions in Section 5.1.4 (Leak Standards) exist at the facility. [District Rule 4455, 5.1.3.1] Federally Enforceable Through Title V Permit

13. Except for annual operator inspection described in Section 5.1.3.2.3, any operator inspection that demonstrates that one or more of the conditions in Section 5.1.4 exist at the facility shall not constitute a violation of Rule 4455 if the leaking components are repaired as soon as practicable but not later than the time frame specified in Rule 4455. Such components shall not be counted towards determination of compliance with the provisions of Section 5.1.4. [District Rule 4455, 5.1.3.2.1] Federally Enforceable Through Title V Permit

14. Leaking components detected during operator inspection pursuant Section 5.1.3.2.1 that are not repaired, replaced, or removed from operation as soon as practicable but not later than the time frame specified in Rule 4455 shall be counted toward determination of compliance with the provisions of Section 5.1.4. [District Rule 4455, 5.1.3.2.2] Federally Enforceable Through Title V Permit

15. Any operator inspection conducted annually for a component type (including operator annual inspections pursuant to Section 5.2.5, 5.2.6, 5.2.7, or 5.2.8) that demonstrates one or more of the conditions in Section 5.1.4 exist at the facility shall constitute a violation of Rule 4455 regardless of whether or not the leaking components are repaired, replaced, or removed from operation within the allowable repair time frame specified in Rule 4455. [District Rule 4455, 5.1.3.2.3] Federally Enforceable Through Title V Permit

16. A component shall be considered leaking if one or more of the conditions specified in Sections 5.1.4.1 through 5.1.4.4 of Rule 4455 exist at the facility. Readings shall be taken as methane using a portable hydrocarbon detection instrument and shall be made in accordance with the methods specified in Section 6.4.1 of Rule 4455. [District Rule 4455, 5.1.4] Federally Enforceable Through Title V Permit

17. The operator shall audio-visually inspect for leaks all accessible operating pumps, compressors and Pressure Relief Devices (PRDs) in service at least once every 24 hours, except when operators do not report to the facility for that given 24 hours. Any identified leak that cannot be immediately repaired shall be reinspected within 24 hours using a portable analyzer. If a leak is found, it shall be repaired as soon as practical but not later than the time frame specified in Table 3. [District Rule 4455, 5.2.1 & 5.2.2] Federally Enforceable Through Title V Permit

18. The operator shall inspect all components at least once every calendar quarter, except for inaccessible components, unsafe-to-monitor components and pipes. Inaccessible components, unsafe-to-monitor components and pipes shall be inspected in accordance with the requirements set forth in Sections 5.2.5, 5.2.6, and 5.2.7. New, replaced, or repaired fittings, flanges and threaded connections shall be inspected immediately after being placed into service. Components shall be inspected using EPA Method 21. [District Rule 4455, 5.2.3, 5.2.4, 5.2.5, 5.2.6 & 5.2.7] Federally Enforceable Through Title V Permit

19. The operator may apply for a written approval from the APCO to change the inspection frequency from quarterly to annually for a component type, provided the operator meets all the criteria specified in Sections 5.2.8.1 through 5.2.8.3. This approval shall apply to accessible component types, specifically designated by the APCO, except pumps, compressors, and PRDs which shall continue to be inspected on a quarterly basis. [District Rule 4455, 5.2.8] Federally Enforceable Through Title V Permit

20. An annual inspection frequency approved by the APCO shall revert to quarterly inspection frequency for a component type if either the operator inspection or District inspection demonstrates that a violation of the provisions of Sections 5.1, 5.2 and 5.3 of the rule exists for that component type, or the APCO issued a Notice of Violation for violating any of the provisions of Rule 4455 during the annual inspection period for that component type. When the inspection frequency changes from annual to quarterly inspections, the operator shall notify the APCO in writing within five (5) calendar days after changing the inspection frequency, giving the reason(s) and date of change to quarterly inspection frequency. [District Rule 4455, 5.2.9 & 5.2.10] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

21. The operator shall initially inspect a process PRD that releases to the atmosphere as soon as practicable but not later than 24 hours after the time of the release. To insure that the process PRD is operating properly, and is leak-free, the operator shall re-inspect the process PRD not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the date of the release using EPA Method 21. If the process PRD is found to be leaking at either inspection, the PRD leak shall be treated as if the leak was found during quarterly operator inspections. [District Rule 4455, 5.2.11] Federally Enforceable Through Title V Permit

22. Except for process PRD, a component shall be inspected within 15 calendar days after repairing the leak or replacing the component using EPA Method 21. [District Rule 4455, 5.2.12] Federally Enforceable Through Title V Permit

23. A District inspection in no way fulfills any of the mandatory inspection requirements that are placed upon operators and cannot be used or counted as an inspection required of an operator. Any attempt by an operator to count such District inspections as part of the mandatory operator's inspections is considered to be willful circumvention and is a violation of this rule. [District Rule 4455, 5.2.13] Federally Enforceable Through Title V Permit

24. Upon detection of a leaking component, the operator shall affix to that component a weatherproof readily visible tag that contains the information specified in Section 5.3.3. The tag shall remain affixed to the component until the leaking component has been repaired or replaced; has been re-inspected using EPA Method 21; and is found to be in compliance with the requirements of Rule 4455. [District Rule 4455, 5.3.1 5.3.2 and 5.3.3] Federally Enforceable Through Title V Permit

25. An operator shall minimize all component leaks immediately to the extent possible, but not later than one (1) hour after detection of leaks in order to stop or reduce leakage to the atmosphere. [District Rule 4455, 5.3.4] Federally Enforceable Through Title V Permit

26. If the leak has been minimized but the leak still exceeds the applicable leak standards of Rule 4455, an operator shall repair or replace the leaking component, vent the leaking component to a closed vent system, or remove the leaking component from operation as soon as practicable but not later than the time period specified in Table 3. For each calendar quarter, the operator may be allowed to extend the repair period as specified in Table 3, for a total number of leaking components, not to exceed 0.05 percent of the number of components inspected, by type, rounded upward to the nearest integer where required. [District Rule 4455, 5.3.5] Federally Enforceable Through Title V Permit

27. If the leaking component is an essential component or a critical component and which cannot be immediately shut down for repairs, the operator shall minimize the leak within one hour after detection of the leak. If the leak has been minimized, but the leak still exceeds any of the applicable leak standards of Rule 4455, the essential component or critical component shall be repaired or replaced to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection, whichever comes earlier. [District Rule 4455 5.3.6] Federally Enforceable Through Title V Permit

28. For any component that has incurred five repair actions for major gas leaks or major liquid leaks, or any combination of major gas leaks and major liquid leaks within a continuous 12-month period, the operator shall comply with at least one of the requirements specified in Sections 5.3.7.1, 5.3.7.2, 5.3.7.3, or 5.3.7.4 by the applicable deadlines specified in Sections 5.3.7.5 and 5.3.7.6. If the original leaking component is replaced with a new like-in-kind component before incurring five repair actions for major leaks within 12-consecutive months, the repair count shall start over for the new component. An entire compressor or pump need not be replaced provided the compressor part(s) or pump part(s) that have incurred five repair actions as described in Section 5.3.7 are brought into compliance with at least one of the requirements of Sections 5.3.7.1 through 5.3.7.6. [District Rule 4455, 5.3.7] Federally Enforceable Through Title V Permit

29. The operator shall monitor process PRD by using electronic process control instrumentation that allows for real time continuous parameter monitoring or by using telltale indicators for the process PRD where parameter monitoring is not feasible. [District Rule 4455, 5.4.1] Federally Enforceable Through Title V Permit

30. After a release from a process PRD in excess of 500 pounds of VOC in a continuous 24-hour period, the operator shall immediately conduct a failure analysis and implement corrective actions as soon as practicable but not later than 30 days to prevent the reoccurrence of similar release. For refineries processing greater than 20,000 barrels of crude oil per day, any subsequent release in excess of 500 pounds of VOC within a continuous 24-hour period shall be subject to the requirements of Section 5.4.5. [District Rule 4455, 5.4.3 & 5.4.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

31. The operator of a refinery processing greater than 20,000 barrels of crude oil per day shall connect all process PRDs serving that process equipment to an APCO-approved closed vent system as defined in Section 3.0 if any of the conditions specified in Sections 5.4.5.1 and 5.4.5.2 occurs. Process PRDs subject to the provisions of Section 5.4.5 shall be connected to an APCO-approved closed-vent system as soon as practicable, but no later than the first turnaround after the requirement to connect becomes effective. [District Rule 4455, 5.4.5] Federally Enforceable Through Title V Permit

32. All major components and critical components shall be physically identified clearly and visibly for inspection, repair, and recordkeeping purposes. The physical identification shall consist of labels, tags, manufacturer's nameplate identifier, serial number, or model number, or other system approved by the APCO that enables an operator or District personnel to locate each individual component. The operator shall replace tags or labels that become missing or unreadable as soon as practicable but not later than 24 hours after discovery. The operator shall comply with the requirements of Sections 6.1.4 if there is any change in the description of major components or critical components. [District Rule 4455, 5.5.1 & 5.5.2] Federally Enforceable Through Title V Permit

33. The operator shall keep a copy of the operator management plan at the facility and make it available to the APCO, ARB and US EPA upon request. By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved operator management plan. [District Rule 4455, 6.1.2 & 6.1.4] Federally Enforceable Through Title V Permit

34. The operator shall maintain an inspection log containing, at a minimum, 1) total number of components inspected, and total number and percentage of leaking components found by component types, 2) location, type, name or description of each leaking component, and description of any unit where the leaking component is found, 3) date of leak detection and method of leak detection, 4) for gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak, 5) date of repair, replacement, or removal from operation of leaking components, 6) identification and location of essential component and critical components found leaking that cannot be repaired until the next process unit turnaround or not later one year after leak detection, whichever comes earlier, 7) methods used to minimize the leak from essential components and critical components that cannot be repaired until the next process unit turnaround or not later one year after leak detection, whichever comes earlier, 8) after the component is repaired or is replaced, the date of reinspection and the leak concentration in ppmv, 9) inspector's name, business mailing address, and business telephone number, and 10) the facility operator responsible for the inspection and repair program shall sign and date the inspection log certifying the accuracy of the information recorded in the log. [District Rule 4455, 6.2.1] Federally Enforceable Through Title V Permit

35. Records of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components, including a copy of current calibration gas certification from the vendor of said calibration gas cylinder, the date of calibration, concentration of calibration gas, analyzer reading of calibration gas before adjustment, instrument reading of calibration gas after adjustment, calibration gas expiration date, and calibration gas cylinder pressure at the time of calibration. [District Rule 4455, 6.2.3] Federally Enforceable Through Title V Permit

36. The operator shall notify the APCO, by telephone or other methods approved by the APCO, of any process PRD release described in Sections 5.4.4 and 5.4.5, and any release in excess of the reportable quantity limits as stipulated in 40 CFR, Part 117, Part 302 and Part 355, including any release in excess of 100 pounds of VOC, within one hour of such occurrence or within one hour of the time said person knew or reasonably should have known of its occurrence. [District Rule 4455, 6.3.1] Federally Enforceable Through Title V Permit

37. The operator shall submit a written report to the APCO within thirty (30) calendar days following a PRD release subject to 6.3.1. The written report shall include 1) process PRD type, size, and location, 2) date, time and duration of the process PRD release, 3) types of VOC released and individual amounts, in pounds, including supporting calculations, 4) cause of the process PRD release, and 5) corrective actions taken to prevent a subsequent process PRD release. [District Rule 4455 6.3.2] Federally Enforceable Through Title V Permit

38. Copies of all records shall be retained for a minimum of five (5) years after the date of an entry. Such records shall be made available to the APCO, ARB, or US EPA upon request. [District Rule 4455, 6.2.2, 6.2.3 & 6.2.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

39. Measurements of gaseous leak concentrations shall be conducted according to US EPA Method 21 using an appropriate portable hydrocarbon detection instrument calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in US EPA Method 21 or the manufacturer's instruction, as appropriate, not more than 30 days prior to its use. The operator shall record the calibration date of the instrument. [District Rule 4455, 6.4.1] Federally Enforceable Through Title V Permit

40. The VOC content of exempt streams shall be determined using American Society of Testing and Materials (ASTM) D 1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 for liquids. [District Rule 4455, 6.4.2] Federally Enforceable Through Title V Permit

41. For exempt streams, the percent by volume liquid evaporated at 150 deg C shall be determined using ASTM D 86. [District Rule 4455, 6.4.3] Federally Enforceable Through Title V Permit

42. Equivalent test methods other than specified in Sections 6.4.1 through 6.4.5 may be used provided such test methods have received prior approval from the US EPA, ARB, and APCO. [District Rule 4455, 6.4] Federally Enforceable Through Title V Permit

43. Each owner or operator subject to the provisions of this subpart shall demonstrate compliance with the requirements of 40 CFR 60.482-3a for all equipment within 180 days of initial startup. [40 CFR 60.482-1a(a)]

44. Compliance with 40 CFR 60.482-3a shall be determined by review of records and reports, review of performance test results, and inspection using the methods and procedures specified in 40 CFR 60.485a. [40 CFR 60.482-1a(b)]

45. An owner or operator may request a determination of equivalence of a means of emission limitation to the requirements of 40 CFR 60.482-3a as provided in 40 CFR 60.484a. [40 CFR 60.482-1a(c)(1)]

46. If the Administrator makes a determination that a means of emission limitation is at least equivalent to the requirements of 40 CFR 60.482-3a, an owner or operator shall comply with the requirements of that determination. [40 CFR 60.482-1a(c)(2)]

47. Equipment that is in vacuum service is excluded from the requirements of 40 CFR 60.482-3a if it is identified as required in 40 CFR 60.486a(e)(5). [40 CFR 60.482-1a(d)]

48. Unless exempt under 40 CFR 60.482-3a, each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in 40 CFR 60.482-3a(h) and (i). The barrier fluid system shall be in heavy liquid service or shall not be in VOC service. Each compressor shall be operated and equipped as specified in 40 CFR 60.482-3a(b)(1), (2), or (3). [40 CFR 60.482-3a(a), (b), and (c)]

49. Any compressor that is designated, as described in 40 CFR 60.486a(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background, is exempt from the requirements of 40 CFR 60.482-3a(a) through (h) if the compressor meets the requirements specified in 40 CFR 60.482-3a(i)(1) and (2). [40 CFR 60.482-3a(i), and District Rule 2201]

50. Any existing reciprocating compressor in a process unit which becomes an affected facility under the provisions of 40 CFR 60.14 or 40 CFR 60.15 is exempt from 40 CFR 60.482a(a), (b), (c), (d), (e), and (h), provided the owner or operator demonstrates that recasting the distance piece or replacing the compressor are the only options available to bring the compressor into compliance with the provisions of 40 CFR 60.482-3a(a), (b), (c), (d), (e), and (h). [40 CFR 60.593a(c)]

51. For valves and connectors associated with compressor skids C-02 and C-03 , a leak shall be defined as a reading of methane in excess of 100 ppmv above background when measured per EPA Method 21. For pump and compressor seals associated with compressor skids C-02 and C-03, a leak shall be defined as a reading of methane in excess of 500 ppmv above background when measure per EPA Method 21. [District Rule 2201] Federally Enforceable Through Title V Permit

52. VOC emission rate from fugitive components associated with compressor skids C-02 and C-03 shall not exceed 10.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

53. Permit holder shall maintain accurate component count for compressor skids C-02 and C-03 and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. Permit holder shall update such records when new components are approved and installed. Components shall be screened and leak rate shall be measured in accordance with the frequency of inspection specified in Rule 4455. [District Rule 2201] Federally Enforceable Through Title V Permit

54. 60 MM Btu/hr Tulsa Heaters Inc. process heater shall be equipped with eight Caldius LE-CSG-8W low NOx burners, each having a maximum heat release of 8.18 MM BTU/HR. Heater shall be fired exclusively on PUC or FERC regulated natural gas or refinery fuel gas. [District NSR Rule] Federally Enforceable Through Title V Permit

55. 60 MMBtu/hr Born heater shall be equipped with John Zink PSMR-19 low NOx burners and shall be fired exclusively on PUC or FERC regulated natural gas or refinery fuel gas. [District NSR Rule, District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

56. Tulsa Heaters Inc. process heater emission rates shall not exceed NOx: 30 ppmv @ 3% O2 or 0.036 lb/MMBtu, CO: 239 ppmvd @ 3% O2, VOC: 0.0026 lb/MMBtu, PM10: 0.014 lb/MMBtu, and SOx: 0.0167 lb SO2/MMBtu. [District Rule 2201, District Rule 4351 5.1, District Rule 4305, 5.1 and 5.3, District Rule 4306, District Rule 4301 and Kern County Rule 408] Federally Enforceable Through Title V Permit

57. Born process heater emission rates shall not exceed NOx (as NO2) 30 ppmv @ 3% O2 or .036 lb/MMBtu, CO: 239 ppmvd @ 3% O2, VOC: 0.0026 lb/MMBtu, PM10: 0.014 lb/MMBtu, and SOx: 0.0167 lb SO2/MMBtu . [District NSR Rule, District Rules 4351 5.1, 4305, 5.1 and 5.3, District Rule 4306, District Rule 4301 and Kern County Rule 408] Federally Enforceable Through Title V Permit

58. Heat input to Tulsa Heater Inc. process heater shall not exceed 60 MM Btu/hr (hhv), as measured on an annual average basis. [District NSR Rule] Federally Enforceable Through Title V Permit

59. Permittee shall demonstrate compliance with the heat input limit of Tulsa Heaters Inc. process heater by maintaining records of hhv of fuel burned and of the cumulative annual fuel use (scf/yr). Records shall be kept for a period of five years and shall be made readily available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit

60. For each heater, stack concentrations of NOx (as NO2), CO, and O2 shall be measured at least on a monthly basis using District approved portable analyzers. In-stack O2 monitors are acceptable for O2 measurement. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit

61. If the NOx or CO concentrations, as measured by the portable analyzer, exceed the allowable emissions rate, the permittee shall notify the District and return the NOx and CO concentrations to the allowable emissions rate as soon as possible but no longer than one (1) hour after detection. If the portable analyzer readings continue to exceed the allowable emissions rate after one hour, the permittee shall conduct an emissions test within 60 days, utilizing District approved test methods, to determine compliance with the applicable emissions limits. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit

62. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

63. The permittee shall maintain records of the date and time of NOx, CO, and O2 measurements, the measured NO2 and CO concentrations corrected to 3% O2, and the O2 concentration. The records must also include a description of any corrective action taken to maintain the emissions within an acceptable range. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit

64. Operator shall perform annual source testing for NOx (ppmv) according to EPA Method 7E (or ARB Method 100), stack gas oxygen by EPA Method 3 or 3A (or ARB Method 100), NOx emission rate (heat input basis) by EPA Method 19, CO by EPA method 10 or ARB method 100, stack gas velocities by EPA Method 2, and stack gas moisture content by EPA Method 4. [District Rule 4305, 6.2.2, 6.2.4-7 and 4351, 6.2.2 & 6.2.4-7, & 6.3, District Rule 4306] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

65. Nitrogen oxide (NOx) emission concentrations in ppmv shall be referenced at dry stack gas conditions, and shall be calculated to 3.00 percent by volume stack gas oxygen and averaged over 60 minutes, and lb/MMBtu rates shall be calculated as lb NO2/MMBtu of heat input (hhv). [District Rule 4305, 5.0, 8.2, District Rule 4306, and/or 4351, 8.1] Federally Enforceable Through Title V Permit

66. During the source test, emissions for these units shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx and CO. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

67. Compliance source testing shall be conducted under conditions representative of normal operation. [District Rule 1081] Federally Enforceable Through Title V Permit

68. Exhaust stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 1081] Federally Enforceable Through Title V Permit

69. Source testing to measure NOx and CO emissions shall be conducted at least once every 12 months, except as provided below. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

70. Source testing to measure NOx and CO emissions shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit

71. If permittee fails any compliance demonstration for NOx or CO emission limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit

72. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit

73. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

74. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

75. Annual test results submitted to the District from unit(s) representing a group of units may be used to demonstrate compliance with NOx limits of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.) [District Rules 4305, 6.3.2, 4306, and 4351, 6.3] Federally Enforceable Through Title V Permit

76. The following conditions must be met for representative unit(s) to be used to demonstrate compliance for NOx limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rules 2520, 9.3.2, 4305, 6.3.2, and 4306] Federally Enforceable Through Title V Permit

77. All units in a group for which representative units are source tested to demonstrate compliance for NOx limits of this permit shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for the each unit of the group including all preventative and corrective maintenance work done. [District Rules 2520, 9.4.2, 4305, 6.3.2, and 4306] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

78. All units in a group for which representative units are source tested to demonstrate compliance for NOx limits of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type (e.g. from natural gas to refinery gas) then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rules 2520, 9.3.2, 4305, 6.3.2, and 4306] Federally Enforceable Through Title V Permit

79. The number of representative units source tested to demonstrate compliance for NOx limits shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that in 3 years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

80. Copies of all purchased fuel invoices, gas purchase contract, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. Operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel [District Rule 2520, 9.4.2 and 40 CFR 60.48c(g)] Federally Enforceable Through Title V Permit

81. Draeger tubes shall be used as an alternative method for measuring fuel gas H2S during scheduled maintenance or unscheduled interruptions of CEMs. Draeger tube use shall be limited to no more than 96 continuous hours and fuel gas H2S shall be checked a minimum of every two hours during scheduled maintenance or unscheduled interruptions of CEMs. Alternate method of measuring fuel gas H2S shall occur no more than 192 hours in any calendar year. [40CFR60.13(i)] Federally Enforceable Through Title V Permit

82. Operator shall maintain all records of the reason for alternative monitoring and required fuel gas H2S monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

83. Operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

84. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit

85. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-2-6 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
RERUN UNIT INCLUDING PRE-FLASH DRUM, FRACTIONATOR, STRIPPER, ACCUMULATOR, AND ASSOCIATED VALVES, FLANGES, AND CONNECTORS

PERMIT UNIT REQUIREMENTS

1. Copies of all test results to determine compliance with the conditions of this permit shall be maintained. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
2. Operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
3. Permittee shall maintain a record of hours of operation of the Rerun Unit. Records shall be retained for a minimum of five years, and shall be made available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. Spent caustics and waste liquids shall be disposed of in a manner preventing the creation of odors. [District Rule 4102]
5. Fugitive VOC emissions shall not exceed 13,656 lb per year. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Except for complying with the applicable requirements of Sections 6.1 and 7.3, the requirements of this rule shall not apply to 1) components subject to Rule 4623 (adopted 5/19/05), 2) pressure relief devices, pumps, and compressors equipped with a closed vent system as defined in Section 3.0, 3) components buried below ground, 4) components exclusively handling liquid streams which have less than 10 percent by weight (<10 wt%) evaporation at 150 C, 5) components exclusively handling liquid streams with a VOC content less than ten percent by weight (<10 wt%), 6) components exclusively handling gas/vapor streams with a VOC content of less than one percent by weight (<1wt%), 7) components incorporated in lines exclusively in vacuum service, 8) components exclusively handling commercial natural gas, and 9) one-half inch nominal or less stainless steel tube fittings which have been demonstrated to the Air Pollution Control Officer (APCO) to be leak-free based on initial inspection. [District Rule 4455, 4.1 & 4.2] Federally Enforceable Through Title V Permit
7. Except for components subject to Rule 4623 (Storage of Organic Liquids) or for components included in the inspection and maintenance (I&M) program implemented pursuant to Section 5.7 of Rule 4623, the operator shall not use any component that leaks in excess of the allowable leak standards of Rule 4455, or is found to be in violation of the provisions specified in Section 5.1.3. A component identified as leaking in excess of an allowable leak standard may be used provided it has been identified with a tag for repair, has been repaired, or is awaiting re-inspection after repair, within the applicable time period specified within the rule. [District Rule 4455, 5.1.1] Federally Enforceable Through Title V Permit
8. Each hatch shall be closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4455, 5.1.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. The operator shall be in violation of Rule 4455 if any District inspection demonstrates that one or more of the conditions in Section 5.1.4 (Leak Standards) exist at the facility. [District Rule 4455, 5.1.3.1] Federally Enforceable Through Title V Permit

10. Except for annual operator inspection described in Section 5.1.3.2.3, any operator inspection that demonstrates that one or more of the conditions in Section 5.1.4 exist at the facility shall not constitute a violation of Rule 4455 if the leaking components are repaired as soon as practicable but not later than the time frame specified in Rule 4455. Such components shall not be counted towards determination of compliance with the provisions of Section 5.1.4. [District Rule 4455, 5.1.3.2.1] Federally Enforceable Through Title V Permit

11. Leaking components detected during operator inspection pursuant Section 5.1.3.2.1 that are not repaired, replaced, or removed from operation as soon as practicable but not later than the time frame specified in Rule 4455 shall be counted toward determination of compliance with the provisions of Section 5.1.4. [District Rule 4455, 5.1.3.2.2] Federally Enforceable Through Title V Permit

12. Any operator inspection conducted annually for a component type (including operator annual inspections pursuant to Section 5.2.5, 5.2.6, 5.2.7, or 5.2.8) that demonstrates one or more of the conditions in Section 5.1.4 exist at the facility shall constitute a violation of Rule 4455 regardless of whether or not the leaking components are repaired, replaced, or removed from operation within the allowable repair time frame specified in Rule 4455. [District Rule 4455, 5.1.3.2.3] Federally Enforceable Through Title V Permit

13. A component shall be considered leaking if one or more of the conditions specified in Sections 5.1.4.1 through 5.1.4.4 of Rule 4455 exist at the facility. Readings shall be taken as methane using a portable hydrocarbon detection instrument and shall be made in accordance with the methods specified in Section 6.4.1 of Rule 4455. [District Rule 4455, 5.1.4] Federally Enforceable Through Title V Permit

14. The operator shall audio-visually inspect for leaks all accessible operating pumps, compressors and Pressure Relief Devices (PRDs) in service at least once every 24 hours, except when operators do not report to the facility for that given 24 hours. Any identified leak that cannot be immediately repaired shall be reinspected within 24 hours using a portable analyzer. If a leak is found, it shall be repaired as soon as practical but not later than the time frame specified in Table 3. [District Rule 4455, 5.2.1 & 5.2.2] Federally Enforceable Through Title V Permit

15. The operator shall inspect all components at least once every calendar quarter, except for inaccessible components, unsafe-to-monitor components and pipes. Inaccessible components, unsafe-to-monitor components and pipes shall be inspected in accordance with the requirements set forth in Sections 5.2.5, 5.2.6, and 5.2.7. New, replaced, or repaired fittings, flanges and threaded connections shall be inspected immediately after being placed into service. Components shall be inspected using EPA Method 21. [District Rule 4455, 5.2.3, 5.2.4, 5.2.5, 5.2.6 & 5.2.7] Federally Enforceable Through Title V Permit

16. The operator may apply for a written approval from the APCO to change the inspection frequency from quarterly to annually for a component type, provided the operator meets all the criteria specified in Sections 5.2.8.1 through 5.2.8.3. This approval shall apply to accessible component types, specifically designated by the APCO, except pumps, compressors, and PRDs which shall continue to be inspected on a quarterly basis. [District Rule 4455, 5.2.8] Federally Enforceable Through Title V Permit

17. An annual inspection frequency approved by the APCO shall revert to quarterly inspection frequency for a component type if either the operator inspection or District inspection demonstrates that a violation of the provisions of Sections 5.1, 5.2 and 5.3 of the rule exists for that component type, or the APCO issued a Notice of Violation for violating any of the provisions of Rule 4455 during the annual inspection period for that component type. When the inspection frequency changes from annual to quarterly inspections, the operator shall notify the APCO in writing within five (5) calendar days after changing the inspection frequency, giving the reason(s) and date of change to quarterly inspection frequency. [District Rule 4455, 5.2.9 & 5.2.10] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

18. The operator shall initially inspect a process PRD that releases to the atmosphere as soon as practicable but not later than 24 hours after the time of the release. To insure that the process PRD is operating properly, and is leak-free, the operator shall re-inspect the process PRD not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the date of the release using EPA Method 21. If the process PRD is found to be leaking at either inspection, the PRD leak shall be treated as if the leak was found during quarterly operator inspections. [District Rule 4455, 5.2.11] Federally Enforceable Through Title V Permit

19. Except for process PRD, a component shall be inspected within 15 calendar days after repairing the leak or replacing the component using EPA Method 21. [District Rule 4455, 5.2.12] Federally Enforceable Through Title V Permit

20. A District inspection in no way fulfills any of the mandatory inspection requirements that are placed upon operators and cannot be used or counted as an inspection required of an operator. Any attempt by an operator to count such District inspections as part of the mandatory operator's inspections is considered to be willful circumvention and is a violation of this rule. [District Rule 4455, 5.2.13] Federally Enforceable Through Title V Permit

21. Upon detection of a leaking component, the operator shall affix to that component a weatherproof readily visible tag that contains the information specified in Section 5.3.3. The tag shall remain affixed to the component until the leaking component has been repaired or replaced; has been re-inspected using EPA Method 21; and is found to be in compliance with the requirements of Rule 4455. [District Rule 4455, 5.3.1 5.3.2 and 5.3.3] Federally Enforceable Through Title V Permit

22. An operator shall minimize all component leaks immediately to the extent possible, but not later than one (1) hour after detection of leaks in order to stop or reduce leakage to the atmosphere. [District Rule 4455, 5.3.4] Federally Enforceable Through Title V Permit

23. If the leak has been minimized but the leak still exceeds the applicable leak standards of Rule 4455, an operator shall repair or replace the leaking component, vent the leaking component to a closed vent system, or remove the leaking component from operation as soon as practicable but not later than the time period specified in Table 3. For each calendar quarter, the operator may be allowed to extend the repair period as specified in Table 3, for a total number of leaking components, not to exceed 0.05 percent of the number of components inspected, by type, rounded upward to the nearest integer where required. [District Rule 4455, 5.3.5] Federally Enforceable Through Title V Permit

24. If the leaking component is an essential component or a critical component and which cannot be immediately shut down for repairs, the operator shall minimize the leak within one hour after detection of the leak. If the leak has been minimized, but the leak still exceeds any of the applicable leak standards of Rule 4455, the essential component or critical component shall be repaired or replaced to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection, whichever comes earlier. [District Rule 4455 5.3.6] Federally Enforceable Through Title V Permit

25. For any component that has incurred five repair actions for major gas leaks or major liquid leaks, or any combination of major gas leaks and major liquid leaks within a continuous 12-month period, the operator shall comply with at least one of the requirements specified in Sections 5.3.7.1, 5.3.7.2, 5.3.7.3, or 5.3.7.4 by the applicable deadlines specified in Sections 5.3.7.5 and 5.3.7.6. If the original leaking component is replaced with a new like-in-kind component before incurring five repair actions for major leaks within 12-consecutive months, the repair count shall start over for the new component. An entire compressor or pump need not be replaced provided the compressor part(s) or pump part(s) that have incurred five repair actions as described in Section 5.3.7 are brought into compliance with at least one of the requirements of Sections 5.3.7.1 through 5.3.7.6. [District Rule 4455, 5.3.7] Federally Enforceable Through Title V Permit

26. The operator shall monitor process PRD by using electronic process control instrumentation that allows for real time continuous parameter monitoring or by using telltale indicators for the process PRD where parameter monitoring is not feasible. [District Rule 4455, 5.4.1] Federally Enforceable Through Title V Permit

27. After a release from a process PRD in excess of 500 pounds of VOC in a continuous 24-hour period, the operator shall immediately conduct a failure analysis and implement corrective actions as soon as practicable but not later than 30 days to prevent the reoccurrence of similar release. For refineries processing greater than 20,000 barrels of crude oil per day, any subsequent release in excess of 500 pounds of VOC within a continuous 24-hour period shall be subject to the requirements of Section 5.4.5. [District Rule 4455, 5.4.3 & 5.4.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

28. The operator of a refinery processing greater than 20,000 barrels of crude oil per day shall connect all process PRDs serving that process equipment to an APCO-approved closed vent system as defined in Section 3.0 if any of the conditions specified in Sections 5.4.5.1 and 5.4.5.2 occurs. Process PRDs subject to the provisions of Section 5.4.5 shall be connected to an APCO-approved closed-vent system as soon as practicable, but no later than the first turnaround after the requirement to connect becomes effective. [District Rule 4455, 5.4.5] Federally Enforceable Through Title V Permit

29. All major components and critical components shall be physically identified clearly and visibly for inspection, repair, and recordkeeping purposes. The physical identification shall consist of labels, tags, manufacturer's nameplate identifier, serial number, or model number, or other system approved by the APCO that enables an operator or District personnel to locate each individual component. The operator shall replace tags or labels that become missing or unreadable as soon as practicable but not later than 24 hours after discovery. The operator shall comply with the requirements of Sections 6.1.4 if there is any change in the description of major components or critical components. [District Rule 4455, 5.5.1 & 5.5.2] Federally Enforceable Through Title V Permit

30. The operator shall keep a copy of the operator management plan at the facility and make it available to the APCO, ARB and US EPA upon request. By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved operator management plan. [District Rule 4455, 6.1.2 & 6.1.4] Federally Enforceable Through Title V Permit

31. The operator shall maintain an inspection log containing, at a minimum, 1) total number of components inspected, and total number and percentage of leaking components found by component types, 2) location, type, name or description of each leaking component, and description of any unit where the leaking component is found, 3) date of leak detection and method of leak detection, 4) for gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak, 5) date of repair, replacement, or removal from operation of leaking components, 6) identification and location of essential component and critical components found leaking that cannot be repaired until the next process unit turnaround or not later one year after leak detection, whichever comes earlier, 7) methods used to minimize the leak from essential components and critical components that cannot be repaired until the next process unit turnaround or not later one year after leak detection, whichever comes earlier, 8) after the component is repaired or is replaced, the date of reinspection and the leak concentration in ppmv, 9) inspector's name, business mailing address, and business telephone number, and 10) the facility operator responsible for the inspection and repair program shall sign and date the inspection log certifying the accuracy of the information recorded in the log. [District Rule 4455, 6.2.1] Federally Enforceable Through Title V Permit

32. Records of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components, including a copy of current calibration gas certification from the vendor of said calibration gas cylinder, the date of calibration, concentration of calibration gas, analyzer reading of calibration gas before adjustment, instrument reading of calibration gas after adjustment, calibration gas expiration date, and calibration gas cylinder pressure at the time of calibration. [District Rule 4455, 6.2.3] Federally Enforceable Through Title V Permit

33. The operator shall notify the APCO, by telephone or other methods approved by the APCO, of any process PRD release described in Sections 5.4.4 and 5.4.5, and any release in excess of the reportable quantity limits as stipulated in 40 CFR, Part 117, Part 302 and Part 355, including any release in excess of 100 pounds of VOC, within one hour of such occurrence or within one hour of the time said person knew or reasonably should have known of its occurrence. [District Rule 4455, 6.3.1] Federally Enforceable Through Title V Permit

34. The operator shall submit a written report to the APCO within thirty (30) calendar days following a PRD release subject to 6.3.1. The written report shall include 1) process PRD type, size, and location, 2) date, time and duration of the process PRD release, 3) types of VOC released and individual amounts, in pounds, including supporting calculations, 4) cause of the process PRD release, and 5) corrective actions taken to prevent a subsequent process PRD release. [District Rule 4455 6.3.2] Federally Enforceable Through Title V Permit

35. Copies of all records shall be retained for a minimum of five (5) years after the date of an entry. Such records shall be made available to the APCO, ARB, or US EPA upon request. [District Rule 4455, 6.2.2, 6.2.3 & 6.2.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

36. Measurements of gaseous leak concentrations shall be conducted according to US EPA Method 21 using an appropriate portable hydrocarbon detection instrument calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in US EPA Method 21 or the manufacturer's instruction, as appropriate, not more than 30 days prior to its use. The operator shall record the calibration date of the instrument. [District Rule 4455, 6.4.1] Federally Enforceable Through Title V Permit

37. The VOC content of exempt streams shall be determined using American Society of Testing and Materials (ASTM) D 1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 for liquids. [District Rule 4455, 6.4.2] Federally Enforceable Through Title V Permit

38. For exempt streams, the percent by volume liquid evaporated at 150 deg C shall be determined using ASTM D 86. [District Rule 4455, 6.4.3] Federally Enforceable Through Title V Permit

39. Equivalent test methods other than specified in Sections 6.4.1 through 6.4.5 may be used provided such test methods have received prior approval from the US EPA, ARB, and APCO. [District Rule 4455, 6.4] Federally Enforceable Through Title V Permit

40. Permittee shall maintain accurate records of number of fugitive components and expected emissions calculated using Technical Guidance Document to AB2588 for refineries Tables D1-D3, AP-42 Table 9.1-2, or other District approved emission factors. [District NSR Rule and District Rule 1070] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-3-7 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
UNIFINER UNIT INCLUDING A SPLITTER, A REACTOR, A SEPARATOR, 3 ACCUMULATORS, 11.4 MMBTU/HR CHARGE HEATER WITH ZEECO GLSF-10 LOW NOX BURNERS AND 12.5 MMBTU/HR SPLITTER REBOILER HEATER WITH ZEECO GLSF-10 LOW NOX BURNERS

PERMIT UNIT REQUIREMENTS

1. Heaters shall be fired only on purchased commercial natural gas, refinery fuel gas, or any combination thereof. [District Rule 2201, 4001] Federally Enforceable Through Title V Permit
2. Sulfur content of fuel combusted in this unit shall not exceed 100 ppmv (as total reduced sulfur), based on a 3 hour rolling average. [District Rules 2201 and 40 CFR Part 60, Subpart J, 60.104(a)(1)] Federally Enforceable Through Title V Permit
3. All refinery fuel gas combusted in the heaters shall be monitored for H2S content by a continuous emissions monitoring (CEM) system. CEM shall be installed, calibrated, operated, and reported according to EPA guidelines as specified under 40 CFR 60, Subpart J, Specification 7, and general requirements. CEM results shall be calculated on a rolling three (3) hour basis. [District Rules 2201, 4001, Subpart J, 60.105(a)(4) and 60.105(a)(4)iii] Federally Enforceable Through Title V Permit
4. At least once per year, permittee shall obtain and analyze a representative sample for total reduced sulfur of the fuel combusted in this unit. Each sample shall be analyzed for the following reduced sulfur compounds: carbon disulfide, carbonyl sulfide, dimethyl disulfide, dimethyl sulfide, hydrogen sulfide and methyl mercaptan. For each sample, permittee shall record the analytical results for total sulfur, calculated as the sum of the results for all analytes, expressed as H2S, and shall calculate and record the ratio of total sulfur to H2S. Samples shall be analysed using ASTM D6228-98, or an alternative analytical method approved in advance by the APCO. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The permittee shall demonstrate continuous compliance with the sulfur content limit (as total reduced sulfur) of the fuel combusted in this unit by calculation, as the product of the fuel H2S concentration and the ratio of total sulfur to H2S, based on the most recently conducted fuel sample analysis for total sulfur. The total sulfur of the fuel shall be calculated for each one hour H2S monitoring result, and the hourly fuel sulfur values shall be averaged over a rolling three hour period to determine compliance. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Emission rates from each heater, except during startup and shutdown, shall not exceed any of the following: NOx (as NO2): 25 ppmv @ 3% O2 or 0.030 lb/MMBtu, VOC: 5.5 lb/MMscf, PM10: 7.6 lb/MMscf or CO: 50 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
7. Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
8. Daily combustion emissions from this permit unit shall not exceed any of the following: NOx (as NO2): 17.2 lb/day, VOC: 3.2 lb/day, PM10: 4.4 lb/day, or CO: 21.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. The duration of each startup and shutdown period for each heater shall not exceed 12 hours and 9 hours respectively. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

10. The permittee shall record the date and the duration of each startup and each shutdown. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

11. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit

12. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

13. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

14. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

15. Heater exhaust stacks shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 1081] Federally Enforceable Through Title V Permit

16. Source testing to demonstrate compliance with NOx and CO emission limits shall be conducted not less than once every 12 months, except as provided below. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

17. Source testing to demonstrate compliance with NOx and CO emission limits shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

18. If permittee fails any compliance demonstration for NOx or CO emission limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

19. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit

20. Compliance source testing shall be conducted under conditions representative of normal operation. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

21. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
22. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
23. The following test methods shall be used unless otherwise approved by the APCO and EPA: NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, and stack gas oxygen - EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit
24. All required source testing shall conform to the compliance testing procedures described in District Rule 1081. [District Rule 1081] Federally Enforceable Through Title V Permit
25. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results used to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel. [District Rule 2520, 9.4.2 and 40 CFR 60.48c(g)] Federally Enforceable Through Title V Permit
26. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit
27. Nitrogen oxide (NOx) emission concentrations in ppmv shall be referenced at dry stack gas conditions, and shall be calculated to 3.00 percent by volume stack gas oxygen and averaged over 60 minutes, and lb/MMBtu rates shall be calculated as lb NO2/MMBtu of heat input (hhv). [District Rule 4305, 5.0, 8.2 and/or 4351, 8.1] Federally Enforceable Through Title V Permit
28. Draeger tubes shall be used as an alternative method for measuring fuel gas H2S during scheduled maintenance or unscheduled interruptions of CEMs. Draeger tube use shall be limited to no more than 96 continuous hours and fuel gas H2S shall be checked a minimum of every two hours during scheduled maintenance or unscheduled interruptions of CEMs. Alternate method of measuring fuel gas H2S shall occur no more than 192 hours in any calendar year. [40CFR60.13(i)] Federally Enforceable Through Title V Permit
29. Operator shall maintain all records of the reason for alternative monitoring and required fuel gas H2S monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
30. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320]
31. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320]
32. VOC emission rate from fugitive components associated with this emissions unit shall not exceed 90.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
33. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2a: 1995 EPA Protocol Refinery Screening Value Range Emission Factors. Permit holder shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
34. Permit unit shall comply with applicable District Rule 4001 (NSPS, Subpart GGG) requirements. [District Rule 4001] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

35. The owner or operator may apply to the Administrator for a determination of equivalency for any means of emission limitation that achieves a reduction in emissions of VOC at least equivalent to the reduction in emissions of VOC achieved by the controls required in Subpart GGG. In doing so the owner or operator shall comply with the requirements of 40 CFR 60.484. [40 CFR 60.592(c)] Federally Enforceable Through Title V Permit

36. Affected facilities for which construction or modification commenced after January 4, 1983 shall comply with applicable requirements of 40CFR, Subpart GGG. [40CFR60.590(a)]]

37. Each Subpart GGG pump in light liquid service (PLLS) shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485(b), except as provided in 40 CFR 60.482-1(c) and 40 CFR 60.482-2(d), (e), and (f). Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. A leak is detected if an instrument reading of 10,000 ppm or greater is measured or if there are indications of liquids dripping from the pump seal. [40 CFR 60.482-2(a) and (b)]

38. When a leak is detected for each PLLS, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. [40 CFR 60.482-2(c)] Federally Enforceable Through Title V Permit

39. Any Subpart GGG PLLS equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of 40 CFR 60.482-2(a) provided the requirements specified in 40 CFR 60.482-2(d)(1) through (6) are met. [40 CFR 60.482(d)] Federally Enforceable Through Title V Permit

40. Any Subpart GGG PLLS that is designated, as described in 40 CFR 60.486(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 60.482-2(a), (c), and (d) if the pump meets the requirements specified in 40 CFR 60.482-2(e)(1), (2), and (3). [40 CFR 60.482-2(e)] Federally Enforceable Through Title V Permit

41. If any Subpart GGG PLLS is equipped with a closed vent system capable of capturing and transporting leakage from the seal or seals to a control device that complies with the requirements of 40 CFR 60.482-10, it is exempt from the requirements of 40 CFR 60.482-2(a) through (e). [40 CFR 60.482-2(f)] Federally Enforceable Through Title V Permit

42. Any Subpart GGG pump in PLLS that is designated, as described in 40 CFR 60.486(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of 40 CFR 60.482-2(a) and 40 CFR 60.482-2(d)(4) through (6) if: 1). The owner or operator of the pump demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-2(a); and 2) The owner or operator of the pump has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in 40 CFR 60.482-2(c) if a leak is detected. [40 CFR 60.482-2(g)] Federally Enforceable Through Title V Permit

43. Except during pressure releases, each Subpart GGG pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in 40 CFR 60.485(c). [40 CFR 60.482-4(a)] Federally Enforceable Through Title V Permit

44. After each pressure release, the Subpart GGG pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in 40 CFR 60.482-9. No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in 40 CFR 60.485(c). [40 CFR 60.482-4(b)] Federally Enforceable Through Title V Permit

45. Any Subpart GGG pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in 40 CFR 60.482-10 is exempted from the requirements of 40 CFR 60.482-4(a) and (b). [40 CFR 60.482-4(c)] Federally Enforceable Through Title V Permit

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46. Any pressure relief device that is equipped with a rupture disk upstream of the Subpart GGG pressure relief device is exempt from the 40 CFR 60.482-4(a) and (b), provided the owner or operator complies with the requirements in 40 CFR 60.482-4(d)(2) of this section. After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 60.482-9. [40 CFR 60.482-4(d)] Federally Enforceable Through Title V Permit

47. Except for in-situ sampling systems and sampling systems without purges, each Subpart GGG sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR 60.482-1(c). Each closed-purge, closed-loop, or closed-vent system shall comply with the requirements specified in 40 CFR 60.482-5(b)(1), (2), (3), and (4). [40 CFR 60.482-5(a), (b), and (c)] Federally Enforceable Through Title V Permit

48. Each Subpart GGG open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR 60.482-1(c). The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line. When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with this condition at all other times. [40 CFR 60.482-6(a) and (c)] Federally Enforceable Through Title V Permit

49. Each Subpart GGG open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed. [40 CFR 60.482-6(b)] Federally Enforceable Through Title V Permit

50. Subpart GGG open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of 40 CFR 60.482-6(a), (b) and (c). [40 CFR 60.482-6(d)] Federally Enforceable Through Title V Permit

51. Subpart GGG open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in 40 CFR 60.482-6(a) through (c) are exempt from the requirements of 40 CFR 60.482-6(a) through (c). [40 CFR 60.482-6(e)] Federally Enforceable Through Title V Permit

52. Each Subpart GGG valve in gas/vapor service and in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485(b) and shall comply with 40 CFR 60.482-7(b) through (e), except as provided in 40 CFR 60.482-7(f), (g), and (h), 40 CFR 60.483-1, 40 CFR 60.483-2, and 40 CFR 60.482-1(c). A leak is detected if an instrument reading of 10,000 ppm or greater is measured. [40 CFR 60.482-7(a) and (b)] Federally Enforceable Through Title V Permit

53. Any Subpart GGG valve in gas/vapor service or in light liquid service for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected. If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months. [40 CFR 60.482-7(c)] Federally Enforceable Through Title V Permit

54. When a leak is detected for any Subpart GGG valve in gas/vapor service or in light liquid service, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices specified in 40 CFR 60.482-7(e)(1), (2), (3), and (4), where practicable. [40 CFR 60.482-7(d) and (e)] Federally Enforceable Through Title V Permit

55. Any Subpart GGG valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 60.482-7(a) if the valve meets the requirements specified in 40 CFR 60.482-7(f)(1), (2), and (3). [40 CFR 60.482-7(f)] Federally Enforceable Through Title V Permit

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56. Any Subpart GGG valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7(a) if: 1) The owner or operator of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-7(a); and 2) The owner or operator of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times. [40 CFR 60.482-7(g)] Federally Enforceable Through Title V Permit

57. Any Subpart GGG valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(f)(2), as a difficult-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7(a) if: 1) The owner or operator of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface; 2) The process unit within which the valve is located either becomes an affected facility through 40 CFR 60.14 or 40 CFR 60.15 or the owner or operator designates less than 3.0 percent of the total number of valves as difficult-to-monitor; and 3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year. [40 CFR 60.482-7(h)] Federally Enforceable Through Title V Permit

58. The owner or operator may elect to comply with the applicable provisions for Subpart GGG valves in gas/vapor service and in light liquid service as specified in 40 CFR 60.483-1 and 60.483-2. [40 CFR 60.592(b)] Federally Enforceable Through Title V Permit

59. If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and Subpart GGG valves in heavy liquid service, Subpart GGG pressure relief devices in light liquid or heavy liquid service, and Subpart GGG connectors, the owner or operator shall follow either one of the following procedures: 1) The owner or operator shall monitor the equipment within 5 days by the method specified in 40 CFR 60.485(b) and shall comply with the requirements of 40 CFR 60.482-8(b) through (d); or 2) The owner or operator shall eliminate the visual, audible, olfactory, or other indication of a potential leak. A leak is detected if an instrument reading of 10,000 ppm or greater is measured. [40 CFR 60.482-8(a) and (b)] Federally Enforceable Through Title V Permit

60. When a leak is detected in Subpart GGG pumps and valves in heavy liquid service, Subpart GGG pressure relief devices in light liquid or heavy liquid service, and Subpart GGG connectors, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices described under 40 CFR 60.482-7(e). [40 CFR 60.482-8(c) and (d)] Federally Enforceable Through Title V Permit

61. Delay of Subpart GGG leak repair will be allowed if the repair is technologically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown. Delay of repair is allowed for equipment which is isolated from the process and which does not remain in VOC service. Delay of repair beyond a process unit shutdown will be allowed for a valve, if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown. [40 CFR 60.482-9(a)(b)(e)] Federally Enforceable Through Title V Permit

62. Delay of Subpart GGG leak repair for valves will be allowed if the owner or operator demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair and when repair procedures are effected and when repair procedures ar effected, the purged material is collected and destroyed or recovered in a control device complying with 40 CFR 60.482-10. Delay of leak repair for pumps will be allowed if the repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and repair is completed as soon as practicable, but no later than 6 months after the leak was detected. [40 cfr 60.482-9(c)(d)] Federally Enforceable Through Title V Permit

63. For Subpart GGG closed vent systems and control devices, vapor recovery systems shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, whichever is less stringent. [40 CFR 60.482-10(b)] Federally Enforceable Through Title V Permit

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64. For Subpart GGG closed vent systems and control devices, enclosed combustion devices shall be designed and operated to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816 degrees C. [40 CFR 60.482-10(c)] Federally Enforceable Through Title V Permit

65. Except as provided in 40 CFR 60.482-10(i) through (k), each Subpart GGG closed vent system used to comply with the provisions of Subpart GGG shall be inspected according to the procedures and schedule specified in 40 CFR 60.482-10(f)(1) and (f)(2). Leaks, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, shall be repaired as soon as practicable except as provided in 40 CFR 60.482-10(h). A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. Repair shall be completed no later than 15 calendar days after the leak is detected. [40 CFR 60.482-10(f) and (g)] Federally Enforceable Through Title V Permit

66. Delay of repair of a Subpart GGG closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown. [40 CFR 60.482-10(h)] Federally Enforceable Through Title V Permit

67. If a Subpart GGG vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2). [40 CFR 60.482-10(i)] Federally Enforceable Through Title V Permit

68. Any parts of the Subpart GGG closed vent system that are designated, as described in 40 CFR 60.482-10(l)(1), as unsafe to inspect are exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR 60.482-10 (j)(1) and (j)(2). [40 CFR 60.482-10(j)] Federally Enforceable Through Title V Permit

69. Any parts of the Subpart GGG closed vent system that are designated, as described in 40 CFR 60.482-10(l)(2), as difficult to inspect are exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR 60.482-10(k)(1) through (k)(3). [40 CFR 60.482-10(k)] Federally Enforceable Through Title V Permit

70. The owner or operator shall record the following information: 1) Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment; 2) Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment; 3) For each inspection during which a leak is detected, a record of the information specified in 40 CFR 60.486(c); 4) For each inspection conducted in accordance with 40 CFR 60.485(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected; and 5) For each visual inspection conducted in accordance with 40 CFR 60.482-10(f)(1)(ii) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected. [40 CFR 60.482-10(l)] Federally Enforceable Through Title V Permit

71. Closed vent systems and control devices used to comply with provisions Subpart GGG shall be operated at all times when emissions may be vented to them. [40 CFR 60.482-10(m)] Federally Enforceable Through Title V Permit

72. In conducting the Subpart GGG performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in 40 CFR 60, Appendix A or other methods and procedures as specified in 40 CFR 60.485, except as provided in 40 CFR 60.8(b). [40 CFR 60.485(a)] Federally Enforceable Through Title V Permit

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73. The owner or operator shall determine compliance with the standards in 40 CFR 60.482, 60.483, and 60.484 as follows: Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21. The following calibration gases shall be used: (i) Zero air (less than 10 ppm of hydrocarbon in air); and (ii) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [40 CFR 60.485(b)] Federally Enforceable Through Title V Permit

74. The owner or operator shall determine compliance with the no detectable emission standards in 40 CFR 60.482-2(e), 60.482-3(i), 60.482-4, 60.482-7(f), and 60.482-10(e) as follows: 1) The requirements of 40 CFR 60.485(b) shall apply. 2) Method 21 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance. [40 CFR 60.485(c)] Federally Enforceable Through Title V Permit

75. The owner or operator shall test each piece of Subpart GGG equipment unless demonstrated that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used: 1) Procedures that conform to the general methods in ASTM E260-73, 91, or 96, E168-67, 77, or 92, E169-63, 77, or 93 (incorporated by reference as seen in 40 CFR 60.17) shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment; 2) Organic compounds that are considered by the Administrator to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid; and 3) Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Administrator disagrees with the judgment, the previous two procedures as specified in 40 CFR 60.485(d)(1) and (2) shall be used to resolve the disagreement. [40 CFR 60.485(d)] Federally Enforceable Through Title V Permit

76. The owner or operator shall demonstrate that the Subpart GGG equipment is in light liquid service by showing that all the following conditions apply: 1) The vapor pressure of one or more of the components is greater than 0.3 kPa at 20 øC (1.2 in. H2O at 68 degrees F). Standard reference texts or ASTM D2879-83, 96, or 97 (incorporated by reference as seen in 40 CFR 60.17) shall be used to determine the vapor pressures; 2) The total concentration of the pure components having a vapor pressure greater than 0.3 kPa at 20 degrees Celsius is equal to or greater than 20 percent by weight; and 3) The fluid is a liquid at operating conditions. [40 CFR 60.485(e)] Federally Enforceable Through Title V Permit

77. Samples used in conjunction with 40 CFR 60.485(d), (e), and (g) shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare. [40 CFR 60.485(f)] Federally Enforceable Through Title V Permit

78. An owner or operator of more than one affected facility subject to the provisions Subpart GGG may comply with the recordkeeping requirements for these facilities in one recordkeeping system if the system identifies each record by each facility. [40 CFR 60.486(a)] Federally Enforceable Through Title V Permit

79. When each Subpart GGG leak is detected as specified in 40 CFR 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following requirements apply: 1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment; 2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR 60.482-7(c) and no leak has been detected during those 2 months; and 3) The identification on equipment except on a valve, may be removed after it has been repaired. [40 CFR 60.486(b)] Federally Enforceable Through Title V Permit

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80. When each Subpart GGG leak is detected as specified in 40 CFR 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following information shall be recorded in a log and shall be kept for 5 years in a readily accessible location: 1) The instrument and operator identification numbers and the equipment identification number; 2) The date the leak was detected and the dates of each attempt to repair the leak; 3) Repair methods applied in each attempt to repair the leak; 4) ``Above 10,000" if the maximum instrument reading measured by the methods specified in 40 CFR 60.485(a) after each repair attempt is equal to or greater than 10,000 ppm; 5) ``Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak; 6) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown; 7) The expected date of successful repair of the leak if a leak is not repaired within 15 days; 8) Dates of process unit shutdown that occur while the equipment is unrepaired; and 9) The date of successful repair of the leak. [40 CFR 60.486(c) and District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

81. The following information pertaining to the design requirements for Subpart GGG closed vent systems and control devices described in 40 CFR 60.482-10 shall be recorded and kept in a readily accessible location: 1) Detailed schematics, design specifications, and piping and instrumentation diagrams; 2) The dates and descriptions of any changes in the design specifications; 3) A description of the parameter or parameters monitored, as required in 40 CFR 60.482-10(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring; 4) Periods when the closed vent systems and control devices required in 40 CFR 60.482-2, 60.482-3, 60.482-4, and 60.482-5 are not operated as designed, including periods when a flare pilot light does not have a flame; and 5) Dates of startups and shutdowns of the closed vent systems and control devices required in 40 CFR 60.482-2, 60.482-3, 60.482-4, and 60.482-5. [40 CFR 60.486(d)] Federally Enforceable Through Title V Permit

82. The following information pertaining to all equipment subject to the requirements in 40 CFR 60.482-1 to 60.482-10 shall be recorded in a log that is kept in a readily accessible location: 1) A list of identification numbers for equipment subject to the requirements of Subpart GGG; 2) (i) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 40 CFR 60.482-2(e), 60.482-3(i) and 60.482-7(f). (ii) The designation of equipment as subject to the requirements of 40 CFR 60.482-2(e), 60.482-3(i) and 60.482-7(f) shall be signed by the owner or operator; 3) A list of equipment identification numbers for pressure relief devices required to comply with 60.482-4; 4) (i) The dates of each compliance test as required in 40 CFR 60.482-2(e), 60.482-3(i), 60.482-4, and 60.482-7(f). (ii) The background level measured during each compliance test. (iii) The maximum instrument reading measured at the equipment during each compliance test; and 5) A list of identification numbers for equipment in vacuum service. [40 CFR 60.486(e)] Federally Enforceable Through Title V Permit

83. The following information pertaining to all Subpart GGG valves subject to the requirements of 40 CFR 60.482-7(g) and (h) and to all Subpart GGG pumps subject to the requirements of 40 CFR 60.482-2(g) shall be recorded in a log that is kept in a readily accessible location: 1) A list of identification numbers for valves and pumps that are designated as unsafe-to-monitor, an explanation for each valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump; and 2) A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve. [40 CFR 60.486(f)] Federally Enforceable Through Title V Permit

84. The following information shall be recorded for Subpart GGG valves complying with 40 CFR 60.483-2: 1) A schedule of monitoring; 2) The percent of valves found leaking during each monitoring period. [40 CFR 60.486(g)] Federally Enforceable Through Title V Permit

85. The following information shall be recorded in a log that is kept in a readily accessible location: 1) Design criterion required in 40 CFR 60.482-2(d)(5) and 60.482-3(e)(2) and explanation of the design criterion; and 2) Any changes to this criterion and the reasons for the changes. [40 CFR 60.486(h)] Federally Enforceable Through Title V Permit

86. The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in 40 CFR 60.480(d): 1) An analysis demonstrating the design capacity of the affected facility; 2) A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol; and 3) An analysis demonstrating that equipment is not in VOC service. [40 CFR 60.486(i)] Federally Enforceable Through Title V Permit

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87. Information and data used to demonstrate that a piece of equipment is not in Subpart GGG VOC service shall be recorded in a log that is kept in a readily accessible location. [40 CFR 60.486(j)] Federally Enforceable Through Title V Permit

88. The provisions of 40 CFR 60.7 (b) and (d) do not apply to affected facilities subject to Subpart GGG. [40 CFR 60.486(k)] Federally Enforceable Through Title V Permit

89. All Subpart GGG semiannual reports to the Administrator shall include the following information, summarized from the information in 40 CFR 60.486: 1) Process unit identification; 2) For each month during the semiannual reporting period, i) Number of valves for which leaks were detected as described in 40 CFR 60.482-7(b) or 40 CFR 60.483-2, (ii) Number of valves for which leaks were not repaired as required in 40 CFR 60.482-7(d)(1), (iii) Number of pumps for which leaks were detected as described in 40 CFR 60.482-2(b) and (d)(6)(i), (iv) Number of pumps for which leaks were not repaired as required in 40 CFR 60.482-2(c)(1) and (d)(6)(ii), (v) Number of compressors for which leaks were detected as described in 40 CFR 60.482-3(f), (vi) Number of compressors for which leaks were not repaired as required in 40 CFR 60.482-3(g)(1), and (vii) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible; 3) Dates of process unit shutdowns which occurred within the semiannual reporting period; 4) Revisions to items reported in the semiannual report if changes have occurred since the initial report, as required in 40 CFR 60.487 (a) and (b), or subsequent revisions to the initial report. [40 CFR 60.487(c)] Federally Enforceable Through Title V Permit

90. An owner or operator electing to comply with the provisions of 40 CFR 60.483-1 and 60.483-2 shall notify the Administrator of the alternative standard selected 90 days before implementing either of the provisions. [40 CFR 60.487(d)] Federally Enforceable Through Title V Permit

91. An owner or operator shall report the results of all performance tests in accordance with 40 CFR 60.8 of the General Provisions. The provisions of 40 CFR 60.8(d) do not apply to affected facilities subject to the provisions of Subpart GGG except that an owner or operator must notify the Administrator of the schedule for the initial performance tests at least 30 days before the initial performance tests. [40 CFR 60.487(e)] Federally Enforceable Through Title V Permit

92. The Subpart GGG semiannual reporting requirements of 40 CFR 60.487(a), (b), and (c) remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with the requirements of 40 CFR 60.487(a), (b), and (c), provided that they comply with the requirements established by the State. [40 CFR 60.487(f)] Federally Enforceable Through Title V Permit

93. Compressors are exempt from the standards of Subpart GGG if the owner or operator demonstrates that a compressor is in hydrogen service. Each compressor is presumed not to be in hydrogen service unless an owner or operator demonstrates that the piece of equipment is in hydrogen service. For a piece of equipment to be considered in hydrogen service, it must be determined that the percent hydrogen content can be reasonably expected always to exceed 50 percent by volume. For purposes of determining the percent hydrogen content in the process fluid that is contained in or contacts a compressor, procedures that conform to the general method described in ASTM E-260, E-168, or E-169 shall be used. An owner or operator may use engineering judgment to demonstrate that the percent content exceeds 50 percent by volume, provided the engineering judgment demonstrates that the content clearly exceeds 50 percent by volume. When an owner or operator and the Administrator do not agree on whether a piece of equipment is in hydrogen service, however, the procedures that conform to the general method described in ASTM E-260, E-168, or E-169 shall be used to resolve the disagreement. If an owner or operator determines that a piece of equipment is in hydrogen service, the determination can be revised only after following the procedures that conform to the general method described in ASTM E-260, E-168, or E-169. [40 CFR 60.593(b)] Federally Enforceable Through Title V Permit

94. For compliance with Subpart GGG, an owner or operator may use the following provision in addition to 40 CFR 60.485(e): Equipment is in light liquid service if the percent evaporated is greater than 10 percent at 150 øC as determined by ASTM Method D86-78, 82, 90, 95, or 96. [40 CFR 60.593(d)] Federally Enforceable Through Title V Permit

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95. Equipment that is in vacuum service is excluded from the requirements of 40 CFR 60.482-2 to 40 CFR 60.482-10 if it is identified as required in 40 CFR 60.486(e)(5). [40 CFR 60.482-1(d)] Federally Enforceable Through Title V Permit

96. Except for complying with the applicable requirements of Sections 6.1 and 7.3, the requirements of this rule shall not apply to 1) components subject to Rule 4623 (adopted 5/19/05), 2) pressure relief devices, pumps, and compressors equipped with a closed vent system as defined in Section 3.0, 3) components buried below ground, 4) components exclusively handling liquid streams which have less than 10 percent by weight (<10 wt%) evaporation at 150 C, 5) components exclusively handling liquid streams with a VOC content less than ten percent by weight (<10 wt%), 6) components exclusively handling gas/vapor streams with a VOC content of less than one percent by weight (<1wt%), 7) components incorporated in lines exclusively in vacuum service, 8) components exclusively handling commercial natural gas, and 9) one-half inch nominal or less stainless steel tube fittings which have been demonstrated to the Air Pollution Control Officer (APCO) to be leak-free based on initial inspection. [District Rule 4455, 4.1 & 4.2] Federally Enforceable Through Title V Permit

97. Except for components subject to Rule 4623 (Storage of Organic Liquids) or for components included in the inspection and maintenance (I&M) program implemented pursuant to Section 5.7 of Rule 4623, the operator shall not use any component that leaks in excess of the allowable leak standards of Rule 4455, or is found to be in violation of the provisions specified in Section 5.1.3. A component identified as leaking in excess of an allowable leak standard may be used provided it has been identified with a tag for repair, has been repaired, or is awaiting re-inspection after repair, within the applicable time period specified within the rule. [District Rule 4455, 5.1.1] Federally Enforceable Through Title V Permit

98. Each hatch shall be closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4455, 5.1.2] Federally Enforceable Through Title V Permit

99. The operator shall be in violation of Rule 4455 if any District inspection demonstrates that one or more of the conditions in Section 5.1.4 (Leak Standards) exist at the facility. [District Rule 4455, 5.1.3.1] Federally Enforceable Through Title V Permit

100. Except for annual operator inspection described in Section 5.1.3.2.3, any operator inspection that demonstrates that one or more of the conditions in Section 5.1.4 exist at the facility shall not constitute a violation of Rule 4455 if the leaking components are repaired as soon as practicable but not later than the time frame specified in Rule 4455. Such components shall not be counted towards determination of compliance with the provisions of Section 5.1.4. [District Rule 4455, 5.1.3.2.1] Federally Enforceable Through Title V Permit

101. Leaking components detected during operator inspection pursuant Section 5.1.3.2.1 that are not repaired, replaced, or removed from operation as soon as practicable but not later than the time frame specified in Rule 4455 shall be counted toward determination of compliance with the provisions of Section 5.1.4. [District Rule 4455, 5.1.3.2.2] Federally Enforceable Through Title V Permit

102. Any operator inspection conducted annually for a component type (including operator annual inspections pursuant to Section 5.2.5, 5.2.6, 5.2.7, or 5.2.8) that demonstrates one or more of the conditions in Section 5.1.4 exist at the facility shall constitute a violation of Rule 4455 regardless of whether or not the leaking components are repaired, replaced, or removed from operation within the allowable repair time frame specified in Rule 4455. [District Rule 4455, 5.1.3.2.3] Federally Enforceable Through Title V Permit

103. A component shall be considered leaking if one or more of the conditions specified in Sections 5.1.4.1 through 5.1.4.4 of Rule 4455 exist at the facility. Readings shall be taken as methane using a portable hydrocarbon detection instrument and shall be made in accordance with the methods specified in Section 6.4.1 of Rule 4455. [District Rule 4455, 5.1.4] Federally Enforceable Through Title V Permit

104. The operator shall audio-visually inspect for leaks all accessible operating pumps, compressors and Pressure Relief Devices (PRDs) in service at least once every 24 hours, except when operators do not report to the facility for that given 24 hours. Any identified leak that cannot be immediately repaired shall be reinspected within 24 hours using a portable analyzer. If a leak is found, it shall be repaired as soon as practical but not later than the time frame specified in Table 3. [District Rule 4455, 5.2.1 & 5.2.2] Federally Enforceable Through Title V Permit

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105. The operator shall inspect all components at least once every calendar quarter, except for inaccessible components, unsafe-to-monitor components and pipes. Inaccessible components, unsafe-to-monitor components and pipes shall be inspected in accordance with the requirements set forth in Sections 5.2.5, 5.2.6, and 5.2.7. New, replaced, or repaired fittings, flanges and threaded connections shall be inspected immediately after being placed into service. Components shall be inspected using EPA Method 21. [District Rule 4455, 5.2.3, 5.2.4, 5.2.5, 5.2.6 & 5.2.7] Federally Enforceable Through Title V Permit

106. The operator may apply for a written approval from the APCO to change the inspection frequency from quarterly to annually for a component type, provided the operator meets all the criteria specified in Sections 5.2.8.1 through 5.2.8.3. This approval shall apply to accessible component types, specifically designated by the APCO, except pumps, compressors, and PRDs which shall continue to be inspected on a quarterly basis. [District Rule 4455, 5.2.8] Federally Enforceable Through Title V Permit

107. An annual inspection frequency approved by the APCO shall revert to quarterly inspection frequency for a component type if either the operator inspection or District inspection demonstrates that a violation of the provisions of Sections 5.1, 5.2 and 5.3 of the rule exists for that component type, or the APCO issued a Notice of Violation for violating any of the provisions of Rule 4455 during the annual inspection period for that component type. When the inspection frequency changes from annual to quarterly inspections, the operator shall notify the APCO in writing within five (5) calendar days after changing the inspection frequency, giving the reason(s) and date of change to quarterly inspection frequency. [District Rule 4455, 5.2.9 & 5.2.10] Federally Enforceable Through Title V Permit

108. The operator shall initially inspect a process PRD that releases to the atmosphere as soon as practicable but not later than 24 hours after the time of the release. To insure that the process PRD is operating properly, and is leak-free, the operator shall re-inspect the process PRD not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the date of the release using EPA Method 21. If the process PRD is found to be leaking at either inspection, the PRD leak shall be treated as if the leak was found during quarterly operator inspections. [District Rule 4455, 5.2.11] Federally Enforceable Through Title V Permit

109. Except for process PRD, a component shall be inspected within 15 calendar days after repairing the leak or replacing the component using EPA Method 21. [District Rule 4455, 5.2.12] Federally Enforceable Through Title V Permit

110. A District inspection in no way fulfills any of the mandatory inspection requirements that are placed upon operators and cannot be used or counted as an inspection required of an operator. Any attempt by an operator to count such District inspections as part of the mandatory operator's inspections is considered to be willful circumvention and is a violation of this rule. [District Rule 4455, 5.2.13] Federally Enforceable Through Title V Permit

111. Upon detection of a leaking component, the operator shall affix to that component a weatherproof readily visible tag that contains the information specified in Section 5.3.3. The tag shall remain affixed to the component until the leaking component has been repaired or replaced; has been re-inspected using EPA Method 21; and is found to be in compliance with the requirements of Rule 4455. [District Rule 4455, 5.3.1 5.3.2 and 5.3.3] Federally Enforceable Through Title V Permit

112. An operator shall minimize all component leaks immediately to the extent possible, but not later than one (1) hour after detection of leaks in order to stop or reduce leakage to the atmosphere. [District Rule 4455, 5.3.4] Federally Enforceable Through Title V Permit

113. If the leak has been minimized but the leak still exceeds the applicable leak standards of Rule 4455, an operator shall repair or replace the leaking component, vent the leaking component to a closed vent system, or remove the leaking component from operation as soon as practicable but not later than the time period specified in Table 3. For each calendar quarter, the operator may be allowed to extend the repair period as specified in Table 3, for a total number of leaking components, not to exceed 0.05 percent of the number of components inspected, by type, rounded upward to the nearest integer where required. [District Rule 4455, 5.3.5] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

114. If the leaking component is an essential component or a critical component and which cannot be immediately shut down for repairs, the operator shall minimize the leak within one hour after detection of the leak. If the leak has been minimized, but the leak still exceeds any of the applicable leak standards of Rule 4455, the essential component or critical component shall be repaired or replaced to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection, whichever comes earlier. [District Rule 4455 5.3.6] Federally Enforceable Through Title V Permit

115. For any component that has incurred five repair actions for major gas leaks or major liquid leaks, or any combination of major gas leaks and major liquid leaks within a continuous 12-month period, the operator shall comply with at least one of the requirements specified in Sections 5.3.7.1, 5.3.7.2, 5.3.7.3, or 5.3.7.4 by the applicable deadlines specified in Sections 5.3.7.5 and 5.3.7.6. If the original leaking component is replaced with a new like-in-kind component before incurring five repair actions for major leaks within 12-consecutive months, the repair count shall start over for the new component. An entire compressor or pump need not be replaced provided the compressor part(s) or pump part(s) that have incurred five repair actions as described in Section 5.3.7 are brought into compliance with at least one of the requirements of Sections 5.3.7.1 through 5.3.7.6. [District Rule 4455, 5.3.7] Federally Enforceable Through Title V Permit

116. The operator shall monitor process PRD by using electronic process control instrumentation that allows for real time continuous parameter monitoring or by using telltale indicators for the process PRD where parameter monitoring is not feasible. [District Rule 4455, 5.4.1] Federally Enforceable Through Title V Permit

117. After a release from a process PRD in excess of 500 pounds of VOC in a continuous 24-hour period, the operator shall immediately conduct a failure analysis and implement corrective actions as soon as practicable but not later than 30 days to prevent the reoccurrence of similar release. For refineries processing greater than 20,000 barrels of crude oil per day, any subsequent release in excess of 500 pounds of VOC within a continuous 24-hour period shall be subject to the requirements of Section 5.4.5. [District Rule 4455, 5.4.3 & 5.4.4] Federally Enforceable Through Title V Permit

118. The operator of a refinery processing greater than 20,000 barrels of crude oil per day shall connect all process PRDs serving that process equipment to an APCO-approved closed vent system as defined in Section 3.0 if any of the conditions specified in Sections 5.4.5.1 and 5.4.5.2 occurs. Process PRDs subject to the provisions of Section 5.4.5 shall be connected to an APCO-approved closed-vent system as soon as practicable, but no later than the first turnaround after the requirement to connect becomes effective. [District Rule 4455, 5.4.5] Federally Enforceable Through Title V Permit

119. All major components and critical components shall be physically identified clearly and visibly for inspection, repair, and recordkeeping purposes. The physical identification shall consist of labels, tags, manufacturer's nameplate identifier, serial number, or model number, or other system approved by the APCO that enables an operator or District personnel to locate each individual component. The operator shall replace tags or labels that become missing or unreadable as soon as practicable but not later than 24 hours after discovery. The operator shall comply with the requirements of Sections 6.1.4 if there is any change in the description of major components or critical components. [District Rule 4455, 5.5.1 & 5.5.2] Federally Enforceable Through Title V Permit

120. The operator shall keep a copy of the operator management plan at the facility and make it available to the APCO, ARB and US EPA upon request. By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved operator management plan. [District Rule 4455, 6.1.2 & 6.1.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

121. The operator shall maintain an inspection log containing, at a minimum, 1) total number of components inspected, and total number and percentage of leaking components found by component types, 2) location, type, name or description of each leaking component, and description of any unit where the leaking component is found, 3) date of leak detection and method of leak detection, 4) for gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak, 5) date of repair, replacement, or removal from operation of leaking components, 6) identification and location of essential component and critical components found leaking that cannot be repaired until the next process unit turnaround or not later one year after leak detection, whichever comes earlier, 7) methods used to minimize the leak from essential components and critical components that cannot be repaired until the next process unit turnaround or not later one year after leak detection, whichever comes earlier, 8) after the component is repaired or is replaced, the date of reinspection and the leak concentration in ppmv, 9) inspector's name, business mailing address, and business telephone number, and 10) the facility operator responsible for the inspection and repair program shall sign and date the inspection log certifying the accuracy of the information recorded in the log. [District Rule 4455, 6.2.1] Federally Enforceable Through Title V Permit

122. Records of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components, including a copy of current calibration gas certification from the vendor of said calibration gas cylinder, the date of calibration, concentration of calibration gas, analyzer reading of calibration gas before adjustment, instrument reading of calibration gas after adjustment, calibration gas expiration date, and calibration gas cylinder pressure at the time of calibration. [District Rule 4455, 6.2.3] Federally Enforceable Through Title V Permit

123. The operator shall notify the APCO, by telephone or other methods approved by the APCO, of any process PRD release described in Sections 5.4.4 and 5.4.5, and any release in excess of the reportable quantity limits as stipulated in 40 CFR, Part 117, Part 302 and Part 355, including any release in excess of 100 pounds of VOC, within one hour of such occurrence or within one hour of the time said person knew or reasonably should have known of its occurrence. [District Rule 4455, 6.3.1] Federally Enforceable Through Title V Permit

124. The operator shall submit a written report to the APCO within thirty (30) calendar days following a PRD release subject to 6.3.1. The written report shall include 1) process PRD type, size, and location, 2) date, time and duration of the process PRD release, 3) types of VOC released and individual amounts, in pounds, including supporting calculations, 4) cause of the process PRD release, and 5) corrective actions taken to prevent a subsequent process PRD release. [District Rule 4455 6.3.2] Federally Enforceable Through Title V Permit

125. Copies of all records shall be retained for a minimum of five (5) years after the date of an entry. Such records shall be made available to the APCO, ARB, or US EPA upon request. [District Rule 4455, 6.2.2, 6.2.3 & 6.2.4] Federally Enforceable Through Title V Permit

126. Measurements of gaseous leak concentrations shall be conducted according to US EPA Method 21 using an appropriate portable hydrocarbon detection instrument calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in US EPA Method 21 or the manufacturer's instruction, as appropriate, not more than 30 days prior to its use. The operator shall record the calibration date of the instrument. [District Rule 4455, 6.4.1] Federally Enforceable Through Title V Permit

127. The VOC content of exempt streams shall be determined using American Society of Testing and Materials (ASTM) D 1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 for liquids. [District Rule 4455, 6.4.2] Federally Enforceable Through Title V Permit

128. For exempt streams, the percent by volume liquid evaporated at 150 deg C shall be determined using ASTM D 86. [District Rule 4455, 6.4.3] Federally Enforceable Through Title V Permit

129. Equivalent test methods other than specified in Sections 6.4.1 through 6.4.5 may be used provided such test methods have received prior approval from the US EPA, ARB, and APCO. [District Rule 4455, 6.4] Federally Enforceable Through Title V Permit

130. Permittee shall comply with all applicable testing, recordkeeping, and reporting requirements specified in Rule 4001 - New Source Performance Standards, including but not limited to Subparts A and J. [District Rule 4001] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

131. Operators shall not depressurize any vessel containing VOCs unless the process unit turnaround is accomplished by employing one of the following operating procedures: The organic vapors shall either be recovered, added to the refinery fuel gas system and combusted; or controlled and piped to an appropriate firebox or incinerated for combustion; or flared, until the pressure within the process vessel is as close to atmospheric pressure as is possible. All process vessels shall be depressurized into the control facilities to less than 1020 mm Hg (5 psig) before venting/opening to atmosphere. All organic compounds which emerge from a refinery process vessel during the purging of said vessel and which otherwise would be emitted to the atmosphere shall be either directed to a flare or incinerator or shall be used for fuel until such disposition of emissions is not technically feasible or is less safe than atmospheric venting. [District Rule 4454, 4.0] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-4-17 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
PLATFORMER UNIT INCLUDING SEPARATOR, ADSORBER, 3 REACTORS, 4 FT. DIA. STABILIZER TOWER, ACCUMULATORS, 29.3 MMBTU/HR CHARGE HEATER #1 WITH ZEECO GLSF-12 LOW NOX BURNERS, 17.9 MMBTU/HR CHARGE HEATER #2 WITH ZEECO GLSF-12 LOW NOX BURNERS, AND 11.9 MMBTU/HR CHARGE HEATER #3 WITH ZEECO GLSF-10 LOW NOX BURNERS

PERMIT UNIT REQUIREMENTS

1. Heaters shall be fired only on purchased commercial natural gas, refinery fuel gas, or any combination thereof. [District Rule 2201, 4001] Federally Enforceable Through Title V Permit
2. Sulfur content of fuel combusted in this unit shall not exceed 100 ppmv (as total reduced sulfur), based on a 3 hour rolling average. [District Rules 2201 and 40 CFR Part 60, Subpart J, 60.104(a)(1)] Federally Enforceable Through Title V Permit
3. All refinery fuel gas combusted in the heaters shall be monitored for H2S content by a continuous emissions monitoring (CEM) system. CEM shall be installed, calibrated, operated, and reported according to EPA guidelines as specified under 40 CFR 60, Subpart J, Specification 7, and general requirements. CEM results shall be calculated on a rolling three (3) hour basis. [District Rules 2201, 4001, Subpart J, 60.105(a)(4) and 60.105(a)(4)iii] Federally Enforceable Through Title V Permit
4. Permittee shall obtain and analyze a representative gas sample for total reduced sulfur of the fuel combusted in this unit at least once per year. Each sample shall be analyzed for the following reduced sulfur compounds: carbon disulfide, carbonyl sulfide, dimethyl disulfide, dimethyl sulfide, hydrogen sulfide and methyl mercaptan. For each sample, permittee shall record the analytical results for total sulfur, calculated as the sum of the results for all analytes, expressed as H2S, and shall calculate and record the ratio of total sulfur to H2S. Samples shall be analysed using ASTM D6228-98, or an alternative analytical method approved in advance by the APCO. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The permittee shall demonstrate continuous compliance with the sulfur content limit (as total reduced sulfur) of the fuel combusted in this unit by calculation, as the product of the fuel H2S concentration and the ratio of total sulfur to H2S, based on the most recently conducted fuel sample analysis for total sulfur. The total sulfur of the fuel shall be calculated for each one hour H2S monitoring result, and the hourly fuel sulfur values shall be averaged over a rolling three hour period to determine compliance. [District Rule 2201]
6. Emission rates from each heater, except during startup and shutdown, shall not exceed any of the following: NOx (as NO2): 25 ppmv @ 3% O2 or 0.030 lb/MMBtu, VOC: 5.5 lb/MMscf, PM10: 7.6 lb/MMscf or CO: 50 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
7. Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
8. Daily combustion emissions from this permit unit shall not exceed any of the following: NOx (as NO2): 42.6 lb/day, VOC: 7.8 lb/day, PM10: 10.8 lb/day, or CO: 52.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. The duration of each startup and shutdown period for each heater shall not exceed 12 hours and 9 hours respectively. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

10. The permittee shall record the date and the duration of each startup and each shutdown. [District Rules 4305 and 4306]

11. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit

12. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

13. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

14. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

15. Heater exhaust stacks shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 1081] Federally Enforceable Through Title V Permit

16. Source testing to demonstrate compliance with NOx and CO emission limits shall be conducted not less than once every 12 months, except as provided below. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

17. Source testing to demonstrate compliance with NOx and CO emission limits shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

18. If permittee fails any compliance demonstration for NOx or CO emission limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

19. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit

20. Compliance source testing shall be conducted under conditions representative of normal operation. [District Rule 1081] Federally Enforceable Through Title V Permit

21. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

23. The following test methods shall be used unless otherwise approved by the APCO and EPA: NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, and stack gas oxygen - EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

24. All required source testing shall conform to the compliance testing procedures described in District Rule 1081. [District Rule 1081] Federally Enforceable Through Title V Permit

25. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results used to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel. [District Rule 2520, 9.4.2 and 40 CFR 60.48c(g)] Federally Enforceable Through Title V Permit

26. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit

27. Nitrogen oxide (NOx) emission concentrations in ppmv shall be referenced at dry stack gas conditions, and shall be calculated to 3.00 percent by volume stack gas oxygen and averaged over 60 minutes, and lb/MMBtu rates shall be calculated as lb NO2/MMBtu of heat input (hhv). [District Rule 4305, 5.0, 8.2 and/or 4351, 8.1] Federally Enforceable Through Title V Permit

28. Draeger tubes shall be used as an alternative method for measuring fuel gas H2S during scheduled maintenance or unscheduled interruptions of CEMs. Draeger tube use shall be limited to no more than 96 continuous hours and fuel gas H2S shall be checked a minimum of every two hours during scheduled maintenance or unscheduled interruptions of CEMs. Alternate method of measuring fuel gas H2S shall occur no more than 192 hours in any calendar year. [40CFR60.13(i)] Federally Enforceable Through Title V Permit

29. Operator shall maintain all records of the reason for alternative monitoring and required fuel gas H2S monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

30. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320]

31. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320]

32. VOC emission rate from fugitive components associated with this emissions unit shall not exceed 97.8 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

33. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2a: 1995 EPA Protocol Refinery Screening Value Range Emission Factors. Permit holder shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

34. Except for complying with the applicable requirements of Sections 6.1 and 7.3, the requirements of this rule shall not apply to 1) components subject to Rule 4623 (adopted 5/19/05), 2) pressure relief devices, pumps, and compressors equipped with a closed vent system as defined in Section 3.0, 3) components buried below ground, 4) components exclusively handling liquid streams which have less than 10 percent by weight (<10 wt%) evaporation at 150 C, 5) components exclusively handling liquid streams with a VOC content less than ten percent by weight (<10 wt%), 6) components exclusively handling gas/vapor streams with a VOC content of less than one percent by weight (<1wt%), 7) components incorporated in lines exclusively in vacuum service, 8) components exclusively handling commercial natural gas, and 9) one-half inch nominal or less stainless steel tube fittings which have been demonstrated to the Air Pollution Control Officer (APCO) to be leak-free based on initial inspection. [District Rule 4455, 4.1 & 4.2] Federally Enforceable Through Title V Permit

35. Except for components subject to Rule 4623 (Storage of Organic Liquids) or for components included in the inspection and maintenance (I&M) program implemented pursuant to Section 5.7 of Rule 4623, the operator shall not use any component that leaks in excess of the allowable leak standards of Rule 4455, or is found to be in violation of the provisions specified in Section 5.1.3. A component identified as leaking in excess of an allowable leak standard may be used provided it has been identified with a tag for repair, has been repaired, or is awaiting re-inspection after repair, within the applicable time period specified within the rule. [District Rule 4455, 5.1.1] Federally Enforceable Through Title V Permit

36. Each hatch shall be closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4455, 5.1.2] Federally Enforceable Through Title V Permit

37. The operator shall be in violation of Rule 4455 if any District inspection demonstrates that one or more of the conditions in Section 5.1.4 (Leak Standards) exist at the facility. [District Rule 4455, 5.1.3.1] Federally Enforceable Through Title V Permit

38. Except for annual operator inspection described in Section 5.1.3.2.3, any operator inspection that demonstrates that one or more of the conditions in Section 5.1.4 exist at the facility shall not constitute a violation of Rule 4455 if the leaking components are repaired as soon as practicable but not later than the time frame specified in Rule 4455. Such components shall not be counted towards determination of compliance with the provisions of Section 5.1.4. [District Rule 4455, 5.1.3.2.1] Federally Enforceable Through Title V Permit

39. Leaking components detected during operator inspection pursuant Section 5.1.3.2.1 that are not repaired, replaced, or removed from operation as soon as practicable but not later than the time frame specified in Rule 4455 shall be counted toward determination of compliance with the provisions of Section 5.1.4. [District Rule 4455, 5.1.3.2.2] Federally Enforceable Through Title V Permit

40. Any operator inspection conducted annually for a component type (including operator annual inspections pursuant to Section 5.2.5, 5.2.6, 5.2.7, or 5.2.8) that demonstrates one or more of the conditions in Section 5.1.4 exist at the facility shall constitute a violation of Rule 4455 regardless of whether or not the leaking components are repaired, replaced, or removed from operation within the allowable repair time frame specified in Rule 4455. [District Rule 4455, 5.1.3.2.3] Federally Enforceable Through Title V Permit

41. A component shall be considered leaking if one or more of the conditions specified in Sections 5.1.4.1 through 5.1.4.4 of Rule 4455 exist at the facility. Readings shall be taken as methane using a portable hydrocarbon detection instrument and shall be made in accordance with the methods specified in Section 6.4.1 of Rule 4455. [District Rule 4455, 5.1.4] Federally Enforceable Through Title V Permit

42. The operator shall audio-visually inspect for leaks all accessible operating pumps, compressors and Pressure Relief Devices (PRDs) in service at least once every 24 hours, except when operators do not report to the facility for that given 24 hours. Any identified leak that cannot be immediately repaired shall be reinspected within 24 hours using a portable analyzer. If a leak is found, it shall be repaired as soon as practical but not later than the time frame specified in Table 3. [District Rule 4455, 5.2.1 & 5.2.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

43. The operator shall inspect all components at least once every calendar quarter, except for inaccessible components, unsafe-to-monitor components and pipes. Inaccessible components, unsafe-to-monitor components and pipes shall be inspected in accordance with the requirements set forth in Sections 5.2.5, 5.2.6, and 5.2.7. New, replaced, or repaired fittings, flanges and threaded connections shall be inspected immediately after being placed into service. Components shall be inspected using EPA Method 21. [District Rule 4455, 5.2.3, 5.2.4, 5.2.5, 5.2.6 & 5.2.7] Federally Enforceable Through Title V Permit

44. The operator may apply for a written approval from the APCO to change the inspection frequency from quarterly to annually for a component type, provided the operator meets all the criteria specified in Sections 5.2.8.1 through 5.2.8.3. This approval shall apply to accessible component types, specifically designated by the APCO, except pumps, compressors, and PRDs which shall continue to be inspected on a quarterly basis. [District Rule 4455, 5.2.8] Federally Enforceable Through Title V Permit

45. An annual inspection frequency approved by the APCO shall revert to quarterly inspection frequency for a component type if either the operator inspection or District inspection demonstrates that a violation of the provisions of Sections 5.1, 5.2 and 5.3 of the rule exists for that component type, or the APCO issued a Notice of Violation for violating any of the provisions of Rule 4455 during the annual inspection period for that component type. When the inspection frequency changes from annual to quarterly inspections, the operator shall notify the APCO in writing within five (5) calendar days after changing the inspection frequency, giving the reason(s) and date of change to quarterly inspection frequency. [District Rule 4455, 5.2.9 & 5.2.10] Federally Enforceable Through Title V Permit

46. The operator shall initially inspect a process PRD that releases to the atmosphere as soon as practicable but not later than 24 hours after the time of the release. To insure that the process PRD is operating properly, and is leak-free, the operator shall re-inspect the process PRD not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the date of the release using EPA Method 21. If the process PRD is found to be leaking at either inspection, the PRD leak shall be treated as if the leak was found during quarterly operator inspections. [District Rule 4455, 5.2.11] Federally Enforceable Through Title V Permit

47. Except for process PRD, a component shall be inspected within 15 calendar days after repairing the leak or replacing the component using EPA Method 21. [District Rule 4455, 5.2.12] Federally Enforceable Through Title V Permit

48. A District inspection in no way fulfills any of the mandatory inspection requirements that are placed upon operators and cannot be used or counted as an inspection required of an operator. Any attempt by an operator to count such District inspections as part of the mandatory operator's inspections is considered to be willful circumvention and is a violation of this rule. [District Rule 4455, 5.2.13] Federally Enforceable Through Title V Permit

49. Upon detection of a leaking component, the operator shall affix to that component a weatherproof readily visible tag that contains the information specified in Section 5.3.3. The tag shall remain affixed to the component until the leaking component has been repaired or replaced; has been re-inspected using EPA Method 21; and is found to be in compliance with the requirements of Rule 4455. [District Rule 4455, 5.3.1 5.3.2 and 5.3.3] Federally Enforceable Through Title V Permit

50. An operator shall minimize all component leaks immediately to the extent possible, but not later than one (1) hour after detection of leaks in order to stop or reduce leakage to the atmosphere. [District Rule 4455, 5.3.4] Federally Enforceable Through Title V Permit

51. If the leak has been minimized but the leak still exceeds the applicable leak standards of Rule 4455, an operator shall repair or replace the leaking component, vent the leaking component to a closed vent system, or remove the leaking component from operation as soon as practicable but not later than the time period specified in Table 3. For each calendar quarter, the operator may be allowed to extend the repair period as specified in Table 3, for a total number of leaking components, not to exceed 0.05 percent of the number of components inspected, by type, rounded upward to the nearest integer where required. [District Rule 4455, 5.3.5] Federally Enforceable Through Title V Permit

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52. If the leaking component is an essential component or a critical component and which cannot be immediately shut down for repairs, the operator shall minimize the leak within one hour after detection of the leak. If the leak has been minimized, but the leak still exceeds any of the applicable leak standards of Rule 4455, the essential component or critical component shall be repaired or replaced to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection, whichever comes earlier. [District Rule 4455 5.3.6] Federally Enforceable Through Title V Permit

53. For any component that has incurred five repair actions for major gas leaks or major liquid leaks, or any combination of major gas leaks and major liquid leaks within a continuous 12-month period, the operator shall comply with at least one of the requirements specified in Sections 5.3.7.1, 5.3.7.2, 5.3.7.3, or 5.3.7.4 by the applicable deadlines specified in Sections 5.3.7.5 and 5.3.7.6. If the original leaking component is replaced with a new like-in-kind component before incurring five repair actions for major leaks within 12-consecutive months, the repair count shall start over for the new component. An entire compressor or pump need not be replaced provided the compressor part(s) or pump part(s) that have incurred five repair actions as described in Section 5.3.7 are brought into compliance with at least one of the requirements of Sections 5.3.7.1 through 5.3.7.6. [District Rule 4455, 5.3.7] Federally Enforceable Through Title V Permit

54. The operator shall monitor process PRD by using electronic process control instrumentation that allows for real time continuous parameter monitoring or by using telltale indicators for the process PRD where parameter monitoring is not feasible. [District Rule 4455, 5.4.1] Federally Enforceable Through Title V Permit

55. After a release from a process PRD in excess of 500 pounds of VOC in a continuous 24-hour period, the operator shall immediately conduct a failure analysis and implement corrective actions as soon as practicable but not later than 30 days to prevent the reoccurrence of similar release. For refineries processing greater than 20,000 barrels of crude oil per day, any subsequent release in excess of 500 pounds of VOC within a continuous 24-hour period shall be subject to the requirements of Section 5.4.5. [District Rule 4455, 5.4.3 & 5.4.4] Federally Enforceable Through Title V Permit

56. The operator of a refinery processing greater than 20,000 barrels of crude oil per day shall connect all process PRDs serving that process equipment to an APCO-approved closed vent system as defined in Section 3.0 if any of the conditions specified in Sections 5.4.5.1 and 5.4.5.2 occurs. Process PRDs subject to the provisions of Section 5.4.5 shall be connected to an APCO-approved closed-vent system as soon as practicable, but no later than the first turnaround after the requirement to connect becomes effective. [District Rule 4455, 5.4.5] Federally Enforceable Through Title V Permit

57. All major components and critical components shall be physically identified clearly and visibly for inspection, repair, and recordkeeping purposes. The physical identification shall consist of labels, tags, manufacturer's nameplate identifier, serial number, or model number, or other system approved by the APCO that enables an operator or District personnel to locate each individual component. The operator shall replace tags or labels that become missing or unreadable as soon as practicable but not later than 24 hours after discovery. The operator shall comply with the requirements of Sections 6.1.4 if there is any change in the description of major components or critical components. [District Rule 4455, 5.5.1 & 5.5.2] Federally Enforceable Through Title V Permit

58. The operator shall keep a copy of the operator management plan at the facility and make it available to the APCO, ARB and US EPA upon request. By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved operator management plan. [District Rule 4455, 6.1.2 & 6.1.4] Federally Enforceable Through Title V Permit

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59. The operator shall maintain an inspection log containing, at a minimum, 1) total number of components inspected, and total number and percentage of leaking components found by component types, 2) location, type, name or description of each leaking component, and description of any unit where the leaking component is found, 3) date of leak detection and method of leak detection, 4) for gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak, 5) date of repair, replacement, or removal from operation of leaking components, 6) identification and location of essential component and critical components found leaking that cannot be repaired until the next process unit turnaround or not later one year after leak detection, whichever comes earlier, 7) methods used to minimize the leak from essential components and critical components that cannot be repaired until the next process unit turnaround or not later one year after leak detection, whichever comes earlier, 8) after the component is repaired or is replaced, the date of reinspection and the leak concentration in ppmv, 9) inspector's name, business mailing address, and business telephone number, and 10) the facility operator responsible for the inspection and repair program shall sign and date the inspection log certifying the accuracy of the information recorded in the log. [District Rule 4455, 6.2.1] Federally Enforceable Through Title V Permit

60. Records of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components, including a copy of current calibration gas certification from the vendor of said calibration gas cylinder, the date of calibration, concentration of calibration gas, analyzer reading of calibration gas before adjustment, instrument reading of calibration gas after adjustment, calibration gas expiration date, and calibration gas cylinder pressure at the time of calibration. [District Rule 4455, 6.2.3] Federally Enforceable Through Title V Permit

61. The operator shall notify the APCO, by telephone or other methods approved by the APCO, of any process PRD release described in Sections 5.4.4 and 5.4.5, and any release in excess of the reportable quantity limits as stipulated in 40 CFR, Part 117, Part 302 and Part 355, including any release in excess of 100 pounds of VOC, within one hour of such occurrence or within one hour of the time said person knew or reasonably should have known of its occurrence. [District Rule 4455, 6.3.1] Federally Enforceable Through Title V Permit

62. The operator shall submit a written report to the APCO within thirty (30) calendar days following a PRD release subject to 6.3.1. The written report shall include 1) process PRD type, size, and location, 2) date, time and duration of the process PRD release, 3) types of VOC released and individual amounts, in pounds, including supporting calculations, 4) cause of the process PRD release, and 5) corrective actions taken to prevent a subsequent process PRD release. [District Rule 4455 6.3.2] Federally Enforceable Through Title V Permit

63. Copies of all records shall be retained for a minimum of five (5) years after the date of an entry. Such records shall be made available to the APCO, ARB, or US EPA upon request. [District Rule 4455, 6.2.2, 6.2.3 & 6.2.4] Federally Enforceable Through Title V Permit

64. Measurements of gaseous leak concentrations shall be conducted according to US EPA Method 21 using an appropriate portable hydrocarbon detection instrument calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in US EPA Method 21 or the manufacturer's instruction, as appropriate, not more than 30 days prior to its use. The operator shall record the calibration date of the instrument. [District Rule 4455, 6.4.1] Federally Enforceable Through Title V Permit

65. The VOC content of exempt streams shall be determined using American Society of Testing and Materials (ASTM) D 1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 for liquids. [District Rule 4455, 6.4.2] Federally Enforceable Through Title V Permit

66. For exempt streams, the percent by volume liquid evaporated at 150 deg C shall be determined using ASTM D 86. [District Rule 4455, 6.4.3] Federally Enforceable Through Title V Permit

67. Equivalent test methods other than specified in Sections 6.4.1 through 6.4.5 may be used provided such test methods have received prior approval from the US EPA, ARB, and APCO. [District Rule 4455, 6.4] Federally Enforceable Through Title V Permit

68. Permit unit shall comply with applicable District Rule 4001 (NSPS, Subpart GGG) requirements. [District Rule 4001] Federally Enforceable Through Title V Permit

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69. The owner or operator may apply to the Administrator for a determination of equivalency for any means of emission limitation that achieves a reduction in emissions of VOC at least equivalent to the reduction in emissions of VOC achieved by the controls required in Subpart GGG. In doing so the owner or operator shall comply with the requirements of 40 CFR 60.484. [40 CFR 60.592(c)] Federally Enforceable Through Title V Permit

70. Affected facilities for which construction or modification commenced after January 4, 1983 shall comply with applicable requirements of 40CFR, Subpart GGG. [40CFR60.590(a)]]

71. Each Subpart GGG pump in light liquid service (PLLS) shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485(b), except as provided in 40 CFR 60.482-1(c) and 40 CFR 60.482-2(d), (e), and (f). Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. A leak is detected if an instrument reading of 10,000 ppm or greater is measured or if there are indications of liquids dripping from the pump seal. [40 CFR 60.482-2(a) and (b)]

72. When a leak is detected for each PLLS, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. [40 CFR 60.482-2(c)] Federally Enforceable Through Title V Permit

73. Any Subpart GGG PLLS equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of 40 CFR 60.482-2(a) provided the requirements specified in 40 CFR 60.482-2(d)(1) through (6) are met. [40 CFR 60.482(d)] Federally Enforceable Through Title V Permit

74. Any Subpart GGG PLLS that is designated, as described in 40 CFR 60.486(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 60.482-2(a), (c), and (d) if the pump meets the requirements specified in 40 CFR 60.482-2(e)(1), (2), and (3). [40 CFR 60.482-2(e)] Federally Enforceable Through Title V Permit

75. If any Subpart GGG PLLS is equipped with a closed vent system capable of capturing and transporting leakage from the seal or seals to a control device that complies with the requirements of 40 CFR 60.482-10, it is exempt from the requirements of 40 CFR 60.482-2(a) through (e). [40 CFR 60.482-2(f)] Federally Enforceable Through Title V Permit

76. Any Subpart GGG pump in PLLS that is designated, as described in 40 CFR 60.486(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of 40 CFR 60.482-2(a) and 40 CFR 60.482-2(d)(4) through (6) if: 1). The owner or operator of the pump demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-2(a); and 2) The owner or operator of the pump has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in 40 CFR 60.482-2(c) if a leak is detected. [40 CFR 60.482-2(g)] Federally Enforceable Through Title V Permit

77. Except during pressure releases, each Subpart GGG pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in 40 CFR 60.485(c). [40 CFR 60.482-4(a)] Federally Enforceable Through Title V Permit

78. After each pressure release, the Subpart GGG pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in 40 CFR 60.482-9. No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in 40 CFR 60.485(c). [40 CFR 60.482-4(b)] Federally Enforceable Through Title V Permit

79. Any Subpart GGG pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in 40 CFR 60.482-10 is exempted from the requirements of 40 CFR 60.482-4(a) and (b). [40 CFR 60.482-4(c)] Federally Enforceable Through Title V Permit

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80. Any pressure relief device that is equipped with a rupture disk upstream of the Subpart GGG pressure relief device is exempt from the 40 CFR 60.482-4(a) and (b), provided the owner or operator complies with the requirements in 40 CFR 60.482-4(d)(2) of this section. After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 60.482-9. [40 CFR 60.482-4(d)] Federally Enforceable Through Title V Permit

81. Except for in-situ sampling systems and sampling systems without purges, each Subpart GGG sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR 60.482-1(c). Each closed-purge, closed-loop, or closed-vent system shall comply with the requirements specified in 40 CFR 60.482-5(b)(1), (2), (3), and (4). [40 CFR 60.482-5(a), (b), and (c)] Federally Enforceable Through Title V Permit

82. Each Subpart GGG open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR 60.482-1(c). The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line. When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with this condition at all other times. [40 CFR 60.482-6(a) and (c)] Federally Enforceable Through Title V Permit

83. Each Subpart GGG open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed. [40 CFR 60.482-6(b)] Federally Enforceable Through Title V Permit

84. Subpart GGG open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of 40 CFR 60.482-6(a), (b) and (c). [40 CFR 60.482-6(d)] Federally Enforceable Through Title V Permit

85. Subpart GGG open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in 40 CFR 60.482-6(a) through (c) are exempt from the requirements of 40 CFR 60.482-6(a) through (c). [40 CFR 60.482-6(e)] Federally Enforceable Through Title V Permit

86. Each Subpart GGG valve in gas/vapor service and in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485(b) and shall comply with 40 CFR 60.482-7(b) through (e), except as provided in 40 CFR 60.482-7(f), (g), and (h), 40 CFR 60.483-1, 40 CFR 60.483-2, and 40 CFR 60.482-1(c). A leak is detected if an instrument reading of 10,000 ppm or greater is measured. [40 CFR 60.482-7(a) and (b)] Federally Enforceable Through Title V Permit

87. Any Subpart GGG valve in gas/vapor service or in light liquid service for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected. If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months. [40 CFR 60.482-7(c)] Federally Enforceable Through Title V Permit

88. When a leak is detected for any Subpart GGG valve in gas/vapor service or in light liquid service, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices specified in 40 CFR 60.482-7(e)(1), (2), (3), and (4), where practicable. [40 CFR 60.482-7(d) and (e)] Federally Enforceable Through Title V Permit

89. Any Subpart GGG valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 60.482-7(a) if the valve meets the requirements specified in 40 CFR 60.482-7(f)(1), (2), and (3). [40 CFR 60.482-7(f)] Federally Enforceable Through Title V Permit

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90. Any Subpart GGG valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7(a) if: 1) The owner or operator of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-7(a); and 2) The owner or operator of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times. [40 CFR 60.482-7(g)] Federally Enforceable Through Title V Permit

91. Any Subpart GGG valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(f)(2), as a difficult-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7(a) if: 1) The owner or operator of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface; 2) The process unit within which the valve is located either becomes an affected facility through 40 CFR 60.14 or 40 CFR 60.15 or the owner or operator designates less than 3.0 percent of the total number of valves as difficult-to-monitor; and 3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year. [40 CFR 60.482-7(h)] Federally Enforceable Through Title V Permit

92. The owner or operator may elect to comply with the applicable provisions for Subpart GGG valves in gas/vapor service and in light liquid service as specified in 40 CFR 60.483-1 and 60.483-2. [40 CFR 60.592(b)] Federally Enforceable Through Title V Permit

93. If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and Subpart GGG valves in heavy liquid service, Subpart GGG pressure relief devices in light liquid or heavy liquid service, and Subpart GGG connectors, the owner or operator shall follow either one of the following procedures: 1) The owner or operator shall monitor the equipment within 5 days by the method specified in 40 CFR 60.485(b) and shall comply with the requirements of 40 CFR 60.482-8(b) through (d); or 2) The owner or operator shall eliminate the visual, audible, olfactory, or other indication of a potential leak. A leak is detected if an instrument reading of 10,000 ppm or greater is measured. [40 CFR 60.482-8(a) and (b)] Federally Enforceable Through Title V Permit

94. When a leak is detected in Subpart GGG pumps and valves in heavy liquid service, Subpart GGG pressure relief devices in light liquid or heavy liquid service, and Subpart GGG connectors, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices described under 40 CFR 60.482-7(e). [40 CFR 60.482-8(c) and (d)] Federally Enforceable Through Title V Permit

95. Delay of Subpart GGG leak repair will be allowed if the repair is technologically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown. Delay of repair is allowed for equipment which is isolated from the process and which does not remain in VOC service. Delay of repair beyond a process unit shutdown will be allowed for a valve, if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown. [40 CFR 60.482-9(a)(b)(e)] Federally Enforceable Through Title V Permit

96. Delay of Subpart GGG leak repair for valves will be allowed if the owner or operator demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair and when repair procedures are effected and when repair procedures ar effected, the purged material is collected and destroyed or recovered in a control device complying with 40 CFR 60.482-10. Delay of leak repair for pumps will be allowed if the repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and repair is completed as soon as practicable, but no later than 6 months after the leak was detected. [40 cfr 60.482-9(c)(d)] Federally Enforceable Through Title V Permit

97. For Subpart GGG closed vent systems and control devices, vapor recovery systems shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, whichever is less stringent. [40 CFR 60.482-10(b)] Federally Enforceable Through Title V Permit

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98. For Subpart GGG closed vent systems and control devices, enclosed combustion devices shall be designed and operated to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816 degrees C. [40 CFR 60.482-10(c)] Federally Enforceable Through Title V Permit

99. Except as provided in 40 CFR 60.482-10(i) through (k), each Subpart GGG closed vent system used to comply with the provisions of Subpart GGG shall be inspected according to the procedures and schedule specified in 40 CFR 60.482-10(f)(1) and (f)(2). Leaks, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, shall be repaired as soon as practicable except as provided in 40 CFR 60.482-10(h). A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. Repair shall be completed no later than 15 calendar days after the leak is detected. [40 CFR 60.482-10(f) and (g)] Federally Enforceable Through Title V Permit

100. Delay of repair of a Subpart GGG closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown. [40 CFR 60.482-10(h)] Federally Enforceable Through Title V Permit

101. If a Subpart GGG vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2). [40 CFR 60.482-10(i)] Federally Enforceable Through Title V Permit

102. Any parts of the Subpart GGG closed vent system that are designated, as described in 40 CFR 60.482-10(l)(1), as unsafe to inspect are exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR 60.482-10 (j)(1) and (j)(2). [40 CFR 60.482-10(j)] Federally Enforceable Through Title V Permit

103. Any parts of the Subpart GGG closed vent system that are designated, as described in 40 CFR 60.482-10(l)(2), as difficult to inspect are exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR 60.482-10(k)(1) through (k)(3). [40 CFR 60.482-10(k)] Federally Enforceable Through Title V Permit

104. The owner or operator shall record the following information: 1) Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment; 2) Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment; 3) For each inspection during which a leak is detected, a record of the information specified in 40 CFR 60.486(c); 4) For each inspection conducted in accordance with 40 CFR 60.485(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected; and 5) For each visual inspection conducted in accordance with 40 CFR 60.482-10(f)(1)(ii) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected. [40 CFR 60.482-10(l)] Federally Enforceable Through Title V Permit

105. Closed vent systems and control devices used to comply with provisions Subpart GGG shall be operated at all times when emissions may be vented to them. [40 CFR 60.482-10(m)] Federally Enforceable Through Title V Permit

106. In conducting the Subpart GGG performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in 40 CFR 60, Appendix A or other methods and procedures as specified in 40 CFR 60.485, except as provided in 40 CFR 60.8(b). [40 CFR 60.485(a)] Federally Enforceable Through Title V Permit

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107. The owner or operator shall determine compliance with the standards in 40 CFR 60.482, 60.483, and 60.484 as follows: Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21. The following calibration gases shall be used: (i) Zero air (less than 10 ppm of hydrocarbon in air); and (ii) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [40 CFR 60.485(b)] Federally Enforceable Through Title V Permit

108. The owner or operator shall determine compliance with the no detectable emission standards in 40 CFR 60.482-2(e), 60.482-3(i), 60.482-4, 60.482-7(f), and 60.482-10(e) as follows: 1) The requirements of 40 CFR 60.485(b) shall apply. 2) Method 21 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance. [40 CFR 60.485(c)] Federally Enforceable Through Title V Permit

109. The owner or operator shall test each piece of Subpart GGG equipment unless demonstrated that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used: 1) Procedures that conform to the general methods in ASTM E260-73, 91, or 96, E168-67, 77, or 92, E169-63, 77, or 93 (incorporated by reference as seen in 40 CFR 60.17) shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment; 2) Organic compounds that are considered by the Administrator to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid; and 3) Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Administrator disagrees with the judgment, the previous two procedures as specified in 40 CFR 60.485(d)(1) and (2) shall be used to resolve the disagreement. [40 CFR 60.485(d)] Federally Enforceable Through Title V Permit

110. The owner or operator shall demonstrate that the Subpart GGG equipment is in light liquid service by showing that all the following conditions apply: 1) The vapor pressure of one or more of the components is greater than 0.3 kPa at 20 øC (1.2 in. H2O at 68 degrees F). Standard reference texts or ASTM D2879-83, 96, or 97 (incorporated by reference as seen in 40 CFR 60.17) shall be used to determine the vapor pressures; 2) The total concentration of the pure components having a vapor pressure greater than 0.3 kPa at 20 degrees Celsius is equal to or greater than 20 percent by weight; and 3) The fluid is a liquid at operating conditions. [40 CFR 60.485(e)] Federally Enforceable Through Title V Permit

111. Samples used in conjunction with 40 CFR 60.485(d), (e), and (g) shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare. [40 CFR 60.485(f)] Federally Enforceable Through Title V Permit

112. An owner or operator of more than one affected facility subject to the provisions Subpart GGG may comply with the recordkeeping requirements for these facilities in one recordkeeping system if the system identifies each record by each facility. [40 CFR 60.486(a)] Federally Enforceable Through Title V Permit

113. When each Subpart GGG leak is detected as specified in 40 CFR 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following requirements apply: 1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment; 2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR 60.482-7(c) and no leak has been detected during those 2 months; and 3) The identification on equipment except on a valve, may be removed after it has been repaired. [40 CFR 60.486(b)] Federally Enforceable Through Title V Permit

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114. When each Subpart GGG leak is detected as specified in 40 CFR 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following information shall be recorded in a log and shall be kept for 5 years in a readily accessible location: 1) The instrument and operator identification numbers and the equipment identification number; 2) The date the leak was detected and the dates of each attempt to repair the leak; 3) Repair methods applied in each attempt to repair the leak; 4) ``Above 10,000" if the maximum instrument reading measured by the methods specified in 40 CFR 60.485(a) after each repair attempt is equal to or greater than 10,000 ppm; 5) ``Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak; 6) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown; 7) The expected date of successful repair of the leak if a leak is not repaired within 15 days; 8) Dates of process unit shutdown that occur while the equipment is unrepaired; and 9) The date of successful repair of the leak. [40 CFR 60.486(c) and District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

115. The following information pertaining to the design requirements for Subpart GGG closed vent systems and control devices described in 40 CFR 60.482-10 shall be recorded and kept in a readily accessible location: 1) Detailed schematics, design specifications, and piping and instrumentation diagrams; 2) The dates and descriptions of any changes in the design specifications; 3) A description of the parameter or parameters monitored, as required in 40 CFR 60.482-10(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring; 4) Periods when the closed vent systems and control devices required in 40 CFR 60.482-2, 60.482-3, 60.482-4, and 60.482-5 are not operated as designed, including periods when a flare pilot light does not have a flame; and 5) Dates of startups and shutdowns of the closed vent systems and control devices required in 40 CFR 60.482-2, 60.482-3, 60.482-4, and 60.482-5. [40 CFR 60.486(d)] Federally Enforceable Through Title V Permit

116. The following information pertaining to all equipment subject to the requirements in 40 CFR 60.482-1 to 60.482-10 shall be recorded in a log that is kept in a readily accessible location: 1) A list of identification numbers for equipment subject to the requirements of Subpart GGG; 2) (i) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 40 CFR 60.482-2(e), 60.482-3(i) and 60.482-7(f). (ii) The designation of equipment as subject to the requirements of 40 CFR 60.482-2(e), 60.482-3(i) and 60.482-7(f) shall be signed by the owner or operator; 3) A list of equipment identification numbers for pressure relief devices required to comply with 60.482-4; 4) (i) The dates of each compliance test as required in 40 CFR 60.482-2(e), 60.482-3(i), 60.482-4, and 60.482-7(f). (ii) The background level measured during each compliance test. (iii) The maximum instrument reading measured at the equipment during each compliance test; and 5) A list of identification numbers for equipment in vacuum service. [40 CFR 60.486(e)] Federally Enforceable Through Title V Permit

117. The following information pertaining to all Subpart GGG valves subject to the requirements of 40 CFR 60.482-7(g) and (h) and to all Subpart GGG pumps subject to the requirements of 40 CFR 60.482-2(g) shall be recorded in a log that is kept in a readily accessible location: 1) A list of identification numbers for valves and pumps that are designated as unsafe-to-monitor, an explanation for each valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump; and 2) A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve. [40 CFR 60.486(f)] Federally Enforceable Through Title V Permit

118. The following information shall be recorded for Subpart GGG valves complying with 40 CFR 60.483-2: 1) A schedule of monitoring; 2) The percent of valves found leaking during each monitoring period. [40 CFR 60.486(g)] Federally Enforceable Through Title V Permit

119. The following information shall be recorded in a log that is kept in a readily accessible location: 1) Design criterion required in 40 CFR 60.482-2(d)(5) and 60.482-3(e)(2) and explanation of the design criterion; and 2) Any changes to this criterion and the reasons for the changes. [40 CFR 60.486(h)] Federally Enforceable Through Title V Permit

120. The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in 40 CFR 60.480(d): 1) An analysis demonstrating the design capacity of the affected facility; 2) A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol; and 3) An analysis demonstrating that equipment is not in VOC service. [40 CFR 60.486(i)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

121. Information and data used to demonstrate that a piece of equipment is not in Subpart GGG VOC service shall be recorded in a log that is kept in a readily accessible location. [40 CFR 60.486(j)] Federally Enforceable Through Title V Permit

122. The provisions of 40 CFR 60.7 (b) and (d) do not apply to affected facilities subject to Subpart GGG. [40 CFR 60.486(k)] Federally Enforceable Through Title V Permit

123. All Subpart GGG semiannual reports to the Administrator shall include the following information, summarized from the information in 40 CFR 60.486: 1) Process unit identification; 2) For each month during the semiannual reporting period, i) Number of valves for which leaks were detected as described in 40 CFR 60.482-7(b) or 40 CFR 60.483-2, (ii) Number of valves for which leaks were not repaired as required in 40 CFR 60.482-7(d)(1), (iii) Number of pumps for which leaks were detected as described in 40 CFR 60.482-2(b) and (d)(6)(i), (iv) Number of pumps for which leaks were not repaired as required in 40 CFR 60.482-2(c)(1) and (d)(6)(ii), (v) Number of compressors for which leaks were detected as described in 40 CFR 60.482-3(f), (vi) Number of compressors for which leaks were not repaired as required in 40 CFR 60.482-3(g)(1), and (vii) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible; 3) Dates of process unit shutdowns which occurred within the semiannual reporting period; 4) Revisions to items reported in the semiannual report if changes have occurred since the initial report, as required in 40 CFR 60.487 (a) and (b), or subsequent revisions to the initial report. [40 CFR 60.487(c)] Federally Enforceable Through Title V Permit

124. An owner or operator electing to comply with the provisions of 40 CFR 60.483-1 and 60.483-2 shall notify the Administrator of the alternative standard selected 90 days before implementing either of the provisions. [40 CFR 60.487(d)] Federally Enforceable Through Title V Permit

125. An owner or operator shall report the results of all performance tests in accordance with 40 CFR 60.8 of the General Provisions. The provisions of 40 CFR 60.8(d) do not apply to affected facilities subject to the provisions of Subpart GGG except that an owner or operator must notify the Administrator of the schedule for the initial performance tests at least 30 days before the initial performance tests. [40 CFR 60.487(e)] Federally Enforceable Through Title V Permit

126. The Subpart GGG semiannual reporting requirements of 40 CFR 60.487(a), (b), and (c) remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with the requirements of 40 CFR 60.487(a), (b), and (c), provided that they comply with the requirements established by the State. [40 CFR 60.487(f)] Federally Enforceable Through Title V Permit

127. Compressors are exempt from the standards of Subpart GGG if the owner or operator demonstrates that a compressor is in hydrogen service. Each compressor is presumed not to be in hydrogen service unless an owner or operator demonstrates that the piece of equipment is in hydrogen service. For a piece of equipment to be considered in hydrogen service, it must be determined that the percent hydrogen content can be reasonably expected always to exceed 50 percent by volume. For purposes of determining the percent hydrogen content in the process fluid that is contained in or contacts a compressor, procedures that conform to the general method described in ASTM E-260, E-168, or E-169 shall be used. An owner or operator may use engineering judgment to demonstrate that the percent content exceeds 50 percent by volume, provided the engineering judgment demonstrates that the content clearly exceeds 50 percent by volume. When an owner or operator and the Administrator do not agree on whether a piece of equipment is in hydrogen service, however, the procedures that conform to the general method described in ASTM E-260, E-168, or E-169 shall be used to resolve the disagreement. If an owner or operator determines that a piece of equipment is in hydrogen service, the determination can be revised only after following the procedures that conform to the general method described in ASTM E-260, E-168, or E-169. [40 CFR 60.593(b)] Federally Enforceable Through Title V Permit

128. For compliance with Subpart GGG, an owner or operator may use the following provision in addition to 40 CFR 60.485(e): Equipment is in light liquid service if the percent evaporated is greater than 10 percent at 150 øC as determined by ASTM Method D86-78, 82, 90, 95, or 96. [40 CFR 60.593(d)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

129. Equipment that is in vacuum service is excluded from the requirements of 40 CFR 60.482-2 to 40 CFR 60.482-10 if it is identified as required in 40 CFR 60.486(e)(5). [40 CFR 60.482-1(d)] Federally Enforceable Through Title V Permit

130. Permittee shall comply with all applicable testing, recordkeeping, and reporting requirements specified in Rule 4001 - New Source Performance Standards, including but not limited to Subparts A and J. [District Rule 4001] Federally Enforceable Through Title V Permit

131. Operators shall not depressurize any vessel containing VOCs unless the process unit turnaround is accomplished by employing one of the following operating procedures: The organic vapors shall either be recovered, added to the refinery fuel gas system and combusted; or controlled and piped to an appropriate firebox or incinerated for combustion; or flared, until the pressure within the process vessel is as close to atmospheric pressure as is possible. All process vessels shall be depressurized into the control facilities to less than 1020 mm Hg (5 psig) before venting/opening to atmosphere. All organic compounds which emerge from a refinery process vessel during the purging of said vessel and which otherwise would be emitted to the atmosphere shall be either directed to a flare or incinerator or shall be used for fuel until such disposition of emissions is not technically feasible or is less safe than atmospheric venting. [District Rule 4454, 4.0] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-5-2 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
LIQUID-LIQUID MEROX SWEETENING UNIT INCLUDING MIXER, CAUSTIC SETTLER, CATALYST INJECTION PORT, AND ASSOCIATED PUMPS AND PIPING

PERMIT UNIT REQUIREMENTS

1. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801] Federally Enforceable Through Title V Permit
2. Spent caustics and waste liquids shall be disposed of in a manner preventing the creation of odors. [District Rule 4102]
3. Except for complying with the applicable requirements of Sections 6.1 and 7.3, the requirements of this rule shall not apply to 1) components subject to Rule 4623 (adopted 5/19/05), 2) pressure relief devices, pumps, and compressors equipped with a closed vent system as defined in Section 3.0, 3) components buried below ground, 4) components exclusively handling liquid streams which have less than 10 percent by weight (<10 wt%) evaporation at 150 C, 5) components exclusively handling liquid streams with a VOC content less than ten percent by weight (<10 wt%), 6) components exclusively handling gas/vapor streams with a VOC content of less than one percent by weight (<1wt%), 7) components incorporated in lines exclusively in vacuum service, 8) components exclusively handling commercial natural gas, and 9) one-half inch nominal or less stainless steel tube fittings which have been demonstrated to the Air Pollution Control Officer (APCO) to be leak-free based on initial inspection. [District Rule 4455, 4.1 & 4.2] Federally Enforceable Through Title V Permit
4. Except for components subject to Rule 4623 (Storage of Organic Liquids) or for components included in the inspection and maintenance (I&M) program implemented pursuant to Section 5.7 of Rule 4623, the operator shall not use any component that leaks in excess of the allowable leak standards of Rule 4455, or is found to be in violation of the provisions specified in Section 5.1.3. A component identified as leaking in excess of an allowable leak standard may be used provided it has been identified with a tag for repair, has been repaired, or is awaiting re-inspection after repair, within the applicable time period specified within the rule. [District Rule 4455, 5.1.1] Federally Enforceable Through Title V Permit
5. Each hatch shall be closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4455, 5.1.2] Federally Enforceable Through Title V Permit
6. The operator shall be in violation of Rule 4455 if any District inspection demonstrates that one or more of the conditions in Section 5.1.4 (Leak Standards) exist at the facility. [District Rule 4455, 5.1.3.1] Federally Enforceable Through Title V Permit
7. Except for annual operator inspection described in Section 5.1.3.2.3, any operator inspection that demonstrates that one or more of the conditions in Section 5.1.4 exist at the facility shall not constitute a violation of Rule 4455 if the leaking components are repaired as soon as practicable but not later than the time frame specified in Rule 4455. Such components shall not be counted towards determination of compliance with the provisions of Section 5.1.4. [District Rule 4455, 5.1.3.2.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

8. Leaking components detected during operator inspection pursuant Section 5.1.3.2.1 that are not repaired, replaced, or removed from operation as soon as practicable but not later than the time frame specified in Rule 4455 shall be counted toward determination of compliance with the provisions of Section 5.1.4. [District Rule 4455, 5.1.3.2.2] Federally Enforceable Through Title V Permit

9. Any operator inspection conducted annually for a component type (including operator annual inspections pursuant to Section 5.2.5, 5.2.6, 5.2.7, or 5.2.8) that demonstrates one or more of the conditions in Section 5.1.4 exist at the facility shall constitute a violation of Rule 4455 regardless of whether or not the leaking components are repaired, replaced, or removed from operation within the allowable repair time frame specified in Rule 4455. [District Rule 4455, 5.1.3.2.3] Federally Enforceable Through Title V Permit

10. A component shall be considered leaking if one or more of the conditions specified in Sections 5.1.4.1 through 5.1.4.4 of Rule 4455 exist at the facility. Readings shall be taken as methane using a portable hydrocarbon detection instrument and shall be made in accordance with the methods specified in Section 6.4.1 of Rule 4455. [District Rule 4455, 5.1.4] Federally Enforceable Through Title V Permit

11. The operator shall audio-visually inspect for leaks all accessible operating pumps, compressors and Pressure Relief Devices (PRDs) in service at least once every 24 hours, except when operators do not report to the facility for that given 24 hours. Any identified leak that cannot be immediately repaired shall be reinspected within 24 hours using a portable analyzer. If a leak is found, it shall be repaired as soon as practical but not later than the time frame specified in Table 3. [District Rule 4455, 5.2.1 & 5.2.2] Federally Enforceable Through Title V Permit

12. The operator shall inspect all components at least once every calendar quarter, except for inaccessible components, unsafe-to-monitor components and pipes. Inaccessible components, unsafe-to-monitor components and pipes shall be inspected in accordance with the requirements set forth in Sections 5.2.5, 5.2.6, and 5.2.7. New, replaced, or repaired fittings, flanges and threaded connections shall be inspected immediately after being placed into service. Components shall be inspected using EPA Method 21. [District Rule 4455, 5.2.3, 5.2.4, 5.2.5, 5.2.6 & 5.2.7] Federally Enforceable Through Title V Permit

13. The operator may apply for a written approval from the APCO to change the inspection frequency from quarterly to annually for a component type, provided the operator meets all the criteria specified in Sections 5.2.8.1 through 5.2.8.3. This approval shall apply to accessible component types, specifically designated by the APCO, except pumps, compressors, and PRDs which shall continue to be inspected on a quarterly basis. [District Rule 4455, 5.2.8] Federally Enforceable Through Title V Permit

14. An annual inspection frequency approved by the APCO shall revert to quarterly inspection frequency for a component type if either the operator inspection or District inspection demonstrates that a violation of the provisions of Sections 5.1, 5.2 and 5.3 of the rule exists for that component type, or the APCO issued a Notice of Violation for violating any of the provisions of Rule 4455 during the annual inspection period for that component type. When the inspection frequency changes from annual to quarterly inspections, the operator shall notify the APCO in writing within five (5) calendar days after changing the inspection frequency, giving the reason(s) and date of change to quarterly inspection frequency. [District Rule 4455, 5.2.9 & 5.2.10] Federally Enforceable Through Title V Permit

15. The operator shall initially inspect a process PRD that releases to the atmosphere as soon as practicable but not later than 24 hours after the time of the release. To insure that the process PRD is operating properly, and is leak-free, the operator shall re-inspect the process PRD not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the date of the release using EPA Method 21. If the process PRD is found to be leaking at either inspection, the PRD leak shall be treated as if the leak was found during quarterly operator inspections. [District Rule 4455, 5.2.11] Federally Enforceable Through Title V Permit

16. Except for process PRD, a component shall be inspected within 15 calendar days after repairing the leak or replacing the component using EPA Method 21. [District Rule 4455, 5.2.12] Federally Enforceable Through Title V Permit

17. A District inspection in no way fulfills any of the mandatory inspection requirements that are placed upon operators and cannot be used or counted as an inspection required of an operator. Any attempt by an operator to count such District inspections as part of the mandatory operator's inspections is considered to be willful circumvention and is a violation of this rule. [District Rule 4455, 5.2.13] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

18. Upon detection of a leaking component, the operator shall affix to that component a weatherproof readily visible tag that contains the information specified in Section 5.3.3. The tag shall remain affixed to the component until the leaking component has been repaired or replaced; has been re-inspected using EPA Method 21; and is found to be in compliance with the requirements of Rule 4455. [District Rule 4455, 5.3.1 5.3.2 and 5.3.3] Federally Enforceable Through Title V Permit

19. An operator shall minimize all component leaks immediately to the extent possible, but not later than one (1) hour after detection of leaks in order to stop or reduce leakage to the atmosphere. [District Rule 4455, 5.3.4] Federally Enforceable Through Title V Permit

20. If the leak has been minimized but the leak still exceeds the applicable leak standards of Rule 4455, an operator shall repair or replace the leaking component, vent the leaking component to a closed vent system, or remove the leaking component from operation as soon as practicable but not later than the time period specified in Table 3. For each calendar quarter, the operator may be allowed to extend the repair period as specified in Table 3, for a total number of leaking components, not to exceed 0.05 percent of the number of components inspected, by type, rounded upward to the nearest integer where required. [District Rule 4455, 5.3.5] Federally Enforceable Through Title V Permit

21. If the leaking component is an essential component or a critical component and which cannot be immediately shut down for repairs, the operator shall minimize the leak within one hour after detection of the leak. If the leak has been minimized, but the leak still exceeds any of the applicable leak standards of Rule 4455, the essential component or critical component shall be repaired or replaced to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection, whichever comes earlier. [District Rule 4455 5.3.6] Federally Enforceable Through Title V Permit

22. For any component that has incurred five repair actions for major gas leaks or major liquid leaks, or any combination of major gas leaks and major liquid leaks within a continuous 12-month period, the operator shall comply with at least one of the requirements specified in Sections 5.3.7.1, 5.3.7.2, 5.3.7.3, or 5.3.7.4 by the applicable deadlines specified in Sections 5.3.7.5 and 5.3.7.6. If the original leaking component is replaced with a new like-in-kind component before incurring five repair actions for major leaks within 12-consecutive months, the repair count shall start over for the new component. An entire compressor or pump need not be replaced provided the compressor part(s) or pump part(s) that have incurred five repair actions as described in Section 5.3.7 are brought into compliance with at least one of the requirements of Sections 5.3.7.1 through 5.3.7.6. [District Rule 4455, 5.3.7] Federally Enforceable Through Title V Permit

23. The operator shall monitor process PRD by using electronic process control instrumentation that allows for real time continuous parameter monitoring or by using telltale indicators for the process PRD where parameter monitoring is not feasible. [District Rule 4455, 5.4.1] Federally Enforceable Through Title V Permit

24. After a release from a process PRD in excess of 500 pounds of VOC in a continuous 24-hour period, the operator shall immediately conduct a failure analysis and implement corrective actions as soon as practicable but not later than 30 days to prevent the reoccurrence of similar release. For refineries processing greater than 20,000 barrels of crude oil per day, any subsequent release in excess of 500 pounds of VOC within a continuous 24-hour period shall be subject to the requirements of Section 5.4.5. [District Rule 4455, 5.4.3 & 5.4.4] Federally Enforceable Through Title V Permit

25. The operator of a refinery processing greater than 20,000 barrels of crude oil per day shall connect all process PRDs serving that process equipment to an APCO-approved closed vent system as defined in Section 3.0 if any of the conditions specified in Sections 5.4.5.1 and 5.4.5.2 occurs. Process PRDs subject to the provisions of Section 5.4.5 shall be connected to an APCO-approved closed-vent system as soon as practicable, but no later than the first turnaround after the requirement to connect becomes effective. [District Rule 4455, 5.4.5] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

26. All major components and critical components shall be physically identified clearly and visibly for inspection, repair, and recordkeeping purposes. The physical identification shall consist of labels, tags, manufacturer's nameplate identifier, serial number, or model number, or other system approved by the APCO that enables an operator or District personnel to locate each individual component. The operator shall replace tags or labels that become missing or unreadable as soon as practicable but not later than 24 hours after discovery. The operator shall comply with the requirements of Sections 6.1.4 if there is any change in the description of major components or critical components. [District Rule 4455, 5.5.1 & 5.5.2] Federally Enforceable Through Title V Permit

27. The operator shall keep a copy of the operator management plan at the facility and make it available to the APCO, ARB and US EPA upon request. By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved operator management plan. [District Rule 4455, 6.1.2 & 6.1.4] Federally Enforceable Through Title V Permit

28. The operator shall maintain an inspection log containing, at a minimum, 1) total number of components inspected, and total number and percentage of leaking components found by component types, 2) location, type, name or description of each leaking component, and description of any unit where the leaking component is found, 3) date of leak detection and method of leak detection, 4) for gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak, 5) date of repair, replacement, or removal from operation of leaking components, 6) identification and location of essential component and critical components found leaking that cannot be repaired until the next process unit turnaround or not later one year after leak detection, whichever comes earlier, 7) methods used to minimize the leak from essential components and critical components that cannot be repaired until the next process unit turnaround or not later one year after leak detection, whichever comes earlier, 8) after the component is repaired or is replaced, the date of reinspection and the leak concentration in ppmv, 9) inspector's name, business mailing address, and business telephone number, and 10) the facility operator responsible for the inspection and repair program shall sign and date the inspection log certifying the accuracy of the information recorded in the log. [District Rule 4455, 6.2.1] Federally Enforceable Through Title V Permit

29. Records of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components, including a copy of current calibration gas certification from the vendor of said calibration gas cylinder, the date of calibration, concentration of calibration gas, analyzer reading of calibration gas before adjustment, instrument reading of calibration gas after adjustment, calibration gas expiration date, and calibration gas cylinder pressure at the time of calibration. [District Rule 4455, 6.2.3] Federally Enforceable Through Title V Permit

30. The operator shall notify the APCO, by telephone or other methods approved by the APCO, of any process PRD release described in Sections 5.4.4 and 5.4.5, and any release in excess of the reportable quantity limits as stipulated in 40 CFR, Part 117, Part 302 and Part 355, including any release in excess of 100 pounds of VOC, within one hour of such occurrence or within one hour of the time said person knew or reasonably should have known of its occurrence. [District Rule 4455, 6.3.1] Federally Enforceable Through Title V Permit

31. The operator shall submit a written report to the APCO within thirty (30) calendar days following a PRD release subject to 6.3.1. The written report shall include 1) process PRD type, size, and location, 2) date, time and duration of the process PRD release, 3) types of VOC released and individual amounts, in pounds, including supporting calculations, 4) cause of the process PRD release, and 5) corrective actions taken to prevent a subsequent process PRD release. [District Rule 4455 6.3.2] Federally Enforceable Through Title V Permit

32. Copies of all records shall be retained for a minimum of five (5) years after the date of an entry. Such records shall be made available to the APCO, ARB, or US EPA upon request. [District Rule 4455, 6.2.2, 6.2.3 & 6.2.4] Federally Enforceable Through Title V Permit

33. Measurements of gaseous leak concentrations shall be conducted according to US EPA Method 21 using an appropriate portable hydrocarbon detection instrument calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in US EPA Method 21 or the manufacturer's instruction, as appropriate, not more than 30 days prior to its use. The operator shall record the calibration date of the instrument. [District Rule 4455, 6.4.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

34. The VOC content of exempt streams shall be determined using American Society of Testing and Materials (ASTM) D 1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 for liquids. [District Rule 4455, 6.4.2] Federally Enforceable Through Title V Permit

35. For exempt streams, the percent by volume liquid evaporated at 150 deg C shall be determined using ASTM D 86. [District Rule 4455, 6.4.3] Federally Enforceable Through Title V Permit

36. Equivalent test methods other than specified in Sections 6.4.1 through 6.4.5 may be used provided such test methods have received prior approval from the US EPA, ARB, and APCO. [District Rule 4455, 6.4] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-6-16 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
49.0 MMBTU/HR COEN, MODEL #D-57, DUAL-FIRED INDUCED DRAFT WATER TUBE BOILER #6 - REPLACEMENT STANDBY BOILER FOR THE TURBINE AND/OR DUCT BURNER (COGENERATION UNIT S-37-114) COMPLIANT DORMANT EMISSIONS UNIT

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without an Authority to Construct for such modifications, except for changes specified in conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel supply line shall be physically disconnected from this unit. [District Rules 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
3. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
4. While dormant, normal source testing shall not be required. [District Rule 2080]
5. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080]
6. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080]
7. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]
8. Operators shall notify the District at least seven (7) calendar days prior to recommencing operation of this dormant emissions unit, at which time this permit will be administratively modified to remove DEU references. [District Rules 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
9. This equipment shall not be operated for any reason on or after the applicable Rule 4320 Compliance Deadline (Section 5.2.1 and Table 1), unless an Authority to Construct permit has been issued approving all necessary retrofits required to comply with the applicable requirements of District Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit
10. Boiler shall operate as a replacement standby unit for the turbine and/or the duct burner (cogeneration unit, S-37-114). Simultaneous operation of all three emissions units (the replacement standby boiler, the turbine, and the duct burner) shall not occur except during start-up of the third unit or shutdown of one of the two operating units). [District Rules 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
11. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
12. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
14. Boiler shall be fired either on PUC/FERC regulated natural gas or refinery gas. [District Rule 2201] Federally Enforceable Through Title V Permit
15. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of natural gas combusted in the unit shall be installed, utilized and maintained. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit
16. Maximum annual heat input of the unit shall be less than 9 billion Btu per calendar year. [District Rule 2201, 4305, and 4306] Federally Enforceable Through Title V Permit
17. Emissions rates from the natural gas-fired unit shall not exceed any of the following limits: 95 ppmvd NOx @ 3% O2 or 0.1 lb-NOx/MMBtu, 0.00285 lb-SOx/MMBtu, 0.0076 lb-PM10/MMBtu, 400 ppmvd CO @ 3% O2 or 0.3 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
18. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown. [District Rule 4305] Federally Enforceable Through Title V Permit
19. Owner/operator shall have unit tuned at least twice each calendar year, from four to eight months apart, in which it operates, by a technician that is qualified, to the satisfaction of the APCO, in accordance with the procedure described in Rule 4304 (Equipment Tuning Procedure for Boilers, Steam Generators, and Process Heaters). [District Rule 4306] Federally Enforceable Through Title V Permit
20. If the unit does not operate throughout a continuous six-month period within a calendar year, only one tune-up is required for that calendar year. No tune-up is required for any unit that is not operated during that calendar year; this unit may be test fired to verify availability of the unit for its intended use, but once the test firing is completed the unit shall be shutdown. [District Rule 4306] Federally Enforceable Through Title V Permit
21. The permittee shall monitor, at least on a monthly basis, the amount of water use, the amount of unit blow down, and the exhaust stack temperature or other operational characteristics recommended by the unit manufacturer. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 day of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
22. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. [District Rule 2520, 9.3.2; District Rule 4301, 5.2.1] Federally Enforceable Through Title V Permit
23. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 2520, 9.3.2; Kern County Rule 407; District Rule 4801] Federally Enforceable Through Title V Permit
24. Compliance with sulfur compound emission limits may be demonstrated by firing this unit either on PUC/FERC regulated natural gas or refinery gas with a sulfur content of no more than 20,000 ppmv or 2.0% by weight according to the H2S monitoring of the boiler fuel gas supply, sampled upstream of the boiler, using Draeger Tubes or District approved equal. [District Rules 4301, 4801 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
25. If the unit is not fired on PUC/FERC regulated natural gas, each fuel source shall be tested for sulfur content (as H2S) within one week of the startup of its standby-operation. When source or type of fuel gas changes, sampling for sulfur content shall be conducted within one week. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
26. Records of monthly and annual heat input of the unit shall be maintained. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit
27. Records of tune-up and monitoring of the operational characteristics of the unit shall be maintained. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
28. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, and 4306] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

29. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320]

30. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320]

31. Except for complying with the applicable requirements of Sections 6.1 and 7.3, the requirements of this rule shall not apply to 1) components subject to Rule 4623 (adopted 5/19/05), 2) pressure relief devices, pumps, and compressors equipped with a closed vent system as defined in Section 3.0, 3) components buried below ground, 4) components exclusively handling liquid streams which have less than 10 percent by weight (<10 wt%) evaporation at 150 C, 5) components exclusively handling liquid streams with a VOC content less than ten percent by weight (<10 wt%), 6) components exclusively handling gas/vapor streams with a VOC content of less than one percent by weight (<1wt%), 7) components incorporated in lines exclusively in vacuum service, 8) components exclusively handling commercial natural gas, and 9) one-half inch nominal or less stainless steel tube fittings which have been demonstrated to the Air Pollution Control Officer (APCO) to be leak-free based on initial inspection. [District Rule 4455, 4.1 & 4.2] Federally Enforceable Through Title V Permit

32. Except for components subject to Rule 4623 (Storage of Organic Liquids) or for components included in the inspection and maintenance (I&M) program implemented pursuant to Section 5.7 of Rule 4623, the operator shall not use any component that leaks in excess of the allowable leak standards of Rule 4455, or is found to be in violation of the provisions specified in Section 5.1.3. A component identified as leaking in excess of an allowable leak standard may be used provided it has been identified with a tag for repair, has been repaired, or is awaiting re-inspection after repair, within the applicable time period specified within the rule. [District Rule 4455, 5.1.1] Federally Enforceable Through Title V Permit

33. Each hatch shall be closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4455, 5.1.2] Federally Enforceable Through Title V Permit

34. The operator shall be in violation of Rule 4455 if any District inspection demonstrates that one or more of the conditions in Section 5.1.4 (Leak Standards) exist at the facility. [District Rule 4455, 5.1.3.1] Federally Enforceable Through Title V Permit

35. Except for annual operator inspection described in Section 5.1.3.2.3, any operator inspection that demonstrates that one or more of the conditions in Section 5.1.4 exist at the facility shall not constitute a violation of Rule 4455 if the leaking components are repaired as soon as practicable but not later than the time frame specified in Rule 4455. Such components shall not be counted towards determination of compliance with the provisions of Section 5.1.4. [District Rule 4455, 5.1.3.2.1] Federally Enforceable Through Title V Permit

36. Leaking components detected during operator inspection pursuant Section 5.1.3.2.1 that are not repaired, replaced, or removed from operation as soon as practicable but not later than the time frame specified in Rule 4455 shall be counted toward determination of compliance with the provisions of Section 5.1.4. [District Rule 4455, 5.1.3.2.2] Federally Enforceable Through Title V Permit

37. Any operator inspection conducted annually for a component type (including operator annual inspections pursuant to Section 5.2.5, 5.2.6, 5.2.7, or 5.2.8) that demonstrates one or more of the conditions in Section 5.1.4 exist at the facility shall constitute a violation of Rule 4455 regardless of whether or not the leaking components are repaired, replaced, or removed from operation within the allowable repair time frame specified in Rule 4455. [District Rule 4455, 5.1.3.2.3] Federally Enforceable Through Title V Permit

38. A component shall be considered leaking if one or more of the conditions specified in Sections 5.1.4.1 through 5.1.4.4 of Rule 4455 exist at the facility. Readings shall be taken as methane using a portable hydrocarbon detection instrument and shall be made in accordance with the methods specified in Section 6.4.1 of Rule 4455. [District Rule 4455, 5.1.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

39. The operator shall audio-visually inspect for leaks all accessible operating pumps, compressors and Pressure Relief Devices (PRDs) in service at least once every 24 hours, except when operators do not report to the facility for that given 24 hours. Any identified leak that cannot be immediately repaired shall be reinspected within 24 hours using a portable analyzer. If a leak is found, it shall be repaired as soon as practical but not later than the time frame specified in Table 3. [District Rule 4455, 5.2.1 & 5.2.2] Federally Enforceable Through Title V Permit

40. The operator shall inspect all components at least once every calendar quarter, except for inaccessible components, unsafe-to-monitor components and pipes. Inaccessible components, unsafe-to-monitor components and pipes shall be inspected in accordance with the requirements set forth in Sections 5.2.5, 5.2.6, and 5.2.7. New, replaced, or repaired fittings, flanges and threaded connections shall be inspected immediately after being placed into service. Components shall be inspected using EPA Method 21. [District Rule 4455, 5.2.3, 5.2.4, 5.2.5, 5.2.6 & 5.2.7] Federally Enforceable Through Title V Permit

41. The operator may apply for a written approval from the APCO to change the inspection frequency from quarterly to annually for a component type, provided the operator meets all the criteria specified in Sections 5.2.8.1 through 5.2.8.3. This approval shall apply to accessible component types, specifically designated by the APCO, except pumps, compressors, and PRDs which shall continue to be inspected on a quarterly basis. [District Rule 4455, 5.2.8] Federally Enforceable Through Title V Permit

42. An annual inspection frequency approved by the APCO shall revert to quarterly inspection frequency for a component type if either the operator inspection or District inspection demonstrates that a violation of the provisions of Sections 5.1, 5.2 and 5.3 of the rule exists for that component type, or the APCO issued a Notice of Violation for violating any of the provisions of Rule 4455 during the annual inspection period for that component type. When the inspection frequency changes from annual to quarterly inspections, the operator shall notify the APCO in writing within five (5) calendar days after changing the inspection frequency, giving the reason(s) and date of change to quarterly inspection frequency. [District Rule 4455, 5.2.9 & 5.2.10] Federally Enforceable Through Title V Permit

43. The operator shall initially inspect a process PRD that releases to the atmosphere as soon as practicable but not later than 24 hours after the time of the release. To insure that the process PRD is operating properly, and is leak-free, the operator shall re-inspect the process PRD not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the date of the release using EPA Method 21. If the process PRD is found to be leaking at either inspection, the PRD leak shall be treated as if the leak was found during quarterly operator inspections. [District Rule 4455, 5.2.11] Federally Enforceable Through Title V Permit

44. Except for process PRD, a component shall be inspected within 15 calendar days after repairing the leak or replacing the component using EPA Method 21. [District Rule 4455, 5.2.12] Federally Enforceable Through Title V Permit

45. A District inspection in no way fulfills any of the mandatory inspection requirements that are placed upon operators and cannot be used or counted as an inspection required of an operator. Any attempt by an operator to count such District inspections as part of the mandatory operator's inspections is considered to be willful circumvention and is a violation of this rule. [District Rule 4455, 5.2.13] Federally Enforceable Through Title V Permit

46. Upon detection of a leaking component, the operator shall affix to that component a weatherproof readily visible tag that contains the information specified in Section 5.3.3. The tag shall remain affixed to the component until the leaking component has been repaired or replaced; has been re-inspected using EPA Method 21; and is found to be in compliance with the requirements of Rule 4455. [District Rule 4455, 5.3.1 5.3.2 and 5.3.3] Federally Enforceable Through Title V Permit

47. An operator shall minimize all component leaks immediately to the extent possible, but not later than one (1) hour after detection of leaks in order to stop or reduce leakage to the atmosphere. [District Rule 4455, 5.3.4] Federally Enforceable Through Title V Permit

48. If the leak has been minimized but the leak still exceeds the applicable leak standards of Rule 4455, an operator shall repair or replace the leaking component, vent the leaking component to a closed vent system, or remove the leaking component from operation as soon as practicable but not later than the time period specified in Table 3. For each calendar quarter, the operator may be allowed to extend the repair period as specified in Table 3, for a total number of leaking components, not to exceed 0.05 percent of the number of components inspected, by type, rounded upward to the nearest integer where required. [District Rule 4455, 5.3.5] Federally Enforceable Through Title V Permit

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49. If the leaking component is an essential component or a critical component and which cannot be immediately shut down for repairs, the operator shall minimize the leak within one hour after detection of the leak. If the leak has been minimized, but the leak still exceeds any of the applicable leak standards of Rule 4455, the essential component or critical component shall be repaired or replaced to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection, whichever comes earlier. [District Rule 4455 5.3.6] Federally Enforceable Through Title V Permit

50. For any component that has incurred five repair actions for major gas leaks or major liquid leaks, or any combination of major gas leaks and major liquid leaks within a continuous 12-month period, the operator shall comply with at least one of the requirements specified in Sections 5.3.7.1, 5.3.7.2, 5.3.7.3, or 5.3.7.4 by the applicable deadlines specified in Sections 5.3.7.5 and 5.3.7.6. If the original leaking component is replaced with a new like-in-kind component before incurring five repair actions for major leaks within 12-consecutive months, the repair count shall start over for the new component. An entire compressor or pump need not be replaced provided the compressor part(s) or pump part(s) that have incurred five repair actions as described in Section 5.3.7 are brought into compliance with at least one of the requirements of Sections 5.3.7.1 through 5.3.7.6. [District Rule 4455, 5.3.7] Federally Enforceable Through Title V Permit

51. The operator shall monitor process PRD by using electronic process control instrumentation that allows for real time continuous parameter monitoring or by using telltale indicators for the process PRD where parameter monitoring is not feasible. [District Rule 4455, 5.4.1] Federally Enforceable Through Title V Permit

52. After a release from a process PRD in excess of 500 pounds of VOC in a continuous 24-hour period, the operator shall immediately conduct a failure analysis and implement corrective actions as soon as practicable but not later than 30 days to prevent the reoccurrence of similar release. For refineries processing greater than 20,000 barrels of crude oil per day, any subsequent release in excess of 500 pounds of VOC within a continuous 24-hour period shall be subject to the requirements of Section 5.4.5. [District Rule 4455, 5.4.3 & 5.4.4] Federally Enforceable Through Title V Permit

53. The operator of a refinery processing greater than 20,000 barrels of crude oil per day shall connect all process PRDs serving that process equipment to an APCO-approved closed vent system as defined in Section 3.0 if any of the conditions specified in Sections 5.4.5.1 and 5.4.5.2 occurs. Process PRDs subject to the provisions of Section 5.4.5 shall be connected to an APCO-approved closed-vent system as soon as practicable, but no later than the first turnaround after the requirement to connect becomes effective. [District Rule 4455, 5.4.5] Federally Enforceable Through Title V Permit

54. All major components and critical components shall be physically identified clearly and visibly for inspection, repair, and recordkeeping purposes. The physical identification shall consist of labels, tags, manufacturer's nameplate identifier, serial number, or model number, or other system approved by the APCO that enables an operator or District personnel to locate each individual component. The operator shall replace tags or labels that become missing or unreadable as soon as practicable but not later than 24 hours after discovery. The operator shall comply with the requirements of Sections 6.1.4 if there is any change in the description of major components or critical components. [District Rule 4455, 5.5.1 & 5.5.2] Federally Enforceable Through Title V Permit

55. The operator shall keep a copy of the operator management plan at the facility and make it available to the APCO, ARB and US EPA upon request. By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved operator management plan. [District Rule 4455, 6.1.2 & 6.1.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

56. The operator shall maintain an inspection log containing, at a minimum, 1) total number of components inspected, and total number and percentage of leaking components found by component types, 2) location, type, name or description of each leaking component, and description of any unit where the leaking component is found, 3) date of leak detection and method of leak detection, 4) for gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak, 5) date of repair, replacement, or removal from operation of leaking components, 6) identification and location of essential component and critical components found leaking that cannot be repaired until the next process unit turnaround or not later one year after leak detection, whichever comes earlier, 7) methods used to minimize the leak from essential components and critical components that cannot be repaired until the next process unit turnaround or not later one year after leak detection, whichever comes earlier, 8) after the component is repaired or is replaced, the date of reinspection and the leak concentration in ppmv, 9) inspector's name, business mailing address, and business telephone number, and 10) the facility operator responsible for the inspection and repair program shall sign and date the inspection log certifying the accuracy of the information recorded in the log. [District Rule 4455, 6.2.1] Federally Enforceable Through Title V Permit

57. Records of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components, including a copy of current calibration gas certification from the vendor of said calibration gas cylinder, the date of calibration, concentration of calibration gas, analyzer reading of calibration gas before adjustment, instrument reading of calibration gas after adjustment, calibration gas expiration date, and calibration gas cylinder pressure at the time of calibration. [District Rule 4455, 6.2.3] Federally Enforceable Through Title V Permit

58. The operator shall notify the APCO, by telephone or other methods approved by the APCO, of any process PRD release described in Sections 5.4.4 and 5.4.5, and any release in excess of the reportable quantity limits as stipulated in 40 CFR, Part 117, Part 302 and Part 355, including any release in excess of 100 pounds of VOC, within one hour of such occurrence or within one hour of the time said person knew or reasonably should have known of its occurrence. [District Rule 4455, 6.3.1] Federally Enforceable Through Title V Permit

59. The operator shall submit a written report to the APCO within thirty (30) calendar days following a PRD release subject to 6.3.1. The written report shall include 1) process PRD type, size, and location, 2) date, time and duration of the process PRD release, 3) types of VOC released and individual amounts, in pounds, including supporting calculations, 4) cause of the process PRD release, and 5) corrective actions taken to prevent a subsequent process PRD release. [District Rule 4455 6.3.2] Federally Enforceable Through Title V Permit

60. Copies of all records shall be retained for a minimum of five (5) years after the date of an entry. Such records shall be made available to the APCO, ARB, or US EPA upon request. [District Rule 4455, 6.2.2, 6.2.3 & 6.2.4] Federally Enforceable Through Title V Permit

61. Measurements of gaseous leak concentrations shall be conducted according to US EPA Method 21 using an appropriate portable hydrocarbon detection instrument calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in US EPA Method 21 or the manufacturer's instruction, as appropriate, not more than 30 days prior to its use. The operator shall record the calibration date of the instrument. [District Rule 4455, 6.4.1] Federally Enforceable Through Title V Permit

62. The VOC content of exempt streams shall be determined using American Society of Testing and Materials (ASTM) D 1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 for liquids. [District Rule 4455, 6.4.2] Federally Enforceable Through Title V Permit

63. For exempt streams, the percent by volume liquid evaporated at 150 deg C shall be determined using ASTM D 86. [District Rule 4455, 6.4.3] Federally Enforceable Through Title V Permit

64. Equivalent test methods other than specified in Sections 6.4.1 through 6.4.5 may be used provided such test methods have received prior approval from the US EPA, ARB, and APCO. [District Rule 4455, 6.4] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-7-6 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
JOHN ZINK STF-S-8 STEAM ASSIST FLARE WITH CONSTANT IGNITION PILOTS, INCLUDING THE FOLLOWING GAS RECOVERY EQUIPMENT: TWO ELECTRIC DRIVEN GAS COMPRESSORS (350 HP TOTAL), FOUR KNOCKOUT POTS, ONE SEAL POT, TWO HEAT EXCHANGERS, TWO STEAM DRIVEN LIQUID RECOVERY PUMPS, AND ONE ELECTRIC DRIVEN LIQUID RECOVERY PUMP (2 HP), C-02 COMPRESSOR SKID INCLUDING: COMPRESSOR (250 HP), TWO KNOCKOUT POTS AND A HEAT EXCHANGER

PERMIT UNIT REQUIREMENTS

1. Flares shall be designed for and operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. [40 CFR 60.18(c)(1)] Federally Enforceable Through Title V Permit
2. Visible emissions monitoring shall be conducted at least annually, using EPA Method 22. [40CFR 60.18(f)(1)] Federally Enforceable Through Title V Permit
3. The outlet shall be equipped with an automatic ignition system, or, shall operate with a pilot flame present at all times when combustible gases are vented through the flare, except during purge periods for automatic-ignition equipped flares. [District Rule 4311, 5.3 and 40CFR 60.18(f)(2)] Federally Enforceable Through Title V Permit
4. For valves and connectors associated with compressor skids C-02 and C-03, flare gas suction K.O. pot V-19, aftercooler E-07and purge gas piping system, a leak shall be defined as a reading of methane in excess of 100 ppmv above background when measured per EPA Method 21. For pump and compressor seals associated with compressor skids C-02 and C-03 and pump P-07, a leak shall be defined as a reading of methane in excess of 500 ppmv above background when measure per EPA Method 21. [District Rule 2201] Federally Enforceable Through Title V Permit
5. VOC emission rate from fugitive components associated with compressor skids C-02 and C-03, flare gas suction K.O. pot V-19, pump P-07, aftercooler E-07 and purge gas piping system shall not exceed 16.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. Permit holder shall update such records when new components are approved and installed. Components shall be screened and leak rate shall be measured in accordance with the frequency of inspection specified in Rule 4455. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The flare shall be equipped with an operational flow-sensing ignition system or a heat sensing device such as a thermocouple, ultraviolet beam sensor, infrared sensor, or an alternative equivalent device capable of continuously detecting at least one pilot flame or the flare flame. [District Rule 4311, 5.5 and 40CFR 60.18(f)(2)] Federally Enforceable Through Title V Permit
8. The flame shall be present at all times when combustible gases are vented through the flare. [District Rule 4311, 5.2 and 40CFR 60.18(c)(2)] Federally Enforceable Through Title V Permit
9. Flares that use flow-sensing automatic ignition systems and which do not use a continuous flame pilot shall use purge gas for purging. [District Rule 4311, 5.6] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Open flares in which the flare gas pressure is less than 5 psig shall be operated in such a manner that meets the provisions of 40 CFR 60.18. [District Rule 4311, 5.6] Federally Enforceable Through Title V Permit

11. The operator shall minimize flare sulfur dioxide emissions consistent with the requirements of section 5.9 of Rule 4311. [District Rule 4311, 5.9] Federally Enforceable Through Title V Permit

12. The operator shall monitor the vent gas flow to the flare with a flow measuring device. [District Rule 4311, 5.10] Federally Enforceable Through Title V Permit

13. The operator shall provide the APCO with access to the flare monitoring system to collect the vent gas samples. [District Rule 4311, 6.6.7] Federally Enforceable Through Title V Permit

14. The operator shall monitor the volumetric flows of the flare's purge and pilot gases with flow measuring devices or other parameters as specified on the Permit to Operate so that volumetric flows of pilot and purge gas may be calculated based on pilot design and the parameters monitored. [District Rule 4311, 6.7] Federally Enforceable Through Title V Permit

15. Upon request, the operator of flares that are subject to Section 5.6 shall make available, to the APCO, the compliance determination records that demonstrate compliance with the provisions of 40 CFR 60.18, (c)(3) through (c)(5). [District Rule 4311, 6.4.1] Federally Enforceable Through Title V Permit

16. The operator shall monitor and record the water level and pressure of the water seal that services the flare daily. [District Rule 4311, 6.8] Federally Enforceable Through Title V Permit

17. The operator shall comply with the following, as applicable: (1) Periods of flare monitoring system inoperation greater than 24 continuous hours shall be reported by the following working day, followed by notification of resumption of monitoring. Periods of inoperation of monitoring equipment shall not exceed 14 days per any 18-consecutive-month period. Periods of flare monitoring system inoperation do not include the periods when the system feeding the flare is not operating; (2) During periods of inoperation of continuous analyzers or auto-samplers installed pursuant to Section 6.6, operators responsible for monitoring shall take one sample within 30 minutes of the commencement of flaring, from the flare header or from an alternate location at which samples are representative of vent gas composition and have samples analyzed pursuant to Section 6.3.4. During periods of inoperation of flow monitors required by Section 5.10, flow shall be calculated using good engineering practices; (3) Maintain and calibrate all required monitors and recording devices in accordance with the applicable manufacturer's specifications. In order to claim that a manufacturer's specification is not applicable, the person responsible for emissions must have, and follow, a written maintenance policy that was developed for the device in question. The written policy must explain and justify the difference between the written procedure and the manufacturer's procedure; (4) All in-line continuous analyzer and flow monitoring data must be continuously recorded by an electronic data acquisition system capable of one-minute averages. Flow monitoring data shall be recorded as one-minute averages. [District Rule 4311, 6.9] Federally Enforceable Through Title V Permit

18. The operator of a petroleum refinery flare shall install and maintain equipment that records a real-time digital image of the flare and flame at a frame rate of no less than one frame per minute. The recorded image of the flare shall be of sufficient size, contrast, and resolution to be readily apparent in the overall image or frame. The image shall include an embedded date and time stamp. The equipment shall archive the images for each 24-hour period. In lieu of video monitoring the operator may use an alternative monitoring method that provides data to verify date, time, vent gas flow, and duration of flaring events. [District Rule 4311, 6.10] Federally Enforceable Through Title V Permit

19. The operator shall notify the APCO of an unplanned flaring event within 24 hours after the start of the next business day or within 24 hours of their discovery, which ever occurs first. The notification shall include the flare source identification, the start date and time, and the end date and time. [District Rule 4311, 6.2.1] Federally Enforceable Through Title V Permit

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20. Effective on and after July 1, 2012, and annually thereafter, the operator of a flare subject to flare minimization plans pursuant to Section 5.8 shall submit an annual report to the APCO that summarizes all Reportable Flaring Events that occurred during the previous 12 month period. A Reportable Flaring Event is any flaring where more than 500,000 standard cubic feet of vent gas is flared per calendar day, or where sulfur oxide emissions are greater than 500 pounds per calendar day. A reportable flaring event ends when it can be demonstrated by monitoring required in Section 6.8 that the integrity of the water seal has been maintained sufficiently to prevent vent gas to the flare tip. The report of all Reportable Flaring Events shall be submitted within 30 days following the end of the twelve month period of the previous year. The report shall include, but is not limited to all of the following: (1) The results of an investigation to determine the primary cause and contributing factors of the flaring event; (2) Any prevention measures considered or implemented to prevent recurrence together with a justification for rejecting any measures that were considered but not implemented; (3) If appropriate, an explanation of why the flaring was an emergency and necessary to prevent accident, hazard or release of vent gas to the atmosphere, or where, due to a regulatory mandate to vent a flare, it cannot be recovered, treated and used as a fuel gas at the facility; and (4) The date, time, and duration of the flaring event. [District Rule 4311, 6.2.2] Federally Enforceable Through Title V Permit

21. Effective on and after July 1, 2012, and annually thereafter, the operator of a flare subject to flare monitoring requirements shall submit an annual report to the APCO within 30 days following the end of each 12 month period. The report shall include the following: (1) The total volumetric flow of vent gas in standard cubic feet for each day. (2) Hydrogen sulfide content, methane content, and hydrocarbon content of vent gas composition pursuant to Section 6.6. (3) If vent gas composition is monitored by a continuous analyzer or analyzers pursuant to Section 5.11, average total hydrocarbon content by volume, average methane content by volume, and depending upon the analytical method used pursuant to Section 6.3.4, total reduced sulfur content by volume or hydrogen sulfide content by volume of vent gas flared for each hour of the month. (4) If the flow monitor used pursuant to Section 5.10 measures molecular weight, the average molecular weight for each hour of each month. (5) For any pilot and purge gas used, the type of gas used, the volumetric flow for each day and for each month, and the means used to determine flow. (6) Flare monitoring system downtime periods, including dates and times. (7) For each day and for each month provide calculated sulfur dioxide emissions. (8) A flow verification report for each flare subject to this rule. The flow verification report shall include flow verification testing pursuant to Section 6.3.5. [District Rule 4311, 6.2.3] Federally Enforceable Through Title V Permit

22. The following records shall be maintained, retained on-site for a minimum of five years, and made available to the APCO, ARB, and EPA upon request: (1) Copy of the compliance determination conducted pursuant to Section 6.4.1. (2) Copy of the source testing result conducted pursuant to Section 6.4.2. (3) For flares used during an emergency, record of the duration of flare operation, amount of gas burned, and the nature of the emergency situation. (4) Effective on and after July 1, 2011, a copy of the approved flare minimization plan. (5) Effective on and after July 1, 2012, where applicable, a copy of annual reports submitted to the APCO pursuant to Section 6.2. (6) Effective on and after July 1, 2011, where applicable, vent gas monitoring data collected. [District Rule 4311, 6.1] Federally Enforceable Through Title V Permit

23. The flare shall be operated according to the manufacturer's specifications, a copy of which shall be maintained on site. [District Rule 2520, 9.3 and 40CFR 60.18(d)] Federally Enforceable Through Title V Permit

24. The actual exit velocity of a flare shall be determined by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip. [40 CFR 60.18 (f)(4)] Federally Enforceable Through Title V Permit

25. Air-assisted or steam-assisted flares shall only be used when the net heating value of the gas being combusted is 300 Btu/scf or greater. Nonassisted flares shall only be used when the net heating value of the gas being combusted is 200 Btu/scf or greater. [40 CFR 60.18 (c)(3)(ii)] Federally Enforceable Through Title V Permit

26. Steam-assisted and nonassisted flares shall be operated with an exit velocity less than 60 ft/sec, except as provided in 40 CFR 60.18 (c)(4)(ii) and (iii). [40 CFR 60.18 (c)(4)(i)] Federally Enforceable Through Title V Permit

27. Steam-assisted and nonassisted flares may be operated with an exit velocity equal to or greater than 60 ft/sec, but less than 400 ft/sec, if the net heating value of the gas being combusted is greater than 1,000 Btu/scf. [40 CFR 60.18 (c)(4)(ii)] Federally Enforceable Through Title V Permit

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28. Steam-assisted and nonassisted flares may be operated with an exit velocity less than the velocity Vmax, as determined by the methods specified in 40 CFR 60.18 (f)(5), and less than 400 ft/sec. [40 CFR 60.18 (c)(4)(iii)] Federally Enforceable Through Title V Permit

29. The net heating value of the gas being combusted in the flare shall be calculated pursuant to 40 CFR 60.18(f)(3) or by using EPA Method 18, ASTM D1945-96, ASTM D1946, and ASTM D2382 if published values are not available or cannot be calculated. [40 CFR 60.18 (f)(3)] Federally Enforceable Through Title V Permit

30. Operators shall not depressurize any vessel containing VOCs unless the process unit turnaround is accomplished by employing one of the following operating procedures: The organic vapors shall either be recovered, added to the refinery fuel gas system and combusted; or controlled and piped to an appropriate firebox or incinerated for combustion; or flared, until the pressure within the process vessel is as close to atmospheric pressure as is possible. All process vessels shall be depressurized into the control facilities to less than 1020 mm Hg (5 psig) before venting/opening to atmosphere. All organic compounds which emerge from a refinery process vessel during the purging of said vessel and which otherwise would be emitted to the atmosphere shall be either directed to a flare or incinerator or shall be used for fuel until such disposition of emissions is not technically feasible or is less safe than atmospheric venting. [District Rule 4454, 4.0] Federally Enforceable Through Title V Permit

31. Except for complying with the applicable requirements of Sections 6.1 and 7.3, the requirements of this rule shall not apply to 1) components subject to Rule 4623 (adopted 5/19/05), 2) pressure relief devices, pumps, and compressors equipped with a closed vent system as defined in Section 3.0, 3) components buried below ground, 4) components exclusively handling liquid streams which have less than 10 percent by weight (<10 wt%) evaporation at 150 C, 5) components exclusively handling liquid streams with a VOC content less than ten percent by weight (<10 wt%), 6) components exclusively handling gas/vapor streams with a VOC content of less than one percent by weight (<1wt%), 7) components incorporated in lines exclusively in vacuum service, 8) components exclusively handling commercial natural gas, and 9) one-half inch nominal or less stainless steel tube fittings which have been demonstrated to the Air Pollution Control Officer (APCO) to be leak-free based on initial inspection. [District Rule 4455, 4.1 & 4.2] Federally Enforceable Through Title V Permit

32. Except for components subject to Rule 4623 (Storage of Organic Liquids) or for components included in the inspection and maintenance (I&M) program implemented pursuant to Section 5.7 of Rule 4623, the operator shall not use any component that leaks in excess of the allowable leak standards of Rule 4455, or is found to be in violation of the provisions specified in Section 5.1.3. A component identified as leaking in excess of an allowable leak standard may be used provided it has been identified with a tag for repair, has been repaired, or is awaiting re-inspection after repair, within the applicable time period specified within the rule. [District Rule 4455, 5.1.1] Federally Enforceable Through Title V Permit

33. Each hatch shall be closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4455, 5.1.2] Federally Enforceable Through Title V Permit

34. The operator shall be in violation of Rule 4455 if any District inspection demonstrates that one or more of the conditions in Section 5.1.4 (Leak Standards) exist at the facility. [District Rule 4455, 5.1.3.1] Federally Enforceable Through Title V Permit

35. Except for annual operator inspection described in Section 5.1.3.2.3, any operator inspection that demonstrates that one or more of the conditions in Section 5.1.4 exist at the facility shall not constitute a violation of Rule 4455 if the leaking components are repaired as soon as practicable but not later than the time frame specified in Rule 4455. Such components shall not be counted towards determination of compliance with the provisions of Section 5.1.4. [District Rule 4455, 5.1.3.2.1] Federally Enforceable Through Title V Permit

36. Leaking components detected during operator inspection pursuant Section 5.1.3.2.1 that are not repaired, replaced, or removed from operation as soon as practicable but not later than the time frame specified in Rule 4455 shall be counted toward determination of compliance with the provisions of Section 5.1.4. [District Rule 4455, 5.1.3.2.2] Federally Enforceable Through Title V Permit

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37. Any operator inspection conducted annually for a component type (including operator annual inspections pursuant to Section 5.2.5, 5.2.6, 5.2.7, or 5.2.8) that demonstrates one or more of the conditions in Section 5.1.4 exist at the facility shall constitute a violation of Rule 4455 regardless of whether or not the leaking components are repaired, replaced, or removed from operation within the allowable repair time frame specified in Rule 4455. [District Rule 4455, 5.1.3.2.3] Federally Enforceable Through Title V Permit

38. A component shall be considered leaking if one or more of the conditions specified in Sections 5.1.4.1 through 5.1.4.4 of Rule 4455 exist at the facility. Readings shall be taken as methane using a portable hydrocarbon detection instrument and shall be made in accordance with the methods specified in Section 6.4.1 of Rule 4455. [District Rule 4455, 5.1.4] Federally Enforceable Through Title V Permit

39. The operator shall audio-visually inspect for leaks all accessible operating pumps, compressors and Pressure Relief Devices (PRDs) in service at least once every 24 hours, except when operators do not report to the facility for that given 24 hours. Any identified leak that cannot be immediately repaired shall be reinspected within 24 hours using a portable analyzer. If a leak is found, it shall be repaired as soon as practical but not later than the time frame specified in Table 3. [District Rule 4455, 5.2.1 & 5.2.2] Federally Enforceable Through Title V Permit

40. The operator shall inspect all components at least once every calendar quarter, except for inaccessible components, unsafe-to-monitor components and pipes. Inaccessible components, unsafe-to-monitor components and pipes shall be inspected in accordance with the requirements set forth in Sections 5.2.5, 5.2.6, and 5.2.7. New, replaced, or repaired fittings, flanges and threaded connections shall be inspected immediately after being placed into service. Components shall be inspected using EPA Method 21. [District Rule 4455, 5.2.3, 5.2.4, 5.2.5, 5.2.6 & 5.2.7] Federally Enforceable Through Title V Permit

41. The operator may apply for a written approval from the APCO to change the inspection frequency from quarterly to annually for a component type, provided the operator meets all the criteria specified in Sections 5.2.8.1 through 5.2.8.3. This approval shall apply to accessible component types, specifically designated by the APCO, except pumps, compressors, and PRDs which shall continue to be inspected on a quarterly basis. [District Rule 4455, 5.2.8] Federally Enforceable Through Title V Permit

42. An annual inspection frequency approved by the APCO shall revert to quarterly inspection frequency for a component type if either the operator inspection or District inspection demonstrates that a violation of the provisions of Sections 5.1, 5.2 and 5.3 of the rule exists for that component type, or the APCO issued a Notice of Violation for violating any of the provisions of Rule 4455 during the annual inspection period for that component type. When the inspection frequency changes from annual to quarterly inspections, the operator shall notify the APCO in writing within five (5) calendar days after changing the inspection frequency, giving the reason(s) and date of change to quarterly inspection frequency. [District Rule 4455, 5.2.9 & 5.2.10] Federally Enforceable Through Title V Permit

43. The operator shall initially inspect a process PRD that releases to the atmosphere as soon as practicable but not later than 24 hours after the time of the release. To insure that the process PRD is operating properly, and is leak-free, the operator shall re-inspect the process PRD not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the date of the release using EPA Method 21. If the process PRD is found to be leaking at either inspection, the PRD leak shall be treated as if the leak was found during quarterly operator inspections. [District Rule 4455, 5.2.11] Federally Enforceable Through Title V Permit

44. Except for process PRD, a component shall be inspected within 15 calendar days after repairing the leak or replacing the component using EPA Method 21. [District Rule 4455, 5.2.12] Federally Enforceable Through Title V Permit

45. A District inspection in no way fulfills any of the mandatory inspection requirements that are placed upon operators and cannot be used or counted as an inspection required of an operator. Any attempt by an operator to count such District inspections as part of the mandatory operator's inspections is considered to be willful circumvention and is a violation of this rule. [District Rule 4455, 5.2.13] Federally Enforceable Through Title V Permit

46. Upon detection of a leaking component, the operator shall affix to that component a weatherproof readily visible tag that contains the information specified in Section 5.3.3. The tag shall remain affixed to the component until the leaking component has been repaired or replaced; has been re-inspected using EPA Method 21; and is found to be in compliance with the requirements of Rule 4455. [District Rule 4455, 5.3.1 5.3.2 and 5.3.3] Federally Enforceable Through Title V Permit

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47. An operator shall minimize all component leaks immediately to the extent possible, but not later than one (1) hour after detection of leaks in order to stop or reduce leakage to the atmosphere. [District Rule 4455, 5.3.4] Federally Enforceable Through Title V Permit

48. If the leak has been minimized but the leak still exceeds the applicable leak standards of Rule 4455, an operator shall repair or replace the leaking component, vent the leaking component to a closed vent system, or remove the leaking component from operation as soon as practicable but not later than the time period specified in Table 3. For each calendar quarter, the operator may be allowed to extend the repair period as specified in Table 3, for a total number of leaking components, not to exceed 0.05 percent of the number of components inspected, by type, rounded upward to the nearest integer where required. [District Rule 4455, 5.3.5] Federally Enforceable Through Title V Permit

49. If the leaking component is an essential component or a critical component and which cannot be immediately shut down for repairs, the operator shall minimize the leak within one hour after detection of the leak. If the leak has been minimized, but the leak still exceeds any of the applicable leak standards of Rule 4455, the essential component or critical component shall be repaired or replaced to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection, whichever comes earlier. [District Rule 4455 5.3.6] Federally Enforceable Through Title V Permit

50. For any component that has incurred five repair actions for major gas leaks or major liquid leaks, or any combination of major gas leaks and major liquid leaks within a continuous 12-month period, the operator shall comply with at least one of the requirements specified in Sections 5.3.7.1, 5.3.7.2, 5.3.7.3, or 5.3.7.4 by the applicable deadlines specified in Sections 5.3.7.5 and 5.3.7.6. If the original leaking component is replaced with a new like-in-kind component before incurring five repair actions for major leaks within 12-consecutive months, the repair count shall start over for the new component. An entire compressor or pump need not be replaced provided the compressor part(s) or pump part(s) that have incurred five repair actions as described in Section 5.3.7 are brought into compliance with at least one of the requirements of Sections 5.3.7.1 through 5.3.7.6. [District Rule 4455, 5.3.7] Federally Enforceable Through Title V Permit

51. The operator shall monitor process PRD by using electronic process control instrumentation that allows for real time continuous parameter monitoring or by using telltale indicators for the process PRD where parameter monitoring is not feasible. [District Rule 4455, 5.4.1] Federally Enforceable Through Title V Permit

52. After a release from a process PRD in excess of 500 pounds of VOC in a continuous 24-hour period, the operator shall immediately conduct a failure analysis and implement corrective actions as soon as practicable but not later than 30 days to prevent the reoccurrence of similar release. For refineries processing greater than 20,000 barrels of crude oil per day, any subsequent release in excess of 500 pounds of VOC within a continuous 24-hour period shall be subject to the requirements of Section 5.4.5. [District Rule 4455, 5.4.3 & 5.4.4] Federally Enforceable Through Title V Permit

53. The operator of a refinery processing greater than 20,000 barrels of crude oil per day shall connect all process PRDs serving that process equipment to an APCO-approved closed vent system as defined in Section 3.0 if any of the conditions specified in Sections 5.4.5.1 and 5.4.5.2 occurs. Process PRDs subject to the provisions of Section 5.4.5 shall be connected to an APCO-approved closed-vent system as soon as practicable, but no later than the first turnaround after the requirement to connect becomes effective. [District Rule 4455, 5.4.5] Federally Enforceable Through Title V Permit

54. All major components and critical components shall be physically identified clearly and visibly for inspection, repair, and recordkeeping purposes. The physical identification shall consist of labels, tags, manufacturer's nameplate identifier, serial number, or model number, or other system approved by the APCO that enables an operator or District personnel to locate each individual component. The operator shall replace tags or labels that become missing or unreadable as soon as practicable but not later than 24 hours after discovery. The operator shall comply with the requirements of Sections 6.1.4 if there is any change in the description of major components or critical components. [District Rule 4455, 5.5.1 & 5.5.2] Federally Enforceable Through Title V Permit

55. The operator shall keep a copy of the operator management plan at the facility and make it available to the APCO, ARB and US EPA upon request. By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved operator management plan. [District Rule 4455, 6.1.2 & 6.1.4] Federally Enforceable Through Title V Permit

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56. The operator shall maintain an inspection log containing, at a minimum, 1) total number of components inspected, and total number and percentage of leaking components found by component types, 2) location, type, name or description of each leaking component, and description of any unit where the leaking component is found, 3) date of leak detection and method of leak detection, 4) for gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak, 5) date of repair, replacement, or removal from operation of leaking components, 6) identification and location of essential component and critical components found leaking that cannot be repaired until the next process unit turnaround or not later one year after leak detection, whichever comes earlier, 7) methods used to minimize the leak from essential components and critical components that cannot be repaired until the next process unit turnaround or not later one year after leak detection, whichever comes earlier, 8) after the component is repaired or is replaced, the date of reinspection and the leak concentration in ppmv, 9) inspector's name, business mailing address, and business telephone number, and 10) the facility operator responsible for the inspection and repair program shall sign and date the inspection log certifying the accuracy of the information recorded in the log. [District Rule 4455, 6.2.1] Federally Enforceable Through Title V Permit

57. Records of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components, including a copy of current calibration gas certification from the vendor of said calibration gas cylinder, the date of calibration, concentration of calibration gas, analyzer reading of calibration gas before adjustment, instrument reading of calibration gas after adjustment, calibration gas expiration date, and calibration gas cylinder pressure at the time of calibration. [District Rule 4455, 6.2.3] Federally Enforceable Through Title V Permit

58. The operator shall notify the APCO, by telephone or other methods approved by the APCO, of any process PRD release described in Sections 5.4.4 and 5.4.5, and any release in excess of the reportable quantity limits as stipulated in 40 CFR, Part 117, Part 302 and Part 355, including any release in excess of 100 pounds of VOC, within one hour of such occurrence or within one hour of the time said person knew or reasonably should have known of its occurrence. [District Rule 4455, 6.3.1] Federally Enforceable Through Title V Permit

59. The operator shall submit a written report to the APCO within thirty (30) calendar days following a PRD release subject to 6.3.1. The written report shall include 1) process PRD type, size, and location, 2) date, time and duration of the process PRD release, 3) types of VOC released and individual amounts, in pounds, including supporting calculations, 4) cause of the process PRD release, and 5) corrective actions taken to prevent a subsequent process PRD release. [District Rule 4455 6.3.2] Federally Enforceable Through Title V Permit

60. Copies of all records shall be retained for a minimum of five (5) years after the date of an entry. Such records shall be made available to the APCO, ARB, or US EPA upon request. [District Rule 4455, 6.2.2, 6.2.3 & 6.2.4] Federally Enforceable Through Title V Permit

61. Measurements of gaseous leak concentrations shall be conducted according to US EPA Method 21 using an appropriate portable hydrocarbon detection instrument calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in US EPA Method 21 or the manufacturer's instruction, as appropriate, not more than 30 days prior to its use. The operator shall record the calibration date of the instrument. [District Rule 4455, 6.4.1] Federally Enforceable Through Title V Permit

62. The VOC content of exempt streams shall be determined using American Society of Testing and Materials (ASTM) D 1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 for liquids. [District Rule 4455, 6.4.2] Federally Enforceable Through Title V Permit

63. For exempt streams, the percent by volume liquid evaporated at 150 deg C shall be determined using ASTM D 86. [District Rule 4455, 6.4.3] Federally Enforceable Through Title V Permit

64. Equivalent test methods other than specified in Sections 6.4.1 through 6.4.5 may be used provided such test methods have received prior approval from the US EPA, ARB, and APCO. [District Rule 4455, 6.4] Federally Enforceable Through Title V Permit

65. Each owner or operator subject to the provisions of this subpart shall demonstrate compliance with the requirements of 40 CFR 60.482-3a for all equipment within 180 days of initial startup. [40 CFR 60.482-1a(a)]

66. Compliance with 40 CFR 60.482-3a shall be determined by review of records and reports, review of performance test results, and inspection using the methods and procedures specified in 40 CFR 60.485a. [40 CFR 60.482-1a(b)]

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67. An owner or operator may request a determination of equivalence of a means of emission limitation to the requirements of 40 CFR 60.482-3a as provided in 40 CFR 60.484a. [40 CFR 60.482-1a(c)(1)]

68. If the Administrator makes a determination that a means of emission limitation is at least equivalent to the requirements of 40 CFR 60.482-3a, an owner or operator shall comply with the requirements of that determination. [40 CFR 60.482-1a(c)(2)]

69. Equipment that is in vacuum service is excluded from the requirements of 40 CFR 60.482-3a if it is identified as required in 40 CFR 60.486a(e)(5). [40 CFR 60.482-1a(d)]

70. Unless exempt under 40 CFR 60.482-3a, each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in 40 CFR 60.482-3a(h) and (i). The barrier fluid system shall be in heavy liquid service or shall not be in VOC service. Each compressor shall be operated and equipped as specified in 40 CFR 60.482-3a(b)(1), (2), or (3). [40 CFR 60.482-3a(a), (b), and (c)]

71. Any compressor that is designated, as described in 40 CFR 60.486a(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background, is exempt from the requirements of 40 CFR 60.482-3a(a) through (h) if the compressor meets the requirements specified in 40 CFR 60.482-3a(i)(1) and (2). [40 CFR 60.482-3a(i), and District Rule 2201]

72. Any existing reciprocating compressor in a process unit which becomes an affected facility under the provisions of 40 CFR 60.14 or 40 CFR 60.15 is exempt from 40 CFR 60.482a(a), (b), (c), (d), (e), and (h), provided the owner or operator demonstrates that recasting the distance piece or replacing the compressor are the only options available to bring the compressor into compliance with the provisions of 40 CFR 60.482-3a(a), (b), (c), (d), (e), and (h). [40 CFR 60.593a(c)]

73. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-8-31 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
ORGANIC LIQUID LOADING AREAS AND REFINERY VAPOR RECOVERY SYSTEM SERVING TANK S-37-150 AND INCLUDING COMPRESSOR(S), LOADING RACKS WITH 10 PRODUCT LINES AND 9 VAPOR RETURN LINES

PERMIT UNIT REQUIREMENTS

1. Transfer Racks N and F may be used for loading and unloading. Transfer Racks A, K, and L shall be used only for loading. [District Rule 2201] Federally Enforceable Through Title V Permit
2. All liquids and gases from the transfer operation shall be routed to one of the following systems: a vapor collection and control system; a fixed roof container that meets the control requirements specified in Rule 4623 (Storage of Organic Liquids); a floating roof container that meets the control requirements specified in Rule 4623 (Storage of Organic Liquids); or a pressure vessel equipped with an APCO-approved vapor recovery system that meets the control requirements specified in Rule 4623 (Storage of Organic Liquids); or a closed VOC emission control system. [District Rules 4623 and 4624] Federally Enforceable Through Title V Permit
3. A floating roof container that meets the applicable control requirements of Section 5.0 of Rule 4623 (Storage of Organic Liquids) shall be considered not leaking when receiving unloaded liquids for compliance with Rule 4624. [District Rule 4624] Federally Enforceable Through Title V Permit
4. For the transfer of gasoline only, transfer to any stationary storage container with 250 gallon capacity or more, that is not subject to Rule 4623, shall not be allowed unless the container is equipped with a permanent submerged fill pipe and an ARB certified Phase I vapor recovery system, which is maintained and operated according to the manufacturer's specifications, or a vapor recovery system with 95% control approved by the District. [District Rule 4621] Federally Enforceable Through Title V Permit
5. All delivery tanks which previously contained organic liquids, including gasoline, with a TVP 1.5 psia or greater at the storage container's maximum organic liquid storage temperature shall be filled only at Class 1 or Class 2 loading facilities that meet the vapor collection and control requirements of District Rule 4624 or listed herein. [District Rule 4624] Federally Enforceable Through Title V Permit
6. Construction, reconstruction (as defined in District Rule 4001) or expansion of any top loading facility shall not be allowed. [District Rule 4624] Federally Enforceable Through Title V Permit
7. The organic liquid and gasoline loading operation shall be equipped with bottom loading equipment with a vapor collection and control system meeting the requirements listed in this permit. [District Rules 4621 and 4624] Federally Enforceable Through Title V Permit
8. Transfer rack and vapor collection and control equipment shall be designed, installed, maintained in accordance with the manufacturers specifications, and operated such that there are no leaks or excess organic liquid drainage at disconnections as defined herein. [District Rules 4621 and 4624] Federally Enforceable Through Title V Permit
9. During unloading of gasoline, a leak shall be defined as the dripping of VOC-containing liquid at a rate of more than three drops per minute or a reading greater than 100 percent of the Lower Explosive Limit (21,000 ppmv as propane) in accordance with EPA Method 21. [District Rule 4621] Federally Enforceable Through Title V Permit

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10. For components used in the gasoline loading operation, a leak shall be defined as the dripping of VOC-containing liquid at a rate of more than three drops per minute or the detection of organic compounds, in excess of 10,000 ppm as methane measured at a distance of one centimeter from the potential source in accordance with EPA Method 21. Excess liquid drainage shall be defined as exceeding 10 milliliters per average of 3 consecutive disconnects. [District Rules 4621 and 4624] Federally Enforceable Through Title V Permit
11. For delivery vessels and components used in the organic liquid transfer operation, a leak shall be defined as the detection of organic compounds, in excess of 1,000 ppm as methane measured at a distance of one centimeter from the potential source in accordance with EPA Method 21. [District Rule 4624] Federally Enforceable Through Title V Permit
12. Equipment under vapor control shall not vent to atmosphere. [District Rules 4621 and 4624.] Federally Enforceable Through Title V Permit
13. The vapor collection and control system shall operate such that VOC emissions do not exceed 0.08 lb/1000 gallons of organic liquid loaded; maintains at least 95% capture and control efficiency of VOC and which operates so the delivery tank does not exceed 18 inches water column pressure nor 6 inches water column vacuum. [District Rule 4624] Federally Enforceable Through Title V Permit
14. No gasoline delivery vessel shall be used or operated unless it is leak-free. No gasoline delivery vessel shall be operated or loaded unless valid State of California decals are displayed on the cargo tank, attesting to the vapor integrity of the tank as verified by annual performance of CARB required Certification and Test Procedures for Vapor Recovery Systems for Cargo Tanks (Executive Order G-70-10-A) or EPA Method 27 for testing delivery vessels owned or operated by this facility. [District Rule 4621, Health & Safety Code, section 41962, and CCR, Title 17 section 94004] Federally Enforceable Through Title V Permit
15. Measurements of leak concentrations for organic liquid delivery vessels, including gasoline, shall be conducted according to the ARB Test Procedure for Determination of Leaks, TP-204.3, or EPA Method 21. [District Rules 4621 and 4624] Federally Enforceable Through Title V Permit
16. VOC emission rate from diesel loading rack shall not exceed any of the following: Fugitive emissions: 0.12 lb/hr and vapor recovery system: 0.09 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
17. VOC emission rate from fugitive components associated with the refinery vapor control system shall not exceed 6.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
18. During loading of a delivery vessel, the truck-mounted vapor return line shall be connected to the vapor recovery system listed on this permit. [District Rules 2201 and 4621] Federally Enforceable Through Title V Permit
19. A delivery vessel loading gasoline shall discontinue if its pressure relief valve opens. Corrective action shall be taken should this condition occur. [District Rules 2520 and 4621] Federally Enforceable Through Title V Permit
20. Switch loading shall not be conducted unless such transfer is made using an ARB certified vapor recovery system. [District Rules 2201 and 4621] Federally Enforceable Through Title V Permit
21. Operators shall conduct all performance tests required by the facility installation and operations manual as per the frequency outlined therein or as designated by the APCO. [District Rules 4621 and 4624] Federally Enforceable Through Title V Permit
22. The operator shall perform and record the results of monthly leak and drainage inspections of the loading and vapor collection equipment at each loading arm. During the loading of gasoline or organic liquids, leak detection shall be conducted using EPA Method 21 measuring at a distance of one centimeter from the potential source. When not in current operation, excess drainage inspections shall be conducted before 10:00 am at the disconnect of each loading arm by collecting all drainage at disconnect in a container and determining the volume within one (1) minute of collection [District Rules 2520, 40 CFR 60.502(j) and 4624] Federally Enforceable Through Title V Permit
23. The leak detection instrument shall be calibrated each day of its use, prior to use, by the procedures specified in Method 21 using the following calibration gases: A) Zero air (less than 10 ppm of hydrocarbon in air); and B) Mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [District Rules 2520, 9.3.2 and 4624] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

24. Corrective steps shall be taken at any time the operator observes a leak or excess drainage at disconnect. All equipment found leaking shall be repaired or replaced within 72 hours. If the leaking component cannot be repaired or replaced within 72 hours, the component shall be taken out of service until such time the component is repaired or replaced. The repaired or replacement equipment shall be reinspected the first time the equipment is in operation after the repair or replacement. [District Rule 4624] Federally Enforceable Through Title V Permit

25. All inspections shall be documented within the inspection log. Inspection records shall include, at a minimum, 1) date of inspection, 2) location and description of any missing, loose, leaking, or damaged equipment and any malfunction requiring repair, 3) corrective steps taken to repair or replace the equipment, 4) test method and results for leak and drainage inspections, 5) location and description of any of equipment which shall be inspected upon commencing operation after repair or replacement and 6) inspector name and signature. [District Rules 4621 and 4624] Federally Enforceable Through Title V Permit

26. Records of daily throughput of each loading rack shall be maintained and made available to the APCO, ARB, or EPA during normal business hours. [District Rules 2201, 4621, and 4624] Federally Enforceable Through Title V Permit

27. The permittee shall maintain accurate records of exempt and non-exempt components and their associated function in the Operator Management Plan (OMP) as required in section 6.1 of Rule 4455. Permit holder shall update the Operator Management Plan when new components are installed. By January 30 of each year, an annual report indicating any changes to an existing Operator Management Plan shall be submitted to the APCO. [District Rule 4455] Federally Enforceable Through Title V Permit

28. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), CAPCOA-Revised 1995 EPA Correlation Equations and Factors for Refineries and Marketing Terminals. Components shall be screened and leak rate shall be measured at least once each quarter. If compliance with the daily emission limit is shown during each of five (5) consecutive quarterly inspections, the inspection frequency may be changed from quarterly to annual. If any annual inspection shows non-compliance with the daily emission limit, then quarterly inspections shall be resumed. [District Rule 2201] Federally Enforceable Through Title V Permit

29. Copies of all records shall be retained for a minimum of five (5) years after the date of an entry. Such records shall be made available to the APCO, ARB, or US EPA upon request. [District Rules 1070, 4621, 4624, and 4455, 6.2.2, 6.2.3 & 6.2.4] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-9-10 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
OIL/WATER SEPARATION OPERATION INCLUDING API SEPARATOR, CORRUGATED PLATE SEPARATOR, INDUCED AIR FLOATATION UNIT, DRAIN PIT, FOUR FILTERS, AND THREE 5,000 BBL STORAGE TANKS (#5061, 5062, AND 5063)

PERMIT UNIT REQUIREMENTS

1. Varec breather vent shall be set at the following settings: 3.0 in. w.c. pressure and 0.865 in. w.c. vacuum. [District NSR Rule] Federally Enforceable Through Title V Permit
2. All access openings, gauge hatches, etc., with the exception of the third compartment of the API separator, shall meet the leak standards identified in Rule 4455. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Clean water tanks shall not be a source of air contaminant emissions. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Vapor space of oil/water separators shall not be purged unless vapors are directed to a control device. [District NSR Rule] Federally Enforceable Through Title V Permit
5. A person shall not use any compartment of any vessel or device operated for the recovery of oil from effluent water from any equipment which processes, refines, stores or handles petroleum products, except for air flotation units, unless such compartments are equipped with one of the following vapor loss control devices: a solid cover with all openings sealed and totally enclosing the liquid contents, except for structurally necessary breathing vents; a flotation pontoon or double deck-type cover as specified in Rule 4625, Section 5.1.2 (version 12/17/92); or a vapor recovery system with a combined collection and control efficiency of at least 90% by weight. [District Rule 4625] Federally Enforceable Through Title V Permit
6. Drain pit with forebay shall be equipped with solid covers. [Rule 4625] Federally Enforceable Through Title V Permit
7. Sampling ports shall remain closed at all times except during gauging or sampling. [District Rule 4625] Federally Enforceable Through Title V Permit
8. Skimmed oil removed from skim tank shall be transferred to crude oil charge tanks or to other tank(s) under vapor control with at least 90% control efficiency by weight. [District Rule 4625] Federally Enforceable Through Title V Permit
9. Operator shall conduct sampling from the oil/water separator operation every 24-months to qualify for exemption from fugitive component counts for components handling fluids with less than 10% VOC by weight. The VOC content shall be determined using South Coast Air Quality Management District (SCAQMD) Method 304-91, EPA Method 8260, or US EPA, ARB and APCO approved equivalent tests. [District Rule 4455, 4.2] Federally Enforceable Through Title V Permit
10. Operator shall conduct quarterly sampling from the oil/water separator to qualify for exemption from fugitive component counts for components handling fluids with less than 10% VOC by weight. If samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually. [District Rules 2201 and 4455] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. The operator shall keep a copy of the Operating Management Plan (OMP) at the facility and make it available to the APCO, ARB and US EPA upon request. By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved Operator Management Plan. [District Rule 4455, 6.1.2] Federally Enforceable Through Title V Permit
12. Permittee shall maintain a record of the VOC content test results from the oil/water separator for a period of five years and make such records available for inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-12-2 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
210,000 GALLON FIXED ROOF GASOLINE STORAGE TANK #5009 WITH SHARED VAPOR RECOVERY SYSTEM LISTED IN S-37-8

PERMIT UNIT REQUIREMENTS

1. This tank shall only vent to the vapor recovery system listed on S-37-8. [District Rule 4623, 5.1] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
3. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
4. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
5. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
6. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
7. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
8. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
9. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
14. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
15. This unit commenced construction, modification, or reconstruction before June 11, 1973. Therefore, the requirements of 40 CFR 60 Subparts K, Ka, and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-13-2 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
210,000 GALLON FIXED ROOF GASOLINE STORAGE TANK #5010 WITH SHARED VAPOR RECOVERY SYSTEM LISTED IN S-37-8

PERMIT UNIT REQUIREMENTS

1. This tank shall only vent to the vapor recovery system listed on S-37-8. [District Rule 4623, 5.1] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
3. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
4. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
5. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
6. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
7. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
8. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
9. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
14. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
15. This unit commenced construction, modification, or reconstruction before June 11, 1973. Therefore, the requirements of 40 CFR 60 Subparts K, Ka, and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-14-2 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
210,000 GALLON FIXED ROOF GASOLINE STORAGE TANK #5011 WITH SHARED VAPOR RECOVERY SYSTEM LISTED IN S-37-8

PERMIT UNIT REQUIREMENTS

1. This tank shall only vent to the vapor recovery system listed on S-37-8. [District Rule 4623, 5.1] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
3. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
4. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
5. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
6. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
7. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
8. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
9. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
14. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
15. This unit commenced construction, modification, or reconstruction before June 11, 1973. Therefore, the requirements of 40 CFR 60 Subparts K, Ka, and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-15-3 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
210,000 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK #5020 WITH SHARED VAPOR RECOVERY SYSTEM LISTED IN S-37-8

PERMIT UNIT REQUIREMENTS

1. This tank shall only vent to the vapor recovery system listed on S-37-8. [District Rule 4623, 5.1] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
3. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
4. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
5. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
6. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
7. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
8. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
9. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
14. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
15. This unit commenced construction, modification, or reconstruction before June 11, 1973. Therefore, the requirements of 40 CFR 60 Subparts K, Ka, and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-16-3 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
504,000 GALLON WELDED EXTERNAL FLOATING ROOF TANK (#12000) WITH RESILIENT PRIMARY SEAL AND RIM-MOUNTED SECONDARY SEAL

PERMIT UNIT REQUIREMENTS

1. The tank shall be equipped with a cover consisting of either a pontoon-type or double-deck-type cover which rests upon the surface of the liquid being stored and is equipped with a closure device between the tank shell and roof edge consisting of two seals, one above the other; the one below shall be referred to as the primary seal, and the one above shall be referred to as the secondary seal. [District Rule 4623, 5.3.1.1, 5.3.1.2] Federally Enforceable Through Title V Permit
2. The external floating roof shall float on the surface of the stored liquid at all times (i.e., off the roof leg supports) except during the initial fill until the roof is lifted off the leg supports and when the tank is completely emptied and subsequently refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. Whenever the permittee intends to land the roof on it's legs, the permittee shall notify the APCO in writing at least five calendar days prior to performing the work. The tank must be in compliance with this rule before it may land on its legs. [District Rule 4623, 5.3.1.3] Federally Enforceable Through Title V Permit
3. True vapor pressure of the stored liquid shall not exceed 11 psia. [District Rule 4623, 5.1.1] Federally Enforceable Through Title V Permit
4. The primary resilient toroid seal shall be mounted on the perimeter of the roof such that it is in contact with the tank's liquid contents at all times while the roof is floating. [District Rule 4623, 5.3.2.3.1] Federally Enforceable Through Title V Permit
5. No gap between the tank shell and the primary seal shall exceed one-half (1/2) inch. The cumulative length of all primary seal gaps greater than one-eighth (1/8) inch shall not exceed five (5) percent of the tank circumference. No continuous gap greater than one eighth (1/8) inch shall exceed ten (10) percent of the tank circumference. [District Rule 4623, 5.3.2.3.2] Federally Enforceable Through Title V Permit
6. No gap between the tank shell and the secondary seal shall exceed one-half (1/2) inch. The cumulative length of all gaps between the tank shall and the secondary seal, greater than one-eighth (1/8) inch shall not exceed five (5) percent of the tank circumference. [District Rule 4623, 5.3.2.3.3] Federally Enforceable Through Title V Permit
7. There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623, 5.3.2.3.4] Federally Enforceable Through Title V Permit
8. The secondary seal shall allow easy insertion of probes up to one-half (1/2) inch in width in order to measure gaps in the primary seal. [District Rule 4623, 5.3.2.3.5] Federally Enforceable Through Title V Permit
9. The secondary seal shall extend from the roof of the tank to the shell and not be attached to the primary seal. [District Rule 4623, 5.3.2.3.6] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. All openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10% of the maximum allowable working pressure of the roof, shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be leak-free, except when the device or appurtenance is in use. [District Rule 4623. 5.5.1] Federally Enforceable Through Title V Permit
11. Except for automatic bleeder vents and rim vents and pressure vacuum relief vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface. [District Rule 4623, 5.5.2.2.1] Federally Enforceable Through Title V Permit
12. Except for automatic bleeder vents and rim vents, roof drains, and leg sleeves, each opening in the roof shall be equipped with a gasketed cover, seal, or lid that shall be maintained in a closed position at all times (i.e., no visible gap) except when in actual use. [District Rule 4623, 5.5.2.2.2] Federally Enforceable Through Title V Permit
13. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. [District Rule 4623, 5.5.2.2.3] Federally Enforceable Through Title V Permit
14. Rim vents shall be equipped with a gasket and shall be set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. [District Rule 4623, 5.5.2.2.4] Federally Enforceable Through Title V Permit
15. Each emergency roof drain shall be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening. The fabric cover must be impermeable if the liquid is drained into the contents of the tanks. [District Rule 4623, 5.5.2.2.5]
16. External floating roof legs shall be equipped with vapor socks or vapor barriers in order to maintain a leak-free condition so as to prevent VOC emissions from escaping through the roof leg opening. [District Rule 4623, 5.5.2.2.6] Federally Enforceable Through Title V Permit
17. All wells and similar fixed projections through the floating roof shall provide a projection below the liquid surface. [District Rule 4623, 5.5.1, 5.5.2.3.1, 5.5.2.4.1] Federally Enforceable Through Title V Permit
18. The well shall be equipped with a pole wiper and a gasketed cover, seal or lid which shall be in a closed position at all times (i.e., no visible gap) except when the well is in use. [District Rule 4623, 5.5.2.3.2] Federally Enforceable Through Title V Permit
19. The gap between the pole wiper and the solid guidepole shall be added to the gaps measured to determine compliance with the secondary seal requirement, and in no case shall exceed 1/2 inch. [District Rule 4623, 5.5.2.3.3] Federally Enforceable Through Title V Permit
20. The slotted guidepole well on a external floating roof shall be equipped with the following: a sliding cover, a well gasket, a pole sleeve, a pole wiper, and an internal float and float wiper designed to minimize the gap between the float and the well, and provided the gap shall not exceed 1/8 inch; or shall be equipped with a well gasket, a zero gap pole wiper seal and a pole sleeve that projects below the liquid surface. [District Rule 4623, 5.5.2.4.2] Federally Enforceable Through Title V Permit
21. The gap between the pole wiper and the slotted guidepole shall be added to the gaps measured to determine compliance with the secondary seal requirement, and in no case shall exceed 1/8 inch. [District Rule 4623, 5.5.2.4.3] Federally Enforceable Through Title V Permit
22. The permittee of external floating roof tanks shall make the primary seal envelope available for unobstructed inspection by the APCO on an annual basis at locations selected along its circumference at random by the APCO. A minimum of four locations shall be made available. If the APCO suspects a violation may exist the APCO may require such further unobstructed inspection of the primary seal as may be necessary to determine the seal condition for its entire circumference. [District Rule 4623, 6.1.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. The permittee shall inspect all floating roof tanks at least once every 12 months to determine compliance with the requirements of this rule. The actual gap measurements of the floating roof primary and secondary seals shall be recorded. The inspection results shall be submitted to the APCO as specified in Section 6.3.5. [District Rule 4623, 6.1.3.1] Federally Enforceable Through Title V Permit

24. The permittee shall inspect the primary and secondary seals for compliance with the requirements of this rule every time a tank is emptied or degassed. Actual gap measurements shall be performed when the liquid level is static but not more than 48 hours after the tank roof is re-floated. [District Rule 4623, 6.1.3.2] Federally Enforceable Through Title V Permit

25. Operator shall visually inspect tank valves, flanges, and connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 4]

26. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 4]

27. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 4]

28. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 4]

29. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 4 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 4 shall constitute a violation of this rule. [District Rule 4623, Table 4]

30. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623, Table 4]

31. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 4]

32. The permittee shall inspect all floating tanks at least once every 12 months to determine compliance with the requirements of this rule. The actual gap measurements of the floating roof primary and secondary seals shall be recorded. The inspection results shall be submitted to the APCO as specified in District Rule 4623, Section 6.3.5. [District Rule 4623, 6.1.3.1] Federally Enforceable Through Title V Permit

33. The permittee shall inspect the primary and secondary seals for compliance with the requirements of this rule every time a tank is emptied or degassed. Actual gap measurements shall be performed when the liquid level is static but not more than 24 hours after the tank roof is re-floated. [District Rule 4623, 6.1.3.1.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

34. Permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of District Rule 4623, Sections 5.2 through 5.5 (Amended May 19, 2005). The inspection report for tanks that that have been determined to be in compliance with the requirements of District Rule 4623, Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of District Rule 4623, Sections 6.3.5.1 through 6.3.5.6 (amended May 19, 2005). [District Rule 4623, 6.3.5] Federally Enforceable Through Title V Permit

35. Permittee shall maintain the records of the external floating roof landing activities that are performed pursuant to District Rule 4623, Sections 5.3.1.3 and 5.4.3 (Amended May 19, 2005). The records shall include information on the true vapor pressure (TVP), API gravity, storage temperature, type of organic liquid stored in the tank, the purpose of landing the roof on its legs, the date of roof landing, duration the roof was on its legs, the level or height at which the tank roof was set to land on its legs, and the lowest liquid level in the tank. [District Rule 4623, 6.3.7] Federally Enforceable Through Title V Permit

36. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3.7] Federally Enforceable Through Title V Permit

37. Construction, reconstruction, or modification of this unit was commenced prior to June 11, 1973. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-17-4 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
504,000 GALLON FIXED ROOF TANK (#12001) WITH VAPOR CONTROL SYSTEM LISTED ON PERMIT S-37-8

PERMIT UNIT REQUIREMENTS

1. VOC fugitive emissions from the components in gas service on this tank and on piping from this tank to the control system listed on Permit to Operate S-37-8 shall not exceed 4.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Except as otherwise provided in this permit, the operator shall ensure that the vapor control system is functional and is operating as designed at all times. [District Rule 2201] Federally Enforceable Through Title V Permit
3. All piping, valves, and fittings shall be constructed and maintained in a leak free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
4. A leak free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
5. Any tank gauging or sampling device on a tank vented to the vapor control system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
6. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
7. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
8. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
10. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Any component found to be leaking on two consecutive annual inspections is in violation of the District Rule 4623, even if it is under the voluntary inspection and maintenance program. [District Rules 2201 and 4623, Table 3] Federally Enforceable Through Title V Permit
13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
14. Permittee shall maintain with the permit accurate fugitive component counts for components on this tank and on piping from this tank to the vapor control system listed on S-37-8 and resulting emissions calculated using CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2a (1995) Protocol Refinery Screening Value Range Emission Factors. [District Rules 2201] Federally Enforceable Through Title V Permit
15. Operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 1070 and 4623] Federally Enforceable Through Title V Permit
16. Construction, reconstruction, or modification of this unit was commenced prior to June 11, 1973. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-18-2 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
420,000 GALLON FIXED ROOF GASOLINE STORAGE TANK #10007 WITH SHARED VAPOR RECOVERY SYSTEM LISTED IN S-37-8

PERMIT UNIT REQUIREMENTS

1. This tank shall only vent to the vapor recovery system listed on S-37-8. [District Rule 4623, 5.1] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
3. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
4. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
5. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
6. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
7. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
8. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
9. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
14. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
15. This unit commenced construction, modification, or reconstruction before June 11, 1973. Therefore, the requirements of 40 CFR 60 Subparts K, Ka, and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-19-2 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
420,000 GALLON FIXED ROOF GASOLINE STORAGE TANK #10008 WITH SHARED VAPOR RECOVERY SYSTEM LISTED IN S-37-8

PERMIT UNIT REQUIREMENTS

1. This tank shall only vent to the vapor recovery system listed on S-37-8. [District Rule 4623, 5.1] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
3. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
4. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
5. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
6. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
7. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
8. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
9. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
14. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
15. This unit commenced construction, modification, or reconstruction before June 11, 1973. Therefore, the requirements of 40 CFR 60 Subparts K, Ka, and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-20-3 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
420,000 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK #10001 WITH SHARED VAPOR RECOVERY SYSTEM LISTED IN S-37-8

PERMIT UNIT REQUIREMENTS

1. This tank shall only vent to the vapor recovery system listed on S-37-8. [District Rule 4623, 5.1] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
3. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
4. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
5. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
6. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
7. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
8. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
9. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
14. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
15. This unit commenced construction, modification, or reconstruction before June 11, 1973. Therefore, the requirements of 40 CFR 60 Subparts K, Ka, and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-21-9 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
210,000 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK #5006

PERMIT UNIT REQUIREMENTS

1. Tanks shall be vented to vapor recovery system (VRS) listed in permit S-37-8 when storing organic liquids with a TVP of 0.5 psia or greater. When storing liquids in the tank with a TVP less than 0.5 psia, vapor recovery system may be disconnected. [District Rule 4623]
2. Upon reconnection to the vapor recovery system, permittee shall inspect all piping, fittings, and valves associated with this tank using a portable hydrocarbon analyzer. If any of the components are found to be leaking, the operator shall minimize and eliminate the leak as described in Table 3 of District Rule 4623. [District Rule 2201 and District Rule 4623]
3. Daily tank liquid throughput shall not exceed 1,100 barrels per day when disconnected from the vapor recovery system. [District Rule 2201] Federally Enforceable Through Title V Permit
4. When disconnected from the vapor recovery system, daily VOC emission shall not exceed 58 lb/day, calculated using District's "Tank Emissions, Fixed Roof Crude Oil less than 26 API" spreadsheet. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Tank shall be equipped with a pressure/vacuum vent hatch set to within 10% of the maximum tank working pressure. [District Rules 2201 and 4623, 5.2] Federally Enforceable Through Title V Permit
6. Fugitive VOC emissions rate, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components from this tank shall not exceed 0.02 lb-VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
8. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
9. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
10. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

12. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

13. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

14. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

15. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

16. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

17. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit

18. Permittee shall perform TVP testing before disconnecting vapor recovery system and the test results shall be maintained and recorded in a log for District Inspection. Permittee shall keep a daily log of the throughput of tank, TVP of stored liquid and status of the vapor recovery system, and shall make such records available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit

19. Except for crude oil with a API gravity 26 degrees or less, the TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures from the oil and gas section of "ARB Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588," dated August 1989. As an alternative to using ASTM D 323-94, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and US EPA. In lieu of performing a TVP test, an operator may use Appendix A of District Rule 4623 to determine the TVP of the stored organic liquid provided the storage temperature listed in Appendix A is not exceeded at any time. [District Rule 4623, 6.4.2 and 6.4.3] Federally Enforceable Through Title V Permit

20. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph," as approved by ARB and US EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

21. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

22. This unit commenced construction, modification, or reconstruction before June 11, 1973. Therefore, the requirements of 40 CFR 60 Subparts K, Ka, and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-22-9 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 31S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
210,000 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK #5007

PERMIT UNIT REQUIREMENTS

1. Tanks shall be vented to vapor recovery system (VRS) listed in permit S-37-8 when storing organic liquids with a TVP of 0.5 psia or greater. When storing liquids in the tank with a TVP less than 0.5 psia, vapor recovery system may be disconnected. [District Rule 4623]
2. Upon reconnection to the vapor recovery control system, permittee shall inspect all piping, fittings, and valves associated with this tank using a portable hydrocarbon analyzer. If any of the components are found to be leaking, the operator shall minimize and eliminate the leak as described in Table 3 of District Rule 4623. [District Rule 2201 and District Rule 4623]
3. Daily tank liquid throughput shall not exceed 1,100 barrels per day when disconnected from the vapor recovery system. [District Rule 2201] Federally Enforceable Through Title V Permit
4. When disconnected from the vapor recovery system, daily VOC emission shall not exceed 58 lb/day, calculated using District's "Tank Emissions, Fixed Roof Crude Oil less than 26 API" spreadsheet. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Tank shall be equipped with a pressure/vacuum vent hatch set to within 10% of the maximum tank working pressure. [District Rules 2201 and 4623, 5.2] Federally Enforceable Through Title V Permit
6. Fugitive VOC emissions rate, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components from this tank shall not exceed 0.02 lb-VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
8. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
9. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
10. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
14. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
15. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
16. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
17. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
18. Permittee shall perform TVP testing before disconnecting vapor recovery system and the test results shall be maintained and recorded in a log for District Inspection. Permittee shall keep a daily log of the throughput of tank, TVP of stored liquid and status of the vapor recovery system, and shall make such records available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
19. Except for crude oil with a API gravity 26 degrees or less, the TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures from the oil and gas section of "ARB Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588," dated August 1989. As an alternative to using ASTM D 323-94, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and US EPA. In lieu of performing a TVP test, an operator may use Appendix A of District Rule 4623 to determine the TVP of the stored organic liquid provided the storage temperature listed in Appendix A is not exceeded at any time. [District Rule 4623, 6.4.2 and 6.4.3] Federally Enforceable Through Title V Permit
20. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph," as approved by ARB and US EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

21. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

22. This unit commenced construction, modification, or reconstruction before June 11, 1973. Therefore, the requirements of 40 CFR 60 Subparts K, Ka, and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-23-7 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
210,000 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK #5008 SERVED BY REFINERY SHARED VAPOR RECOVERY SYSTEM LISTED ON S-37-8

PERMIT UNIT REQUIREMENTS

1. This tank shall only vent to the vapor recovery system listed on S-37-8. [District Rule 4623, 5.1] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank. [District NSR Rule, District Rule 4623, 5.6.1 and 40 CFR 60.112(a)] Federally Enforceable Through Title V Permit
3. VOC emissions from fugitive emissions sources in this permit unit shall not exceed 3.3 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Permittee shall maintain accurate records of number of fugitive emissions components and calculated emissions using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2a "1995 EPA Protocol Refinery Screening Value Ranges Emission Factors". [District NSR Rule and District Rule 1070] Federally Enforceable Through Title V Permit
5. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
6. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
7. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
8. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
9. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
14. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
15. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
16. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
17. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart K. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
18. This unit commenced construction, modification, or reconstruction before May 19, 1978. Therefore, the requirements of 40 CFR 60 Subpart Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-24-4 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
3000 BBL FIXED-ROOF ORGANIC LIQUID STORAGE TANK #3014 CONNECT TO THE VAPOR RECOVERY SYSTEM LISTED ON PERMIT S-37-8

PERMIT UNIT REQUIREMENTS

1. All piping, valves, and fittings shall be constructed and maintained in a leak free condition. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
2. A leak free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
3. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
4. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
5. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
6. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take on of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
7. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

8. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

9. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

10. The permittee shall maintain accurate records of exempt and non-exempt components and their associated function in the Operator Management Plan (OMP) as required in section 6.1 of Rule 4455. Permit holder shall update the Operator Management Plan when new components are installed. By January 30 of each year, an annual report indicating any changes to an existing Operator Management Plan shall be submitted to the APCO. [District Rule 4455] Federally Enforceable Through Title V Permit

11. Permittee shall maintain with the permit accurate fugitive component counts for oil handling components on this tank and on piping from this tank to tank S-37-8 and resulting emissions calculated using CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c (Feb 1999) Oil and Gas Production Screening Value Range emission factors. [District Rules 2201 and 4455] Federally Enforceable Through Title V Permit

12. VOC fugitive emissions from the components in gas service on this tank and on piping from this tank shall not exceed 0.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

13. Except as otherwise provided in this permit, the operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2201] Federally Enforceable Through Title V Permit

14. Operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 1070] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-25-3 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
126,000 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK #3026

PERMIT UNIT REQUIREMENTS

1. True vapor pressure (TVP) of liquids placed, stored, or held in this tank shall be less than 0.5 psi. [District Rule 4623] Federally Enforceable Through Title V Permit
2. The operator shall conduct TVP testing on the liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in each tank. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. Except for crude oil with a API gravity 26 degrees or less, the TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures from the oil and gas section of "ARB Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588," dated August 1989. As an alternative to using ASTM D 323-94, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and US EPA. In lieu of performing a TVP test, an operator may use Appendix A of District Rule 4623 to determine the TVP of the stored organic liquid provided the storage temperature listed in Appendix A is not exceeded at any time. [District Rule 4623, 6.4.2 and 6.4.3] Federally Enforceable Through Title V Permit
4. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph," as approved by ARB and US EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
5. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287-92 (2000) e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)." Sampling for API gravity shall be performed in accordance with ASTM Method D 4057-95 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit
6. The permittee shall keep accurate records of true vapor pressure, storage temperature and types of liquids stored, for a period of five years, and shall make such records available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart K. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
8. This unit commenced construction, modification, or reconstruction before May 19, 1978. Therefore, the requirements of 40 CFR 60 Subpart Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-26-3 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
126,000 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK #3027

PERMIT UNIT REQUIREMENTS

1. True vapor pressure (TVP) of liquids placed, stored, or held in this tank shall be less than 0.5 psi. [District Rule 4623] Federally Enforceable Through Title V Permit
2. The operator shall conduct TVP testing on the liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in each tank. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. Except for crude oil with a API gravity 26 degrees or less, the TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures from the oil and gas section of "ARB Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588," dated August 1989. As an alternative to using ASTM D 323-94, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and US EPA. In lieu of performing a TVP test, an operator may use Appendix A of District Rule 4623 to determine the TVP of the stored organic liquid provided the storage temperature listed in Appendix A is not exceeded at any time. [District Rule 4623, 6.4.2 and 6.4.3] Federally Enforceable Through Title V Permit
4. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph," as approved by ARB and US EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
5. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287-92 (2000) e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)." Sampling for API gravity shall be performed in accordance with ASTM Method D 4057-95 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit
6. The permittee shall keep accurate records of true vapor pressure, storage temperature and types of liquids stored, for a period of five years, and shall make such records available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart K. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
8. This unit commenced construction, modification, or reconstruction before May 19, 1978. Therefore, the requirements of 40 CFR 60 Subpart Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-27-3 **EXPIRATION DATE:** 08/31/2016

SECTION: 30 **TOWNSHIP:** 30S **RANGE:** 29E

EQUIPMENT DESCRIPTION:
37,000 BBL (ALTECH INDUSTRIES) INTERNAL FLOATING ROOF CRUDE OIL STORAGE TANK (#37,000), RIVETED CONSTRUCTION WITH RESILIENT PRIMARY SEAL AND RIM-MOUNTED SECONDARY SEAL

PERMIT UNIT REQUIREMENTS

1. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal roof shall be floating on the liquid surface except during initial fill and when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. Whenever the permittee intends to land the roof on it's legs, the permittee shall notify the APCO in writing at least five days prior to performing the work. [District Rule 4623, 5.4.1, 5.4.3] Federally Enforceable Through Title V Permit
2. The primary resilient toroid seal shall be mounted on the perimeter of the roof such that it is in contact with the tank's liquid contents at all times while the roof is floating. [District Rule 4623, 5.3.2.3.1] Federally Enforceable Through Title V Permit
3. No gap between the tank shell and the primary seal shall exceed one-half (1/2) inch. The cumulative length of all primary seal gaps greater than one-eighth (1/8) inch shall not exceed five (5) percent of the tank circumference. No continuous gap greater than one eighth (1/8) inch shall exceed ten (10) percent of the tank circumference. [District Rule 4623, 5.3.2.3.2] Federally Enforceable Through Title V Permit
4. No gap between the tank shell and the secondary seal shall exceed one-half (1/2) inch. The cumulative length of all gaps between the tank shall and the secondary seal, greater than one-eighth (1/8) inch shall not exceed five (5) percent of the tank circumference. [District Rule 4623, 5.3.2.3.3] Federally Enforceable Through Title V Permit
5. There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623, 5.3.2.3.4] Federally Enforceable Through Title V Permit
6. The secondary seal shall allow easy insertion of probes up to one-half (1/2) inch in width in order to measure gaps in the primary seal. [District Rule 4623, 5.3.2.3.5] Federally Enforceable Through Title V Permit
7. The secondary seal shall extend from the roof of the tank to the shell and not be attached to the primary seal. [District Rule 4623, 5.3.2.3.6] Federally Enforceable Through Title V Permit
8. All openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10% of the maximum allowable working pressure of the roof, shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be leak-free except when the device or appurtenance is in use. [District Rule 4623, 5.5.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. Each opening in a non-contact internal floating roof, except for automatic bleeder vents (vacuum breaker vents) and rim space vents, shall provide a projection below the liquid surface. [District Rule 4623, 5.5.2.1.1] Federally Enforceable Through Title V Permit

10. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use. [District Rule 4623, 5.5.2.1.2] Federally Enforceable Through Title V Permit

11. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. [District Rule 4623, 5.5.2.1.3] Federally Enforceable Through Title V Permit

12. Rim vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [District Rule 4623, 5.5.2.1.4] Federally Enforceable Through Title V Permit

13. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The well shall have a slit fabric cover that covers at least 90% of the opening. The fabric cover must be impermeable. [District Rule 4623, 5.5.2.1.5] Federally Enforceable Through Title V Permit

14. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover. The fabric sleeve must be impermeable. [District Rule 4623, 5.5.2.1.6] Federally Enforceable Through Title V Permit

15. The permittee shall visually inspect the internal floating roof, and its appurtenant parts, fittings, etc. and measure the gaps of the primary seal and/or secondary seal prior to filling the tank for newly constructed, repair, or rebuilt internal floating roof tanks. If holes, tears, or openings in the primary seal, the secondary seal, the seal fabric or defects in the internal floating roof or its appurtenant parts, components, fittings, etc., are found, they shall be repaired prior to filling the tank. [District Rule 4623, 6.1.3.2.1] Federally Enforceable Through Title V Permit

16. The permittee shall visually inspect, through the manholes, roof hatches, or other openings on the fixed roof, the internal floating roof and its appurtenant parts, fittings, etc., and the primary seal and/or secondary seal at least once every 12 months after the tank is initially filled with an organic liquid. There should be no visible organic liquid on the roof, tank walls, or anywhere. Other than the gap criteria specified by this rule, no holes, tears, or other openings are allowed that would permit the escape of vapors. Any defects found are violations of this rule. [District Rule 4623, 6.1.3.2.2] Federally Enforceable Through Title V Permit

17. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. [District Rule 4623, 6.1.3.2.3] Federally Enforceable Through Title V Permit

18. Permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of District Rule 4623, Sections 5.2 through 5.5 (amended May 19, 2005). The inspection report for tanks that that have been determined to be in compliance with the requirements of District Rule 4623, Sections 5.2 through 5.5 (amended May 19, 2005) need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of District Rule 4623 (amended May 19, 2005). [District Rule 4623, 6.3.5] Federally Enforceable Through Title V Permit

19. Permittee shall maintain the records of the internal floating roof landing activities that are performed pursuant to District Rule 4623, Sections 5.3.1.3 and 5.4.3 (amended May 19, 2005). The records shall include information on the true vapor pressure (TVP), API gravity, storage temperature, type of organic liquid stored in the tank, the purpose of landing the roof on its legs, the date of roof landing, duration the roof was on its legs, the level or height at which the tank roof was set to land on its legs, and the lowest liquid level in the tank. [District Rule 4623, 6.3.7] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

20. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2 and 4623, 6.3, 6.3.7] Federally Enforceable Through Title V Permit

21. True vapor pressure of the stored liquid shall not exceed 11 psia. [District Rule 4623, 5.1.1] Federally Enforceable Through Title V Permit

22. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually inspect the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4326, Table 5]

23. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 5]

24. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 5]

25. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 5]

26. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 5 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 5 shall constitute a violation of this rule. [District Rule 4623, Table 5]

27. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623, Table 5]

28. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 5]

29. Construction, reconstruction, or modification of this unit was commenced prior to June 11, 1973. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-28-4 **EXPIRATION DATE:** 08/31/2016

SECTION: 30 **TOWNSHIP:** 30S **RANGE:** 29E

EQUIPMENT DESCRIPTION:
80,000 BBL (ALTECH INDUSTRIES) INTERNAL FLOATING ROOF CRUDE OIL STORAGE TANK (#80,000), RIVETED CONSTRUCTION WITH RESILIENT PRIMARY SEAL AND RIM-MOUNTED SECONDARY SEAL

PERMIT UNIT REQUIREMENTS

1. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal roof shall be floating on the liquid surface except during initial fill and when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. Whenever the permittee intends to land the roof on it's legs, the permittee shall notify the APCO in writing at least five days prior to performing the work. [District Rule 4623, 5.4.1, 5.4.3] Federally Enforceable Through Title V Permit
2. The primary resilient toroid seal shall be mounted on the perimeter of the roof such that it is in contact with the tank's liquid contents at all times while the roof is floating. [District Rule 4623, 5.3.2.3.1] Federally Enforceable Through Title V Permit
3. No gap between the tank shell and the primary seal shall exceed one-half (1/2) inch. The cumulative length of all primary seal gaps greater than one-eighth (1/8) inch shall not exceed five (5) percent of the tank circumference. No continuous gap greater than one eighth (1/8) inch shall exceed ten (10) percent of the tank circumference. [District Rule 4623, 5.3.2.3.2] Federally Enforceable Through Title V Permit
4. No gap between the tank shell and the secondary seal shall exceed one-half (1/2) inch. The cumulative length of all gaps between the tank shall and the secondary seal, greater than one-eighth (1/8) inch shall not exceed five (5) percent of the tank circumference. [District Rule 4623, 5.3.2.3.3] Federally Enforceable Through Title V Permit
5. There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623, 5.3.2.3.4] Federally Enforceable Through Title V Permit
6. The secondary seal shall allow easy insertion of probes up to one-half (1/2) inch in width in order to measure gaps in the primary seal. [District Rule 4623, 5.3.2.3.5] Federally Enforceable Through Title V Permit
7. The secondary seal shall extend from the roof of the tank to the shell and not be attached to the primary seal. [District Rule 4623, 5.3.2.3.6] Federally Enforceable Through Title V Permit
8. All openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10% of the maximum allowable working pressure of the roof, shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be leak-free except when the device or appurtenance is in use. [District Rule 4623, 5.5.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. Each opening in a non-contact internal floating roof, except for automatic bleeder vents (vacuum breaker vents) and rim space vents, shall provide a projection below the liquid surface. [District Rule 4623, 5.5.2.1.1] Federally Enforceable Through Title V Permit

10. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use. [District Rule 4623, 5.5.2.1.2] Federally Enforceable Through Title V Permit

11. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. [District Rule 4623, 5.5.2.1.3] Federally Enforceable Through Title V Permit

12. Rim vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [District Rule 4623, 5.5.2.1.4] Federally Enforceable Through Title V Permit

13. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The well shall have a slit fabric cover that covers at least 90% of the opening. The fabric cover must be impermeable. [District Rule 4623, 5.5.2.1.5] Federally Enforceable Through Title V Permit

14. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover. The fabric sleeve must be impermeable. [District Rule 4623, 5.5.2.1.6] Federally Enforceable Through Title V Permit

15. The permittee shall visually inspect the internal floating roof, and its appurtenant parts, fittings, etc. and measure the gaps of the primary seal and/or secondary seal prior to filling the tank for newly constructed, repair, or rebuilt internal floating roof tanks. If holes, tears, or openings in the primary seal, the secondary seal, the seal fabric or defects in the internal floating roof or its appurtenant parts, components, fittings, etc., are found, they shall be repaired prior to filling the tank. [District Rule 4623, 6.1.3.2.1] Federally Enforceable Through Title V Permit

16. The permittee shall visually inspect, through the manholes, roof hatches, or other openings on the fixed roof, the internal floating roof and its appurtenant parts, fittings, etc., and the primary seal and/or secondary seal at least once every 12 months after the tank is initially filled with an organic liquid. There should be no visible organic liquid on the roof, tank walls, or anywhere. Other than the gap criteria specified by this rule, no holes, tears, or other openings are allowed that would permit the escape of vapors. Any defects found are violations of this rule. [District Rule 4623, 6.1.3.2.2] Federally Enforceable Through Title V Permit

17. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. [District Rule 4623, 6.1.3.2.3] Federally Enforceable Through Title V Permit

18. Permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of District Rule 4623, Sections 5.2 through 5.5 (amended May 19, 2005). The inspection report for tanks that that have been determined to be in compliance with the requirements of District Rule 4623, Sections 5.2 through 5.5 (amended May 19, 2005) need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of District Rule 4623 (amended May 19, 2005). [District Rule 4623, 6.3.5] Federally Enforceable Through Title V Permit

19. Permittee shall maintain the records of the internal floating roof landing activities that are performed pursuant to District Rule 4623, Sections 5.3.1.3 and 5.4.3 (amended May 19, 2005). The records shall include information on the true vapor pressure (TVP), API gravity, storage temperature, type of organic liquid stored in the tank, the purpose of landing the roof on its legs, the date of roof landing, duration the roof was on its legs, the level or height at which the tank roof was set to land on its legs, and the lowest liquid level in the tank. [District Rule 4623, 6.3.7] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

20. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2 and 4623, 6.3, 6.3.7] Federally Enforceable Through Title V Permit

21. True vapor pressure of the stored liquid shall not exceed 11 psia. [District Rule 4623, 5.1.1] Federally Enforceable Through Title V Permit

22. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually inspect the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4326, Table 5]

23. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 5]

24. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 5]

25. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 5]

26. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 5 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 5 shall constitute a violation of this rule. [District Rule 4623, Table 5]

27. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623, Table 5]

28. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 5]

29. Construction, reconstruction, or modification of this unit was commenced prior to June 11, 1973. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-31-6 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
1,000 BBL FIXED-ROOF ORGANIC LIQUID STORAGE TANK(#1000) WITH A SHARED VAPOR RECOVERY SYSTEM (LISTED ON PERMIT UNIT S-37-8)

PERMIT UNIT REQUIREMENTS

1. This tank shall only vent to the vapor recovery system listed on S-37-8. [District Rule 4623, 5.1] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District NSR Rule and District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
3. VOC emissions from fugitive emissions sources in this permit unit shall not exceed 4.4 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Permittee shall maintain accurate records of number of fugitive emissions components and calculated emissions using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2a "1995 EPA Protocol Refinery Screening Value Ranges Emission Factors". [District NSR Rule and District Rule 1070] Federally Enforceable Through Title V Permit
5. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
6. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
7. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
8. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
9. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
14. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
15. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
16. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-34-4 **EXPIRATION DATE:** 08/31/2016

SECTION: 30 **TOWNSHIP:** 30S **RANGE:** 29E

EQUIPMENT DESCRIPTION:
80,000 BBL EXTERNAL FLOATING ROOF PETROLEUM STORAGE TANK (#80,001), WELDED CONSTRUCTION WITH METALLIC SHOE PRIMARY SEAL AND SECONDARY RIM-MOUNTED SEAL

PERMIT UNIT REQUIREMENTS

1. The tank shall be equipped with a cover consisting of either a pontoon-type or double-deck-type cover which rests upon the surface of the liquid being stored and is equipped with a closure device between the tank shell and roof edge consisting of a primary and a secondary seal. [40 CFR 60.112a(a)(1), District Rule 4623, 5.3.1.1, 5.3.1.2] Federally Enforceable Through Title V Permit
2. The external floating roof shall float on the surface of the stored liquid at all times (i.e., off the roof leg supports) except during the initial fill until the roof is lifted off the leg supports and when the tank is completely emptied and subsequently refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. Whenever the permittee intends to land the roof on it's legs, the permittee shall notify the APCO in writing at least five calendar days prior to performing the work. The tank must be in compliance with this rule before it may land on its legs. [District Rule 4623, 5.3.1.3 and 40 CFR 60.112a(a)(1)] Federally Enforceable Through Title V Permit
3. Primary seal (lower seal) shall be either a metallic shoe seal, a liquid-mounted seal, or a vapor-mounted seal. [40 CFR 60.112a(a)(1)(i)] Federally Enforceable Through Title V Permit
4. Secondary seal shall be installed above the primary seal. [40 CFR 60.112a(a)(1)(ii)(A)] Federally Enforceable Through Title V Permit
5. If the secondary seal is used in combination with a vapor-mounted primary seal, there shall be no gaps between the tank wall and the secondary seal. [40 CFR 60.112a(a)(1)(ii)(B)] Federally Enforceable Through Title V Permit
6. Operator shall be exempt from the requirements for secondary seals and the secondary seal gap criteria when performing gap measurements or inspections of the primary seal. [40 CFR 60.112a(a)(1)(ii)(C)] Federally Enforceable Through Title V Permit
7. True vapor pressure of the stored liquid shall not exceed 11 psia. [District Rule 4623, 5.1.1] Federally Enforceable Through Title V Permit
8. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623, 5.3.2.1.1] Federally Enforceable Through Title V Permit
9. The cumulative length of all primary seal gaps greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1] Federally Enforceable Through Title V Permit
10. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1] Federally Enforceable Through Title V Permit
11. No continuous gap greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623, 5.3.2.1.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623, 5.3.2.1.2] Federally Enforceable Through Title V Permit
13. The cumulative length of all secondary seal gaps greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623, 5.3.2.1.2] Federally Enforceable Through Title V Permit
14. The metallic shoe-type seal shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 24 inches above the stored liquid surface. [District Rule 4623, 5.3.2.1.3] Federally Enforceable Through Title V Permit
15. The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623, 5.3.2.1.4] Federally Enforceable Through Title V Permit
16. There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623, 5.3.2.1.5] Federally Enforceable Through Title V Permit
17. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.3.2.1.6] Federally Enforceable Through Title V Permit
18. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623, 5.3.2.1.7] Federally Enforceable Through Title V Permit
19. All openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10% of the maximum allowable working pressure of the roof, shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be leak-free, except when the device or appurtenance is in use. [40 CFR 60.112a(a)(1)(iii), District Rule 4623. 5.5.1] Federally Enforceable Through Title V Permit
20. Except for automatic bleeder vents, rim vents, and pressure relief vents, each opening in a non-contact external floating roof shall provide a projection below the liquid surface. [District Rule 4623, 5.5.2.2.1] Federally Enforceable Through Title V Permit
21. Except for automatic bleeder vents and rim vents, roof drains, and leg sleeves, each opening in the roof shall be equipped with a gasketed cover, seal, or lid that shall be maintained in a closed position at all times (i.e., no visible gap) except when in actual use. [District Rule 4623, 5.5.2.2.2] Federally Enforceable Through Title V Permit
22. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. [40 CFR 60.112a(a)(1)(iii)], District Rule 4623, 5.5.2.2.3] Federally Enforceable Through Title V Permit
23. Rim vents shall be equipped with a gasket and shall be set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. [40 CFR 60.112a(a)(1)(iii)], District Rule 4623, 5.5.2.2.4] Federally Enforceable Through Title V Permit
24. Each emergency roof drain shall be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening. The fabric cover must be impermeable if the liquid is drained into the contents of the tanks. [District Rule 4623, 5.5.2.2.5]
25. External floating roof legs shall be equipped with vapor socks or vapor barriers in order to maintain a leak-free condition so as to prevent VOC emissions from escaping through the roof leg opening. [District Rule 4623, 5.5.2.2.6] Federally Enforceable Through Title V Permit
26. All wells and similar fixed projections through the floating roof shall provide a projection below the liquid surface. [District Rule 4623, 5.5.1, 5.5.2.3.1, 5.5.2.4.1] Federally Enforceable Through Title V Permit
27. A solid guidepole well shall be equipped with a pole wiper and a gasketed cover, seal or lid which shall be in a closed position at all times (i.e., no visible gap) except when the well is in use. [District Rule 4623, 5.5.2.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

28. The gap between the pole wiper and the solid guidepole shall be added to the gaps measured to determine compliance with the secondary seal requirement, and in no case shall exceed 1/2 inch. [District Rule 4623, 5.5.2.3.3] Federally Enforceable Through Title V Permit

29. The slotted guidepole well on a external floating roof shall be equipped with the following: a sliding cover, a well gasket, a pole sleeve, a pole wiper, and an internal float and float wiper designed to minimize the gap between the float and the well, and provided the gap shall not exceed 1/8 inch; or shall be equipped with a well gasket, a zero gap pole wiper seal and a pole sleeve that projects below the liquid surface. [District Rule 4623, 5.5.2.4.1] Federally Enforceable Through Title V Permit

30. The gap between the pole wiper and the slotted guidepole shall be added to the gaps measured to determine compliance with the secondary seal requirement, and in no case shall exceed 1/8 inch. [District Rule 4623, 5.5.2.4.2] Federally Enforceable Through Title V Permit

31. The permittee of external floating roof tanks shall make the primary seal envelope available for unobstructed inspection by the APCO on an annual basis at locations selected along its circumference at random by the APCO. A minimum of four locations shall be made available. If the APCO suspects a violation may exist the APCO may require such further unobstructed inspection of the primary seal as may be necessary to determine the seal condition for its entire circumference. [District Rule 4623, 6.1.1] Federally Enforceable Through Title V Permit

32. Operator shall perform gap measurements on primary seals within 60 days of the initial fill and at least once every 5 years thereafter. Operator shall perform gap measurements on secondary seals within 60 days of the initial fill with petroleum liquid and at least once every year thereafter. If unit is out of service for a period of one year or more, subsequent refilling with petroleum liquid shall be considered initial fill. [40 CFR 60.113a(a)(1)(i)(A), (B), and (C)] Federally Enforceable Through Title V Permit

33. If unit is out of service for a period of one year or more, subsequent refilling with petroleum liquid shall be considered initial fill in accordance with the conditions of this permit. [40 CFR 60.113a(a)(1)(i)(C)] Federally Enforceable Through Title V Permit

34. Operator shall determine gap widths in the primary and secondary seals using the following procedure: 1) Measure seal gaps, at one or more floating roof levels when the roof is floating off leg supports; 2) Measure seal gaps around entire circumference of the tank in each place where a one-eighth (1/8) inch diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the tank wall and measure the circumferential distance of each such location; 3), Total surface area of each gap shall be determined by using probes of various widths to accurately measure the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance; 4) Add the gap surface area of each gap location for the primary seal and the secondary seal individually. Divide the sum for each seal by the nominal diameter of the tank. [40 CFR 60.113a(a)(1)(ii) and (iii)] Federally Enforceable Through Title V Permit

35. Operator shall record the vessel on which the measurement was performed, date of the seal gap measurement, and raw data obtained in the measurement process in accordance with the conditions of this permit. [40 CFR 60.113a(a)(1)(i)(D)] Federally Enforceable Through Title V Permit

36. Operator shall provide the APCO with 30 days notice of the gap measurement to afford the District the opportunity to have an observer present. [40 CFR 60.113a(a)(1)(iv)] Federally Enforceable Through Title V Permit

37. If the accumulated area of gaps or gap width exceed limits, operator shall submit a report to the APCO within 60 days of the date of measurement. Report should include identification of the vessel, reason vessel did not meet the specifications, and a description of the actions necessary to bring the storage vessel into compliance. [40 CFR 60.113a(a)(1)(i)(E)] Federally Enforceable Through Title V Permit

38. Maximum true vapor pressure may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR 60.115a(b)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

39. Operator shall determine the true vapor pressure of each type of crude oil with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method from available data and record if the true vapor pressure is greater than 1.0 psia. [40 CFR 60.115a(c)] Federally Enforceable Through Title V Permit

40. Operator shall visually inspect tank valves, flanges, and connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 4]

41. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 4]

42. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 4]

43. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 4]

44. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 4 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 4 shall constitute a violation of this rule. [District Rule 4623, Table 4]

45. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623, Table 4]

46. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 4]

47. The permittee shall inspect all floating tanks at least once every 12 months to determine compliance with the requirements of this rule. The actual gap measurements of the floating roof primary and secondary seals shall be recorded. The inspection results shall be submitted to the APCO as specified in District Rule 4623, Section 6.3.5. [District Rule 4623, 6.1.3.1] Federally Enforceable Through Title V Permit

48. The permittee shall inspect the primary and secondary seals for compliance with the requirements of this rule every time a tank is emptied or degassed. Actual gap measurements shall be performed when the liquid level is static but not more than 24 hours after the tank roof is re-floated. [District Rule 4623, 6.1.3.1.2] Federally Enforceable Through Title V Permit

49. Permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of District Rule 4623, Sections 5.2 through 5.5 (Amended May 19, 2005). The inspection report for tanks that that have been determined to be in compliance with the requirements of District Rule 4623, Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of District Rule 4623. 6.3.5.1 through 6.3.5.6 (amended May 19, 2005). [District Rule 4623, 6.3.5] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

50. Permittee shall maintain the records of the external floating roof landing activities that are performed pursuant to District Rule 4623, Sections 5.3.1.3 and 5.4.3 (Amended May 19, 2005). The records shall include information on the true vapor pressure (TVP), API gravity, storage temperature, type of organic liquid stored in the tank, the purpose of landing the roof on its legs, the date of roof landing, duration the roof was on its legs, the level or height at which the tank roof was set to land on its legs, and the lowest liquid level in the tank. [District Rule 4623, 6.3.7] Federally Enforceable Through Title V Permit

51. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3.7] Federally Enforceable Through Title V Permit

52. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60, Subpart Ka. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

53. This unit commenced construction, modification, or reconstruction between May 18, 1978 and July 23, 1984. Therefore, the requirements of 40 CFR 60 Subpart K and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-38-10 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
SOLVENT UNIT INCLUDING V-7 FRACTIONATOR, 1 REFLUX DRUM V-8, AND 3,750,000 BTU/HR GAS FIRED FIRE TUBE HEATER (H-1)

PERMIT UNIT REQUIREMENTS

1. Heater shall be fired on purchased natural gas or refinery fuel gas only. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Reflux drum V-8 shall vent only to vapor control system on permit S-37-8. [District NSR Rule] Federally Enforceable Through Title V Permit
3. There shall be no pressure relief valves or vents designed to emit air contaminants to the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
4. There shall be no leaks of 10,000 ppmv or greater of any pressure relief devices installed as part of the unit. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
6. Heater shall be equipped with fuel flowrate indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
7. If splitter unit plant produces odoriferous wastewater, such wastewater shall not be transported in open system or disposed of in open air site(s). [District NSR Rule] Federally Enforceable Through Title V Permit
8. This permit to operate does not authorize steam production increase over S-37-6 permit limit. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Fuel gas sulfur content (as H2S) shall not exceed 0.10 gr/ dscf (160 ppmv) over a three hour rolling average and shall be continuously monitored and recorded. [40 CFR 60, Subpart J, 60.104] Federally Enforceable Through Title V Permit
10. Heater shall operate with no emissions in excess of 5% opacity or source testing shall be required to document emission rates. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Heater shall not be fired at greater than 3.75 MMBtu/hr heat input rate. [District NSR Rule] Federally Enforceable Through Title V Permit
12. Emissions from fugitive emissions components shall not exceed 52.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Emission rates shall not exceed any of the following limits: PM10: 0.06 lb/hr, SOx (as SO2): 1.89 lb/hr, NOx (as NO2): 0.55 lb/hr, VOC: 3.91 lb/hr or CO: 0.14 lb/hr. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

14. Particulate matter emissions shall not exceed 0.1 grain/dscf. Emissions of combustion contaminants shall not exceed 0.1 grain per cubic foot of gas calculated to 12% CO2 at dry standard conditions. Emissions of combustion contaminants shall not exceed ten (10) pounds per hour. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
15. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. [District Rule 2520, 9.3.2; District Rule 4301, 5.2.1] Federally Enforceable Through Title V Permit
16. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 2520, 9.3.2; Kern County Rule 407; District Rule 4801] Federally Enforceable Through Title V Permit
17. Compliance with sulfur compound emission limits may be demonstrated by firing this unit either on PUC or FERC regulated natural gas or refinery gas with a sulfur content of no more than 0.1 grain-H2S/dscf (160 ppmv) according to the continuous H2S monitor installed downstream of the sulfur recovery unit. [District Rules 4301, 4801 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. Operator shall report all rolling 3-hour periods during which the average concentration of H2S as measured by the H2S continuous monitoring system exceeds 0.10 gr/dscf (160 ppmv). [40 CFR Part 60, Subpart J, 60.105(e)(3)(ii)] Federally Enforceable Through Title V Permit
19. Operator shall determine compliance with the H2S standard using EPA Method 11. [40 CFR Part 60, Subpart J, 60.106(e)] Federally Enforceable Through Title V Permit
20. The permittee shall comply with all applicable notification, recordkeeping and monitoring requirements of Rule 4001. [District Rule 4001] Federally Enforceable Through Title V Permit
21. Permittee shall maintain accurate component count and emissions calculated using the 1995 EPA Protocol Refinery Screening Value Range Emissions Factors, from California Implementation Guidelines for Estimating Emissions of Fugitive Hydrocarbon Leaks at Marketing Terminals, Table IV-2a, February 1999. [District Rule 2201] Federally Enforceable Through Title V Permit
22. The permittee shall keep accurate records of sulfur content of refinery fuel gas for a period of five years, and shall make such records available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
23. Operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-42-3 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
3,600 BBL ORGANIC LIQUID STORAGE TANK (#3300) WITH A SHARED VAPOR RECOVERY SYSTEM (LISTED ON PERMIT UNIT S-37-8)

PERMIT UNIT REQUIREMENTS

1. This tank shall only vent to the vapor recovery system listed on S-37-8. [District Rule 4623, 5.1] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
3. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
4. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
5. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
6. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
7. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
8. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
9. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
14. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
15. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart K. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
16. This unit commenced construction, modification, or reconstruction before May 19, 1978. Therefore, the requirements of 40 CFR 60 Subpart Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-43-2 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
15 HP LIGHT SOLVENT TRUCK LOADING OPERATION WITH VAPOR CONTROL SYSTEM INCLUDING: EMCO WHEATON LOADING HOSE AND VAPOR RETURN COUPLERS, 15 PUMP, METER AND CHECK VALVES AND VAPOR RETURN PIPING TO VAPOR CONTROL SYSTEM

PERMIT UNIT REQUIREMENTS

1. The loading rack shall be equipped with bottom loading and a vapor collection and control system such that TOC emissions do not exceed 0.08 pounds per 1000 gallons of organic liquid loaded. [District Rule 4624 and County Rule 413 (Kern)] Federally Enforceable Through Title V Permit
2. Vapor collection and control system shall operate such that the pressure in the delivery tank being loaded does not exceed 18 inches water column pressure and 6 inches water column vacuum. [District Rule 4624 and County Rule 413 (Kern)] Federally Enforceable Through Title V Permit
3. Gasoline, as defined in Rule Rule 4621, shall not be loaded or unloaded in this equipment. [District Rule 4621] Federally Enforceable Through Title V Permit
4. No more than 48 disconnects shall be allowed in any day without prior District approval. [District NSR Rule] Federally Enforceable Through Title V Permit
5. All delivery tanks which previously contained organic liquids, including gasoline, with a TVP greater than 1.5 psia at loading conditions shall be filled only at Class 1 loading facilities using bottom loading equipment with a vapor collection and control system operating such that VOC emissions do not exceed 0.08 lb/1000 gallons loaded; or Class 2 loading facilities equipped with a system to control at least 95% of VOC displaced; and which operate so the delivery tank does not exceed 18 inches water column pressure nor 6 inches water column vacuum. [District Rule 4624, 5.3] Federally Enforceable Through Title V Permit
6. Loading and vapor collection and control equipment shall be designed, installed, maintained and operated such that there are no leaks or excess organic liquid drainage at disconnections. A leak shall be defined as the dripping of organic compounds at a rate of more than three drops per minute or the detection of organic compounds, in excess of 10,000 ppm as methane measured at a distance of one centimeter from the potential source in accordance with EPA Method 21. Excess liquid drainage shall be defined as exceeding 10 mls per average of 3 consecutive disconnects. [District Rule 4624, 5.4, Kern County Rule 413] Federally Enforceable Through Title V Permit
7. During the loading of organic liquids, the operator shall perform and record the results of monthly leak inspections of the loading and vapor collection equipment at each loading arm. Leak inspections shall be conducted using sight, sound, smell and instrument methods to detect leaks. Instrument detection shall be conducted using EPA Method 21 and shall be measured at a distance of one centimeter from the potential source. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: A) Zero air (less than 10 ppm of hydrocarbon in air); and B) Mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

8. Corrective steps shall be taken at any time the operator observes a leak or excess drainage at disconnect. In addition, the operator shall perform and record the results of monthly drainage inspections at disconnect for each loading arm during any month that the loading arm(s) are in operation. If no excess drainage conditions are found during five consecutive monthly inspections, the drainage inspection frequency may be changed from monthly to quarterly. However, if one or more excess drainage condition is found during a quarterly inspection, the inspection frequency shall return to monthly. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. Drainage inspections shall be completed before 10:00 AM the day of inspection. Compliance shall be demonstrated by collecting all drainage at disconnect in a spouted container. The drainage shall be transferred to a graduated cylinder and the volume determined within one (1) minute of collection. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. All inspections shall be documented with an inspection log. Inspection records shall include, at a minimum, 1) date of inspection, 2) location and description of any missing, loose, leaking, or damaged equipment and any malfunction requiring repair, 3) corrective steps taken to repair or replace the equipment, 4) test method and results for leak and drainage inspections, 5) location and description of any equipment to be inspected upon commencing operation after repair or replacement and 6) inspector name and signature. [District Rule 4624, 6.1.3]
11. Analysis of halogenated exempt compounds shall be by ARB Method 432. [District Rule 4624, 6.2.2, and Kern County Rule 413] Federally Enforceable Through Title V Permit
12. VOC emissions from the vapor collection and control system shall be determined using 40CFR 60.503. "Test Methods and Procedures" and EPA Reference Methods 2A, 2B, 25A and 25B and ARB Method 432, or ARB Method 2-4 or District approved equivalent. [District Rule 4624, 6.2.2, and Kern County Rule 413] Federally Enforceable Through Title V Permit
13. Hose couplers shall be dry break type only. [District NSR Rule] Federally Enforceable Through Title V Permit
14. VOC emission from fugitive emissions shall not exceed 0.2 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
15. VOC disconnect losses shall not exceed 0.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Permittee shall maintain accurate component count for the loading rack according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2b (Feb 1999), 1995 EPA Protocol Marketing Terminal Screening Value Range emission factors. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Permittee shall maintain records of the number of disconnects per day and shall make such records available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
18. Operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520 9.4.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-44-3 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
126,000 GALLON NAPHTHA STORAGE TANK (#3019)

PERMIT UNIT REQUIREMENTS

1. True vapor pressure (TVP) of liquids placed, stored, or held in this tank shall be less than 0.5 psi. [District Rule 4623] Federally Enforceable Through Title V Permit
2. Average daily tank throughput (on annual basis) shall not exceed 193 bbl/day of fluid without prior District approval. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The maximum emission rate of volatile organic compounds shall not exceed 14.3 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Tank shall be equipped with an operational stored liquid temperature indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
5. All tank seams, welds, flanges and joints shall be maintained in leak-free condition. A liquid leak is defined as a leak rate of greater than or equal to 30 drops per minute. A gas leak is defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21. [District NSR Rule and District Rule 4623] Federally Enforceable Through Title V Permit
6. There shall be no open, water draw-off drain. [District NSR Rule] Federally Enforceable Through Title V Permit
7. The operator shall conduct TVP testing on the liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in each tank. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
8. Except for crude oil with a API gravity 26 degrees or less, the TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures from the oil and gas section of "ARB Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588," dated August 1989. As an alternative to using ASTM D 323-94, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and US EPA. In lieu of performing a TVP test, an operator may use Appendix A of District Rule 4623 to determine the TVP of the stored organic liquid provided the storage temperature listed in Appendix A is not exceeded at any time. [District Rule 4623, 6.4.2 and 6.4.3] Federally Enforceable Through Title V Permit
9. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph," as approved by ARB and US EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287-92 (2000) e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)." Sampling for API gravity shall be performed in accordance with ASTM Method D 4057-95 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit
11. The permittee shall keep accurate records of true vapor pressure, storage temperature and daily liquid throughput for a period of five years, and shall make such records available for District inspection upon request. [District NSR Rule and District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
12. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart Ka. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
13. This unit commenced construction, modification, or reconstruction between May 18, 1978 and July 23, 1984. Therefore, the requirements of 40 CFR 60 Subpart K and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-46-5 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
30 HP LIQUID LOADING/UNLOADING OPERATION INCLUDING ONE UNCONTROLLED LIQUID LOADOUT LINE, ONE ORGANIC LIQUID LOADOUT/UNLOAD (TRANSFER) LINE EQUIPPED WITH VAPOR RECOVERY, TWO 15 HP PUMPS, DRY-BREAK CONNECTORS, METER(S), AND CHECK VALVES

PERMIT UNIT REQUIREMENTS

1. For the transfer of liquids with a true vapor pressure (TVP) of 1.5 psia or more, the transfer rack shall be equipped with bottom loading or a vapor collection and control system such that VOC emissions do not exceed 0.08 pounds per 1,000 gallons of organic liquid with greatest vapor pressure loaded. [District Rules 4624 and 2201, and County Rule 413 (Kern)] Federally Enforceable Through Title V Permit
2. Vapor collection and control system shall operate such that the pressure in the delivery tank being loaded does not exceed 18 inches water column pressure and 6 inches water column vacuum. [District Rule 4624 and County Rule 413 (Kern)] Federally Enforceable Through Title V Permit
3. The transfer of gasoline from any delivery vessel to any stationary storage container with 250 gallon capacity or more shall not be allowed unless the container is equipped with a permanent submerged fill pipe and an ARB certified Phase I vapor recovery system, which is maintained and operated according to the manufacturers specifications. [District Rule 4621] Federally Enforceable Through Title V Permit
4. No gasoline shall be placed, stored, or held in any above-ground tank of 250 gallon capacity or more unless it is equipped with a pressure-vacuum valve set to within 10% of the maximum allowable working pressure of the tank. [District Rule 4621] Federally Enforceable Through Title V Permit
5. All delivery tanks which previously contained organic liquids, including gasoline, with a TVP 1.5 psia or greater at the storage container's maximum organic liquid storage temperature shall be filled only at Class 1 loading facilities using bottom loading equipment with a vapor collection and control system operating such that VOC emissions do not exceed 0.08 lb/1000 gallons loaded; or Class 2 loading facilities equipped with a system to control at least 95% of VOC displaced; or the transfer facility has a vapor collection and control system such that the pressure in the delivery tank being loaded does not exceed 18 inches water column pressure nor 6 inches water column vacuum. [District Rules 4621 and 4624] Federally Enforceable Through Title V Permit
6. No gasoline delivery vessel shall be used or operated unless it is leak-free. A leak shall be defined as the dripping of organic compounds at a rate of more than three drops per minute or the detection of organic compounds, in excess of 10,000 ppm as methane measured at a distance of one centimeter from the potential source in accordance with EPA Method 21. Excess liquid drainage shall be defined as exceeding 10 milliliters per average of 3 consecutive disconnects. No gasoline delivery vessel shall be operated or loaded unless valid State of California decals are displayed on the cargo tank, attesting to the vapor integrity of the tank as verified by annual performance of CARB required Certification and Test Procedures for Vapor Recovery Systems for Cargo Tanks. [District Rule 4621, Health & Safety Code, section 41962, and CCR, Title 17 section 94004] Federally Enforceable Through Title V Permit
7. The test method to determine vapor tightness of delivery vessels owned or operated by this facility shall be ARB Test Procedure TP-204.3. [District Rule 4621] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

8. Construction, reconstruction (as defined in District Rule 4001), or expansion of any top loading facility shall not be allowed. [District Rule 4624] Federally Enforceable Through Title V Permit

9. Loading and vapor collection and control equipment shall be designed, installed, maintained and operated such that there are no leaks or excess organic liquid drainage at disconnections. A leak from a VOC containing liquid other than gasoline shall be defined as the dripping of organic compounds at a rate of more than three drops per minute or the detection of organic compounds, in excess of 1,000 ppm as methane measured at a distance of one centimeter from the potential source in accordance with EPA Method 21. Excess liquid drainage shall be defined as exceeding 10 milliliters per average of 3 consecutive disconnects. [District Rule 4624 and Kern County Rule 413] Federally Enforceable Through Title V Permit

10. During the loading of organic liquids, the operator shall perform and record the results of monthly leak inspections of the loading and vapor collection equipment at each loading arm. Leak inspections shall be conducted using sight, sound, smell and instrument methods to detect leaks. Instrument detection shall be conducted using EPA Method 21 and shall be measured at a distance of one centimeter from the potential source. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: A) Zero air (less than 10 ppm of hydrocarbon in air); and B) Mixture of methane or n-hexane and air at a concentration of about, but less than, 1,000 ppm methane or n-hexane. [District Rules 2520 and 4624] Federally Enforceable Through Title V Permit

11. Corrective steps shall be taken at any time the operator observes a leak or excess drainage at disconnect. In addition, the operator shall perform and record the results of monthly drainage inspections at disconnect for each loading arm during any month that the loading arm(s) are in operation. If no excess drainage conditions are found during five consecutive monthly inspections, the drainage inspection frequency may be changed from monthly to quarterly. However, if one or more excess drainage condition is found during a quarterly inspection, the inspection frequency shall return to monthly. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

12. All equipment that are found leaking shall be repaired or replaced within 72 hours. If the leaking component cannot be repaired or replaced within 72 hours, the component shall be taken out of service until such time the component is repaired or replaced. The repaired or replacement equipment shall be reinspected the first time the equipment is in operation after the repair or replacement. [District Rule 4624] Federally Enforceable Through Title V Permit

13. Drainage inspections shall be completed before 10:00 AM the day of inspection. Compliance shall be demonstrated by collecting all drainage at disconnect in a spouted container. The drainage shall be transferred to a graduated cylinder and the volume determined within one (1) minute of collection. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

14. All inspections shall be documented with an inspection log. Inspection records shall include, at a minimum, 1) date of inspection, 2) location and description of any missing, loose, leaking, or damaged equipment and any malfunction requiring repair, 3) corrective steps taken to repair or replace the equipment, 4) test method and results for leak and drainage inspections, 5) location and description of any equipment to be inspected upon commencing operation after repair or replacement and 6) inspector name and signature. [District Rule 4624, 6.1.3] Federally Enforceable Through Title V Permit

15. VOC emissions from the vapor collection and control system shall be determined using 40CFR 60.503. "Test Methods and Procedures" and EPA Reference Methods 2A, 2B, 25A and 25B and ARB Method 432, or ARB Method 2-4. [District Rule 4624, 6.2.2, and Kern County Rule 413] Federally Enforceable Through Title V Permit

16. Loading of a delivery vessel shall discontinue if its pressure relief valve opens. Corrective action shall be taken should this condition occur. [District Rule 2520, 9.1] Federally Enforceable Through Title V Permit

17. Operation shall include one uncontrolled loadout line for the handling of naphtha and mineral spirits with true vapor pressure's (TVP's) less than 1.5 psia, and one transfer line equipped with vapor recovery for the handling of light reformate and other organic liquids with TVP's greater than 1.5 psia. [District NSR Rule] Federally Enforceable Through Title V Permit

18. No trucks with a preceding load of petroleum liquid with a greater true vapor pressure than 0.86 psia at 90 deg. F. shall be loaded from loadout line not attached to vapor recovery system. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

19. Only petroleum liquid with a true vapor pressure less than 0.86 psia at 90 deg. F. shall be loaded from loadout hose not attached to vapor recovery system. [District NSR Rule] Federally Enforceable Through Title V Permit
20. All liquid handling equipment and components shall be maintained leak-free (as defined in Rule 4624). [District NSR Rule and Rule 4624] Federally Enforceable Through Title V Permit
21. Hose couplers shall be dry break type only. [District NSR Rule] Federally Enforceable Through Title V Permit
22. VOC emissions from uncontrolled naphtha/mineral spirits loadout line shall not exceed 29.28 lb per day. [District NSR Rule] Federally Enforceable Through Title V Permit
23. Organic liquids with true vapor pressures (TVP) greater than 1.5 psi shall be transferred exclusively through the transfer line equipped with vapor recovery. [District NSR Rule and Rule 4624] Federally Enforceable Through Title V Permit
24. The loadout of organic liquids with true vapor pressures (TVP) greater than 1.5 psi from rack shall not exceed 28,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
25. Permittee shall maintain accurate records of liquid type, throughput, temperature, and Reid Vapor Pressure (or TVP) on site for a period of at least five years and shall be made readily available for District inspection upon request. [District NSR Rule and Rule 1070] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-48-3 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
5,400 BBL ORGANIC LIQUID STORAGE TANK (#5014) WITH A SHARED VAPOR RECOVERY SYSTEM (LISTED ON PERMIT UNIT S-37-8)

PERMIT UNIT REQUIREMENTS

1. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
2. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
3. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
4. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
5. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
6. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
7. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
8. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
10. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
13. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
14. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart K. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
15. This unit commenced construction, modification, or reconstruction before May 19, 1978. Therefore, the requirements of 40 CFR 60 Subpart Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-49-3 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
5,400 BBL ORGANIC LIQUID STORAGE TANK (#5015) WITH A SHARED VAPOR RECOVERY SYSTEM (LISTED ON PERMIT UNIT S-37-8)

PERMIT UNIT REQUIREMENTS

1. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
2. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
3. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
4. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
5. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
6. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
7. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
8. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
10. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
13. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
14. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart K. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
15. This unit commenced construction, modification, or reconstruction before May 19, 1978. Therefore, the requirements of 40 CFR 60 Subpart Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-50-4 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
1,000 BBL ORGANIC LIQUID STORAGE TANK (#1100) WITH A SHARED VAPOR RECOVERY SYSTEM (LISTED ON PERMIT UNIT S-37-8)

PERMIT UNIT REQUIREMENTS

1. This tank shall only vent to the vapor recovery system listed on S-37-8. [District Rule 4623, 5.1] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
3. VOC emissions from fugitive emissions sources in this permit unit shall not exceed 0.6 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Permittee shall maintain accurate records of number of fugitive emissions components and calculated emissions using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2a "1995 EPA Protocol Refinery Screening Value Ranges Emission Factors". [District NSR Rule and District Rule 1070] Federally Enforceable Through Title V Permit
5. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
6. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
7. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
8. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
9. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
14. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
15. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
16. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
17. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart Ka. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
18. This unit commenced construction, modification, or reconstruction between May 18, 1978 and July 23, 1984. Therefore, the requirements of 40 CFR 60 Subpart K and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-51-4 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
20,000 BBL FIXED-ROOF ORGANIC LIQUID STORAGE TANK (#20001) WITH A SHARED VAPOR RECOVERY SYSTEM (LISTED ON PERMIT UNIT S-37-8)

PERMIT UNIT REQUIREMENTS

1. This tank shall only vent to the vapor recovery system listed on S-37-8. [District Rule 4623, 5.1] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
3. VOC emissions from fugitive emissions sources in this permit unit shall not exceed 4.3 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Permittee shall maintain accurate records of number of fugitive emissions components and calculated emissions using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2a "1995 EPA Protocol Refinery Screening Value Ranges Emission Factors". [District NSR Rule and District Rule 1070] Federally Enforceable Through Title V Permit
5. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
6. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
7. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
8. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
9. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
14. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
15. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
16. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
17. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart K. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
18. This unit commenced construction, modification, or reconstruction before May 19, 1978. Therefore, the requirements of 40 CFR 60 Subpart Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-52-5 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
10,000 BBL FIXED-ROOF ORGANIC LIQUID STORAGE TANK (#10000) WITH A SHARED VAPOR RECOVERY SYSTEM (LISTED ON PERMIT UNIT S-37-8)

PERMIT UNIT REQUIREMENTS

1. This tank shall only vent to the vapor recovery system listed on S-37-8. [District Rule 4623, 5.1] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
3. VOC emissions from fugitive emissions sources in this permit unit shall not exceed 3.0 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Permittee shall maintain accurate records of number of fugitive emissions components and calculated emissions using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2a "1995 EPA Protocol Refinery Screening Value Ranges Emission Factors". [District NSR Rule and District Rule 1070] Federally Enforceable Through Title V Permit
5. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
6. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
7. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
8. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
9. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
14. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
15. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
16. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
17. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart K. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
18. This unit commenced construction, modification, or reconstruction before May 19, 1978. Therefore, the requirements of 40 CFR 60 Subpart Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-53-4 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
10,000 BBL FIXED-ROOF ORGANIC LIQUID STORAGE TANK (#10002) WITH A SHARED VAPOR RECOVERY SYSTEM (LISTED ON PERMIT UNIT S-37-8)

PERMIT UNIT REQUIREMENTS

1. This tank shall only vent to the vapor recovery system listed on S-37-8. [District Rule 4623, 5.1] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
3. VOC emissions from fugitive emissions sources in this permit unit shall not exceed 1.9 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Permittee shall maintain accurate records of number of fugitive emissions components and calculated emissions using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2a "1995 EPA Protocol Refinery Screening Value Ranges Emission Factors". [District NSR Rule and District Rule 1070] Federally Enforceable Through Title V Permit
5. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
6. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
7. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
8. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
9. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
14. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
15. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
16. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
17. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart K. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
18. This unit commenced construction, modification, or reconstruction before May 19, 1978. Therefore, the requirements of 40 CFR 60 Subpart Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-56-3 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
500 BBL FIXED ROOF ORGANIC LIQUID STORAGE TANK (#505) WITH A SHARED VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT S-37-8

PERMIT UNIT REQUIREMENTS

1. This tank shall only vent to the vapor recovery system listed on S-37-8. [District Rule 4623, 5.1] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
3. VOC emissions from fugitive emissions sources in this permit unit shall not exceed 1.0 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Permittee shall maintain accurate records of number of fugitive emissions components and calculated emissions using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2a "1995 EPA Protocol Refinery Screening Value Ranges Emission Factors". [District NSR Rule and District Rule 1070] Federally Enforceable Through Title V Permit
5. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
6. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
7. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
8. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
9. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
14. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
15. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
16. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-57-6 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
210,000 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK #5017 WITH SHARED VAPOR RECOVERY SYSTEM LISTED IN S-37-8 AND 29 HP CIRCULATION PUMP WITH CLAY FILTER

PERMIT UNIT REQUIREMENTS

1. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained ina leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in District Rule 4623. [District NSR Rule and District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
2. Filter drainings, back wash, and media shall be handled and disposed of in a manner preventing the emission of VOC to the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Liquids circulating through clay filter shall return to the tank from which it was withdrawn. [District NSR Rule] Federally Enforceable Through Title V Permit
4. The operator shall submit to the APCO an operating plan as described in 40 CFR 60.113b(c) and shall operate the closed vent system and monitor the parameters of the system in accordance with the approved operating plan. The operator shall keep a record of the measured values of the parameters monitored in accordance with the approved operating plan. The operating plan shall be retained for the life of the control equipment. [40 CFR 60.113b(c), 60.115b(c)] Federally Enforceable Through Title V Permit
5. Storage vessel shall be equipped with a closed vent system designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections. Emissions from the closed vent system in excess of this limit shall be considered a leak. [40 CFR 60.112b(a)(3)(i), District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. VOC emissions from fugitive emissions sources in this permit unit shall not exceed 5.3 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Permittee shall maintain accurate records of number of fugitive emissions components and calculated emissions using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2a "1995 EPA Protocol Refinery Screening Value Ranges Emission Factors". [District NSR Rule and District Rule 1070] Federally Enforceable Through Title V Permit
8. Operator shall maintain a record showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. [40 CFR 60.116b(b)] Federally Enforceable Through Title V Permit
9. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. If the control device used for this tank is a flare, operator shall submit semiannual reports to the APCO of all periods recorded in which the pilot flame was absent. [40 CFR 60.115b(d)(3)] Federally Enforceable Through Title V Permit
11. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
12. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
13. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
14. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
15. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
16. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
17. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
18. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
19. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
20. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
21. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
22. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. Operator shall determine the presence of VOC leaks by EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases; 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane [40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit

24. Maximum true vapor pressure, for crude oil or refined petroleum products, may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR 60.116b(e)(2)(i)] Federally Enforceable Through Title V Permit

25. Operator shall determine the true vapor pressure of each type of crude oil with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method from available data and record if the true vapor pressure is greater than 0.5 psia. [40 CFR 60.116b(e)(ii)] Federally Enforceable Through Title V Permit

26. Operator shall determine the true vapor pressure of each VOL, other than crude oil or refined petroleum products, from standard reference texts, by ASTM Method D2879, or by using an appropriate method approved by EPA. [40 CFR 60.116b(e)(3)(iii)] Federally Enforceable Through Title V Permit

27. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart Kb (except 60.113b(c)). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

28. This unit commenced construction, modification, or reconstruction after July 23, 1984. Therefore, the requirements of 40 CFR 60 Subpart K and Ka do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-58-2 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
29 HP JP-4 TRUCK LOADING OPERATION INCLUDING TWO EMCO WHEATON API STYLE DRYBREAK BOTTOM LOADING COUPLERS AND HOSES, TWO OPW MODEL 633 VAPOR RECOVERY COUPLERS AND VAPOR RETURN HOSES, 29 HP UNLOADING PUMP, FILTER, AND METER AND CHECK VALVES

PERMIT UNIT REQUIREMENTS

1. The loading rack shall be equipped with bottom loading and a vapor collection and control system such that VOC emissions do not exceed 0.08 pounds per 1000 gallons of organic liquid loaded. [District Rule 4624 and County Rule 413 (Kern)] Federally Enforceable Through Title V Permit
2. The vapor collection and control system shall operate such that the pressure in the delivery tank being loaded does not exceed 18 inches water column pressure and six (6) inches water column vacuum. [District Rule 4624] Federally Enforceable Through Title V Permit
3. All delivery tanks which previously contained organic liquids with a TVP 1.5 psia or greater at the storage container's maximum organic liquid storage temperature shall be filled only at Class 1 loading facilities using bottom loading equipment with a vapor collection and control system operating such that VOC emissions do not exceed 0.08 lb/1000 gallons loaded; or Class 2 loading facilities equipped with a system to control at least 95% of VOC displaced. [District Rule 4624] Federally Enforceable Through Title V Permit
4. Construction, reconstruction (as defined in District Rule 4001) or expansion of any top loading facility shall not be allowed. [District Rule 4624] Federally Enforceable Through Title V Permit
5. Loading and vapor collection and control equipment shall be designed, installed, maintained and operated such that there are no leaks or excess organic liquid drainage at disconnections. A leak shall be defined as the dripping of organic compounds at a rate of more than three drops per minute or the detection of organic compounds, in excess of 1,000 ppmv as methane measured at a distance of one centimeter from the potential source in accordance with EPA Method 21. Excess liquid drainage shall be defined as exceeding 10 mls per average of 3 consecutive disconnects. [District Rule 4624, 5.4, Kern County Rule 413] Federally Enforceable Through Title V Permit
6. During the loading of organic liquids, the operator shall perform and record the results of monthly leak inspections of the loading and vapor collection equipment at each loading arm. Leak inspections shall be conducted using sight, sound, smell and instrument methods to detect leaks. Instrument detection shall be conducted using EPA Method 21 and shall be measured at a distance of one centimeter from the potential source. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: A) Zero air (less than 10 ppm of hydrocarbon in air); and B) Mixture of methane or n-hexane and air at a concentration of about, but less than 1,000 ppm methane or n-hexane. [District Rule 2520] Federally Enforceable Through Title V Permit
7. All equipment that are found leaking shall be repaired or replaced within 72 hours. If the leaking component cannot be repaired or replaced within 72 hours, the component shall be taken out of service until such time the component is repaired or replaced. The repaired or replacement equipment shall be reinspected the first time the equipment is in operation after the repair or replacement. [District Rule 4624]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

8. Corrective steps shall be taken at any time the operator observes excess drainage at disconnect. In addition, the operator shall perform and record the results of monthly drainage inspections at disconnect for each loading arm. If no excess drainage conditions are found during five consecutive monthly inspections, the drainage inspection frequency may be changed from monthly to quarterly. However, if one or more excess drainage condition is found during a quarterly inspection, the inspection frequency shall return to monthly. [District Rule 2520, 9.1, 9.3.2, 9.4.2] Federally Enforceable Through Title V Permit
9. Drainage inspections shall be completed before 10:00 AM the day of inspection. Compliance shall be demonstrated by collecting all drainage at disconnect in a spouted container. The drainage shall be transferred to a graduated cylinder and the volume determined within one (1) minute of collection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. All inspections shall be documented with an inspection log. Inspection records shall include, at a minimum, 1) date of inspection, 2) location and description of any missing, loose, leaking, or damaged equipment and any malfunction requiring repair, 3) corrective steps taken to repair or replace the equipment, 4) test method and results for leak and drainage inspections, 5) location and description of any equipment to be inspected upon commencing operation after repair or replacement and 6) inspector name and signature. [District Rule 4624, 6.1.3]
11. VOC emissions from the vapor collection and control system shall be determined using 40CFR 60.503. "Test Methods and Procedures" and EPA Reference Methods 2A, 2B, 25A and 25B and ARB Method 432, or ARB Method 2-4. [District Rule 4624 and Kern County Rule 413] Federally Enforceable Through Title V Permit
12. Loading of a delivery vessel shall discontinue if its pressure relief valve opens. Corrective action shall be taken should this condition occur. [District Rule 2520] Federally Enforceable Through Title V Permit
13. Vapor return hose shall only be connected to refinery vapor control system and shall be utilized during the loading of each truck. [District NSR Rule] Federally Enforceable Through Title V Permit
14. Hose couplers shall be drybreak type only. [District NSR Rule] Federally Enforceable Through Title V Permit
15. Filter drainings, back wash, and media shall be handled and disposed of in a manner preventing the emission of VOC to the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
16. VOC emission rate shall not exceed 0.63 lb/hr. [District NSR Rule] Federally Enforceable Through Title V Permit
17. Equipment under vapor control shall not vent to atmosphere. [District Rule 4624] Federally Enforceable Through Title V Permit
18. The operator shall keep records of daily liquid throughput and the results of any required leak inspections. The record shall be made available to the APCO, ARB, or EPA during normal business hours. [District Rule 4624]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-59-4 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
20,000 BBL FIXED-ROOF ORGANIC LIQUID STORAGE TANK (#20000) WITH A SHARED VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT S-37-8

PERMIT UNIT REQUIREMENTS

1. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in gas-tight condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in District Rule 4623. [District NSR Rule and District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
2. VOC emissions from fugitive emissions sources in this permit unit shall not exceed 0.9 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Permittee shall maintain accurate records of number of fugitive emissions components and calculated emissions using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2a "1995 EPA Protocol Refinery Screening Value Ranges Emission Factors". [District NSR Rule and District Rule 1070] Federally Enforceable Through Title V Permit
4. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
5. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
6. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
7. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
8. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
10. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
14. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
15. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
16. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart K. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
17. This unit commenced construction, modification, or reconstruction before May 19, 1978. Therefore, the requirements of 40 CFR 60 Subpart Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-61-6 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
800 BBL FIXED ROOF ORGANIC LIQUID STORAGE TANK (#800) WITH A SHARED VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT S-37-8

PERMIT UNIT REQUIREMENTS

1. Tank shall be vented to vapor control system listed in S-37-8 when storing or introducing liquids into the tank with an Reid Vapor Pressure (RVP) greater than 0.4 psia. When storing or introducing liquids into the tank with an RVP less than or equal to 0.4 psia, use of the vapor control system is not required, except for a period of at least one hour after switching from liquids with an RVP greater than 0.4 psia. [District NSR Rule] Federally Enforceable Through Title V Permit
2. When storing liquids with an RVP less than or equal to 0.4 psia, tank throughput shall not exceed an average of 200 bbl/day over the number of days the liquid is stored. When storing liquids with an RVP greater than 0.4 psia and less than or equal to 9.0 psia, tank throughput shall not exceed an average of 1,315 bbl/day over the number of days the liquid is stored. When storing liquids with an RVP greater than 9.0 psia and less than or equal to12.0 psia, tank throughput shall not exceed an average of 876 bbl/day over the number of days the liquid is stored. [District NSR Rule] Federally Enforceable Through Title V Permit
3. VOC emissions from fugitive emissions sources in this permit unit shall not exceed 1.3 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Permittee shall maintain accurate records of number of fugitive emissions components and calculated emissions using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2a "1995 EPA Protocol Refinery Screening Value Ranges Emission Factors". [District NSR Rule and District Rule 1070] Federally Enforceable Through Title V Permit
5. Upon reconnection to the vapor recovery system, permittee shall inspect all piping, fittings, and valves associated with this tank using a portable hydrocarbon analyzer. If any of the components are found to be leaking, the operator shall minimize and eliminate the leak as described in Table 3 of District Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
6. Tank shall be equipped with an operational stored liquid temperature indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Except as otherwise provided on this permit, when connected to the vapor control system, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
8. Except as otherwise provided in this permit, when connected to the vapor control system, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
9. Except as otherwise provided in this permit, when connected to the vapor control system, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
14. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
15. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
16. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
17. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
18. Permittee shall conduct API gravity and true vapor pressure (TVP) testing of the organic liquid, including liquids with a TVP less than 0.5 psia, stored in this tank or representative tank as provided in Section 6.2.1.1 of District Rule 4623, at least once every 24 months during summer (July - September) during any 24 month period in which the tank is operated without being connected to the vapor control system, and/or whenever there is a change in the source or type of organic liquid stored in the tank and the tank is being operated without utilizing the vapor control system. [District NSR Rule and District Rule 4623, 4.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

19. Except for crude oil with a API gravity 26 degrees or less, the TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures from the oil and gas section of "ARB Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588," dated August 1989. As an alternative to using ASTM D 323-94, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and US EPA. In lieu of performing a TVP test, an operator may use Appendix A of District Rule 4623 to determine the TVP of the stored organic liquid provided the storage temperature listed in Appendix A is not exceeded at any time. [District Rule 4623, 6.4.2 and 6.4.3] Federally Enforceable Through Title V Permit
20. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph," as approved by ARB and US EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
21. Permittee shall maintain accurate records of true vapor pressure, temperature of petroleum liquids in the tank, types of liquid stored, and daily liquid records whenever tank is operated without being connected to the vapor control system. Such records shall be made readily available for District inspection upon request for a period of five (5) years. [District Rules 1070, 4623, District NSR Rule] Federally Enforceable Through Title V Permit
22. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-65-4 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
250 BBL FIXED-ROOF ORGANIC LIQUID STORAGE TANK (#250, DEHY NORTH) WITH A SHARED VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT S-37-8

PERMIT UNIT REQUIREMENTS

1. VOC emissions from fugitive emissions sources in this permit unit shall not exceed 1.4 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Permittee shall maintain accurate records of number of fugitive emissions components and calculated emissions using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2a "1995 EPA Protocol Refinery Screening Value Ranges Emission Factors". [District NSR Rule and District Rule 1070] Federally Enforceable Through Title V Permit
3. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
4. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
5. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
6. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
7. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
8. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
9. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
14. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
15. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-66-4 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
250 BBL FIXED-ROOF ORGANIC LIQUID STORAGE TANK (#251, DEHY SOUTH) WITH A SHARED VAPOR RECOVERY SYSTEM (LISTED ON PERMIT UNIT S-37-8)

PERMIT UNIT REQUIREMENTS

1. This tank shall only vent to the vapor recovery system listed on S-37-8. [District Rule 4623, 5.1] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
3. VOC emissions from fugitive emissions sources in this permit unit shall not exceed 4.0 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Permittee shall maintain accurate records of number of fugitive emissions components and calculated emissions using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2a "1995 EPA Protocol Refinery Screening Value Ranges Emission Factors". [District NSR Rule and District Rule 1070] Federally Enforceable Through Title V Permit
5. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
6. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
7. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
8. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
9. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
14. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
15. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
16. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-67-3 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
8,400 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK (#200) WITH VAREC P/R VALVE, 1 HP PUMP, AND TRUCK UNLOADING FILL LINE WITH DRY-BREAK COUPLER

PERMIT UNIT REQUIREMENTS

1. Average daily tank liquid throughput (on annual basis) shall not exceed 2,500 gallons per day. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Truck unloading shall be performed in a manner preventing spillage of petroleum liquid. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Vapor balance hose shall be connected during truck unloading. [District NSR Rule] Federally Enforceable Through Title V Permit
4. True vapor pressure of stored material shall not exceed 2.7 psi. [District NSR Rule] Federally Enforceable Through Title V Permit
5. The pressure-vacuum relief valve shall be set to within ten (10) percent of the maximum allowable working pressure of the tank. The pressure-vacuum relief valve shall be permanently labeled with the operating pressure settings. The pressure-vacuum relief valve shall be properly installed and maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak-free condition except when the operating pressure exceeds the valve set pressure. [District Rule 4623, 5.2]
6. "Leak-free" shall mean a condition without a gas leak or a liquid leak. A gas leak is a reading in excess of 10,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated with methane in accordance with US EPA Method 21. A liquid leak is the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rule 4623]
7. The operator shall conduct TVP testing on the liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in each tank. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
8. Except for crude oil with a API gravity 26 degrees or less, the TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures from the oil and gas section of "ARB Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588," dated August 1989. As an alternative to using ASTM D 323-94, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and US EPA. In lieu of performing a TVP test, an operator may use Appendix A of District Rule 4623 to determine the TVP of the stored organic liquid provided the storage temperature listed in Appendix A is not exceeded at any time. [District Rule 4623, 6.4.2 and 6.4.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph," as approved by ARB and US EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
10. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287-92 (2000) e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)." Sampling for API gravity shall be performed in accordance with ASTM Method D 4057-95 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit
11. The permittee shall keep accurate records of true vapor pressure, storage temperature and types of liquids stored, for a period of five years, and shall make such records available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-71-5 **EXPIRATION DATE:** 08/31/2016

EQUIPMENT DESCRIPTION:
ORGANIC LIQUID TRUCK LOADING/UNLOADING OPERATION INCLUDING TRUCK UNLOADING CONNECTION, TRUCK LOADING HOSE WITH DRY BREAK COUPLER, VAPOR RECOVERY HOSE WITH DRY BREAK CONNECTOR AND PIPING TO PERMITTED TANKS S-37-50 AND S-37-56

PERMIT UNIT REQUIREMENTS

1. The transfer of gasoline from any delivery vessel to any stationary storage container with 250 gallon capacity or more shall not be allowed unless the container is equipped with a permanent submerged fill pipe and an ARB certified Phase I vapor recovery system, which is maintained and operated according to the manufacturers specifications. [District Rule 4621, 5.1.1] Federally Enforceable Through Title V Permit
2. No gasoline shall be placed, stored, or held in any above-ground tank of 250 gallon capacity or more unless it is equipped with a pressure-vacuum valve set to within 10% of the maximum allowable working pressure of the tank. [District Rule 4621, 5.1.2] Federally Enforceable Through Title V Permit
3. Any delivery vessel into which gasoline vapors have been transferred shall be filled only at a loading facility that is equipped with a certified system that prevents at least 95% by weight of the gasoline vapors displaced from entering the atmosphere. The loading facility vapor recovery system shall not create a back pressure in excess of 18 inches water column. [District Rules 4621, 5.2.2, 5.2.5] Federally Enforceable Through Title V Permit
4. No gasoline delivery vessel shall be used or operated unless it is vapor tight. No gasoline delivery vessel shall be operated or loaded unless valid State of California decals are displayed on the cargo tank, attesting to the vapor integrity of the tank as verified by annual performance of CARB required Certification and Test Procedures for Vapor Recovery Systems for Cargo Tanks. [District Rule 4621, 5.2.1 & 5.2.2, Health & Safety Code, section 41962, and CCR, Title 17 section 94004] Federally Enforceable Through Title V Permit
5. The test method to determine vapor tightness of delivery vessels owned or operated by this facility shall be EPA Method 27. [District Rule 4621, 6.2.3] Federally Enforceable Through Title V Permit
6. Loading of a delivery vessel shall discontinue if its pressure relief valve opens. Corrective action shall be taken should this condition occur. [District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
7. Only organic liquids shall be received or loaded. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Equipment shall be operated to prevent spillage. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Trucks shall be pumped dry before hose disconnect. [District NSR Rule] Federally Enforceable Through Title V Permit
10. Vapor return hose shall be connected to refinery vapor recovery system whenever organic liquid is loaded. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Organic liquids loaded shall not exceed 3,000 gallons in any one day. [District NSR Rule and District Rule 4624] Federally Enforceable Through Title V Permit
12. Organic liquids shall be unloaded to tank S-37-56. [District NSR Rule] Federally Enforceable Through Title V Permit
13. All open ended lines shall be capped or equipped with two closed valves when not in use. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

14. VOC emission rate shall not exceed 0.08 lb/1,000 gallons loaded. [District Rule 4624] Federally Enforceable Through Title V Permit
15. VOC emission rate shall not exceed 0.61 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
16. Operator shall keep a daily record of the gallons of organic liquid transferred on any day organic liquid is transferred. Records shall be retained for a minimum of five years and shall be made readily available to the APCO, ARB, or EPA during normal business hours and submitted upon request to the APCO, ARB, or EPA. [District Rule 4624]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-77-13 **EXPIRATION DATE:** 08/31/2016

SECTION: NW25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
36 MMBTU/HR DIESEL HYDROTREATER UNIT INCLUDING A 18 MMBTU/HR CHARGE HEATER WITH ZEECO INCORPORATED MODEL GLSF-11 FREE JET BURNERS, 18 MMBTU/HR STRIPPER HEATER WITH A CALLIDUS LE-CSG LOW NOX BURNER, HYDROGEN REACTOR VESSEL, HYDROGEN RECYCLE GAS SCRUBBER, AND ASSOCIATED PIPING AND COMPONENTS

PERMIT UNIT REQUIREMENTS

1. Spent caustics and waste liquids shall be disposed of in a manner preventing the creation of odors. [District Rule 4102]
2. Operator shall not burn in any fuel gas combustion device any fuel gas that contains hydrogen sulfide (H2S) in excess of 100 ppmv@ 0% O2. [District Rules 2201 ,2520, 9.4.2 and 4301, 5.2.1, & 40 CFR Part 60, Subpart J, 60.104(a)(1)] Federally Enforceable Through Title V Permit
3. The combustion in the fuel gas combustion devices of gases released as a result of start-up, shutdown, upset, malfunction, or the result of relief valve leakage is exempt from the 100 ppmv@ 0% O2 requirement. [District Rules 2201, 4001, Subpart J, 60.104(a)(1)] Federally Enforceable Through Title V Permit
4. All refinery fuel gas combusted in the heaters shall be monitored for H2S content by a continuous emissions monitoring (CEM) system. CEM shall be installed, calibrated, operated, and reported according to EPA guidelines as specified under 40 CFR 60, Subpart J, Specification 7, and general requirements. CEM results shall be calculated on a rolling three (3) hour basis. [District Rules 2201, 4001, Subpart J, 60.105(a)(4) and 60.105(a)(4)(iii)] Federally Enforceable Through Title V Permit
5. Operator shall report all rolling 3-hour periods during which the average concentration of H2S as measured by the H2S continuous monitoring system exceeds 100 ppmv@ 0% O2. [District Rules 2201, 4001, Subpart J, 60.105(e)(3)(ii)] Federally Enforceable Through Title V Permit
6. PM10 emission rates from each heater shall not exceed 0.0076 lb/MMBtu. [District Rules 2201, 2520, 4201, 4301] Federally Enforceable Through Title V Permit
7. Emission rates from the process heater, except during startup and shutdown, shall not exceed any of the following: NOx (as NO2): 25 ppmv @ 3% O2, CO: 50 ppmv @ 3% O2 or VOC: 0.0055 lb/MMBtu. [District Rules 2201, 2520, 4301, 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
8. Emission rates from the stripper heater, except during startup and shutdown, shall not exceed any of the following: NOx (as NO2): 25 ppmv @ 3% O2, CO: 150 ppmv @ 3% O2 or VOC: 0.0055 lb/MMBtu. [District Rules 2201, 2520, 4301, 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
9. Daily combustion emissions from the process heater shall not exceed any of the following: NOx (as NO2): 13.0 lb/day, VOC: 2.4 lb/day, or CO: 16.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Daily combustion emissions from the stripper heater shall not exceed any of the following: NOx (as NO2): 13.0 lb/day, VOC: 2.4 lb/day, or CO: 47.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. The duration of each startup and shutdown period for reactor process heater H1 shall not exceed 12.0 hours and 9.0 hours each, respectively. The duration of each startup and shutdown period for reboiler heater H2 heater shall not exceed 12.0 hours and 5.0 hours, respectively. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
12. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
13. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit
14. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit
15. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit
16. Heater exhaust stacks shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 1081] Federally Enforceable Through Title V Permit
17. Source testing to demonstrate compliance with NOx and CO emission limits shall be conducted not less than once every 12 months, except as provided below. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit
18. Source testing to demonstrate compliance with NOx and CO emission limits shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit
19. If permittee fails any compliance demonstration for NOx or CO emission limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit
20. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
21. Compliance source testing shall be conducted under conditions representative of normal operation. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

23. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

24. The following test methods shall be used, unless otherwise approved by the APCO and EPA: NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, and stack gas oxygen - EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

25. All required source testing shall conform to the compliance testing procedures described in District Rule 1081. [District Rule 1081, and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit

26. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results used to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel. [District Rule 2520, 9.4.2 and 40 CFR 60.48c(g)] Federally Enforceable Through Title V Permit

27. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit

28. Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit

29. Nitrogen oxide (NOx) emission concentrations in ppmv shall be referenced at dry stack gas conditions, and shall be calculated to 3.00 percent by volume stack gas oxygen and averaged over 60 minutes, and lb/MMBtu rates shall be calculated as lb NO2/MMBtu of heat input (hhv). [District Rule 4305, 5.0, 8.2 and/or 4351, 8.1] Federally Enforceable Through Title V Permit

30. Draeger tubes shall be used as an alternative method for measuring fuel gas H2S during scheduled maintenance or unscheduled interruptions of CEMs. Draeger tube use shall be limited to no more than 96 continuous hours and fuel gas H2S shall be checked a minimum of every two hours during scheduled maintenance or unscheduled interruptions of CEMs. Alternate method of measuring fuel gas H2S shall occur no more than 192 hours in any calendar year. [40CFR60.13(i)] Federally Enforceable Through Title V Permit

31. Operator shall maintain all records of the reason for alternative monitoring and required fuel gas H2S monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

32. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320]

33. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320]

34. VOC emission rate from fugitive components associated with this emissions unit shall not exceed 44.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

35. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. Permit holder shall update such records when new components are approved and installed. Components shall be screened and leak rate shall be measured in accordance with the frequency of inspection specified in Rule 4455 as applicable. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

36. Permit unit shall comply with applicable District Rule 4001 (NSPS, Subpart GGG) requirements. [District Rule 4001] Federally Enforceable Through Title V Permit

37. The owner or operator may apply to the Administrator for a determination of equivalency for any means of emission limitation that achieves a reduction in emissions of VOC at least equivalent to the reduction in emissions of VOC achieved by the controls required in Subpart GGG. In doing so the owner or operator shall comply with the requirements of 40 CFR 60.484. [40 CFR 60.592(c)] Federally Enforceable Through Title V Permit

38. Affected facilities for which construction or modification commenced after January 4, 1983 shall comply with applicable requirements of 40CFR, Subpart GGG. [40CFR60.590(a)]]

39. Each Subpart GGG pump in light liquid service (PLLS) shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485(b), except as provided in 40 CFR 60.482-1(c) and 40 CFR 60.482-2(d), (e), and (f). Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. A leak is detected if an instrument reading of 10,000 ppm or greater is measured or if there are indications of liquids dripping from the pump seal. [40 CFR 60.482-2(a) and (b)] Federally Enforceable Through Title V Permit

40. When a leak is detected for any PLLS, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. [40 CFR 60.482-2(c)] Federally Enforceable Through Title V Permit

41. Each Subpart GGG PLLS equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of 40 CFR 60.482-2(a) provided the requirements specified in 40 CFR 60.482-2(d)(1) through (6) are met. [40 CFR 60.482(d)] Federally Enforceable Through Title V Permit

42. Any Subpart GGG PLLS that is designated, as described in 40 CFR 60.486(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 60.482-2(a), (c), and (d) if the pump meets the requirements specified in 40 CFR 60.482-2(e)(1), (2), and (3). [40 CFR 60.482-2(e)] Federally Enforceable Through Title V Permit

43. If any Subpart GGG PLLS is equipped with a closed vent system capable of capturing and transporting leakage from the seal or seals to a control device that complies with the requirements of 40 CFR 60.482-10, it is exempt from the requirements of 40 CFR 60.482-2(a) through (e). [40 CFR 60.482-2(f)] Federally Enforceable Through Title V Permit

44. Any Subpart GGG pump in PLLS that is designated, as described in 40 CFR 60.486(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of 40 CFR 60.482-2(a) and 40 CFR 60.482-2(d)(4) through (6) if: 1). The owner or operator of the pump demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-2(a); and 2) The owner or operator of the pump has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in 40 CFR 60.482-2(c) if a leak is detected. [40 CFR 60.482-2(g)] Federally Enforceable Through Title V Permit

45. Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in 40 CFR 60.485(c). [40 CFR 60.482-4(a)] Federally Enforceable Through Title V Permit

46. After each pressure release, the Subpart GGG pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in 40 CFR 60.482-9. No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in 40 CFR 60.485(c). [40 CFR 60.482-4(b)] Federally Enforceable Through Title V Permit

47. Any Subpart GGG pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in 40 CFR 60.482-10 is exempted from the requirements of 40 CFR 60.482-4(a) and (b). [40 CFR 60.482-4(c)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

48. Any pressure relief device that is equipped with a rupture disk upstream of the Subpart GGG pressure relief device is exempt from the 40 CFR 60.482-4(a) and (b), provided the owner or operator complies with the requirements in 40 CFR 60.482-4(d)(2) of this section. After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 60.482-9. [40 CFR 60.482-4(d)] Federally Enforceable Through Title V Permit

49. Except for in-situ sampling systems and sampling systems without purges, each Subpart GGG sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR 60.482-1(c). Each closed-purge, closed-loop, or closed-vent system shall comply with the requirements specified in 40 CFR 60.482-5(b)(1), (2), (3), and (4). [40 CFR 60.482-5(a), (b), and (c)] Federally Enforceable Through Title V Permit

50. Each Subpart GGG open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR 60.482-1(c). The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line. When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with this condition at all other times. [40 CFR 60.482-6(a) and (c)] Federally Enforceable Through Title V Permit

51. Each Subpart GGG open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed. [40 CFR 60.482-6(b)] Federally Enforceable Through Title V Permit

52. Subpart GGG open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of 40 CFR 60.482-6(a), (b) and (c). [40 CFR 60.482-6(d)] Federally Enforceable Through Title V Permit

53. Subpart GGG open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in 40 CFR 60.482-6(a) through (c) are exempt from the requirements of 40 CFR 60.482-6(a) through (c). [40 CFR 60.482-6(e)] Federally Enforceable Through Title V Permit

54. Each Subpart GGG valve in gas/vapor service and in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485(b) and shall comply with 40 CFR 60.482-7(b) through (e), except as provided in 40 CFR 60.482-7(f), (g), and (h), 40 CFR 60.483-1, 40 CFR 60.483-2, and 40 CFR 60.482-1(c). A leak is detected if an instrument reading of 10,000 ppm or greater is measured. [40 CFR 60.482-7(a) and (b)] Federally Enforceable Through Title V Permit

55. Any Subpart GGG valve in gas/vapor service or in light liquid service for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected. If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months. [40 CFR 60.482-7(c)] Federally Enforceable Through Title V Permit

56. When a leak is detected for any Subpart GGG valve in gas/vapor service or in light liquid service, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices specified in 40 CFR 60.482-7(e)(1), (2), (3), and (4), where practicable. [40 CFR 60.482-7(d) and (e)] Federally Enforceable Through Title V Permit

57. Any Subpart GGG valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 60.482-7(a) if the valve meets the requirements specified in 40 CFR 60.482-7(f)(1), (2), and (3). [40 CFR 60.482-7(f)] Federally Enforceable Through Title V Permit

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58. Any Subpart GGG valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7(a) if: 1) The owner or operator of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-7(a); and 2) The owner or operator of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times. [40 CFR 60.482-7(g)] Federally Enforceable Through Title V Permit

59. Any Subpart GGG valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(f)(2), as a difficult-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7(a) if: 1) The owner or operator of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface; 2) The process unit within which the valve is located either becomes an affected facility through 40 CFR 60.14 or 40 CFR 60.15 or the owner or operator designates less than 3.0 percent of the total number of valves as difficult-to-monitor; and 3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year. [40 CFR 60.482-7(h)] Federally Enforceable Through Title V Permit

60. The owner or operator may elect to comply with the applicable provisions for Subpart GGG valves in gas/vapor service and in light liquid service as specified in 40 CFR 60.483-1 and 60.483-2. [40 CFR 60.592(b)] Federally Enforceable Through Title V Permit

61. If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at Subpart GGG pumps and valves in heavy liquid service, Subpart GGG pressure relief devices in light liquid or heavy liquid service, and Subpart GGG connectors, the owner or operator shall follow either one of the following procedures: 1) The owner or operator shall monitor the equipment within 5 days by the method specified in 40 CFR 60.485(b) and shall comply with the requirements of 40 CFR 60.482-8(b) through (d); or 2) The owner or operator shall eliminate the visual, audible, olfactory, or other indication of a potential leak. A leak is detected if an instrument reading of 10,000 ppm or greater is measured. [40 CFR 60.482-8(a) and (b)] Federally Enforceable Through Title V Permit

62. When a leak is detected in Subpart GGG pumps and valves in heavy liquid service, Subpart GGG pressure relief devices in light liquid or heavy liquid service, and Subpart GGG connectors, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices described under 40 CFR 60.482-7(e). [40 CFR 60.482-8(c) and (d)] Federally Enforceable Through Title V Permit

63. Delay of Subpart GGG leak repair will be allowed if the repair is technologically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown. Delay of repair is allowed for equipment which is isolated from the process and which does not remain in VOC service. Delay of repair beyond a process unit shutdown will be allowed for a valve, if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown. [40 CFR 60.482-9(a)(b)(e)] Federally Enforceable Through Title V Permit

64. Delay of leak repair for Subpart GGG valves will be allowed if the owner or operator demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair and when repair procedures are effected and when repair procedures ar effected, the purged material is collected and destroyed or recovered in a control device complying with 40 CFR 60.482-10. Delay of leak repair for pumps will be allowed if the repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and repair is completed as soon as practicable, but no later than 6 months after the leak was detected. [40 cfr 60.482-9(c)(d)] Federally Enforceable Through Title V Permit

65. For Subpart GGG closed vent systems and control devices, vapor recovery systems shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, whichever is less stringent. [40 CFR 60.482-10(b)] Federally Enforceable Through Title V Permit

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66. For Subpart GGG closed vent systems and control devices, enclosed combustion devices shall be designed and operated to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816 degrees C. [40 CFR 60.482-10(c)] Federally Enforceable Through Title V Permit

67. Flares used to comply with Subpart GGG shall comply with the requirements of 40 CFR 60.18. [40 CFR 60.482-10(d)] Federally Enforceable Through Title V Permit

68. Owners or operators of control devices used to comply with the provisions of Subpart GGG shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs. [40 CFR 60.482-10(e)] Federally Enforceable Through Title V Permit

69. Except as provided in 40 CFR 60.482-10(i) through (k), each closed vent system used to comply with the provisions of Subpart GGG shall be inspected according to the procedures and schedule specified in 40 CFR 60.482-10(f)(1) and (f)(2). Leaks, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, shall be repaired as soon as practicable except as provided in 40 CFR 60.482-10(h). A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. Repair shall be completed no later than 15 calendar days after the leak is detected. [40 CFR 60.482-10(f) and (g)] Federally Enforceable Through Title V Permit

70. Delay of repair of a Subpart GGG closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown. [40 CFR 60.482-10(h)] Federally Enforceable Through Title V Permit

71. If a Subpart GGG vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2). [40 CFR 60.482-10(i)] Federally Enforceable Through Title V Permit

72. Any parts of the Subpart GGG closed vent system that are designated, as described in 40 CFR 60.482-10(l)(1), as unsafe to inspect are exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR 60.482-10 (j)(1) and (j)(2). [40 CFR 60.482-10(j)] Federally Enforceable Through Title V Permit

73. Any parts of the Subpart GGG closed vent system that are designated, as described in 40 CFR 60.482-10(l)(2), as difficult to inspect are exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR 60.482-10(k)(1) through (k)(3). [40 CFR 60.482-10(k)] Federally Enforceable Through Title V Permit

74. The owner or operator shall record the following information: 1) Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment; 2) Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment; 3) For each inspection during which a leak is detected, a record of the information specified in 40 CFR 60.486(c); 4) For each inspection conducted in accordance with 40 CFR 60.485(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected; and 5) For each visual inspection conducted in accordance with 40 CFR 60.482-10(f)(1)(ii) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected. [40 CFR 60.482-10(l)] Federally Enforceable Through Title V Permit

75. Closed vent systems and control devices used to comply with provisions Subpart GGG shall be operated at all times when emissions may be vented to them. [40 CFR 60.482-10(m)] Federally Enforceable Through Title V Permit

76. In conducting the Subpart GGG performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in 40 CFR 60, Appendix A or other methods and procedures as specified in 40 CFR 60.485, except as provided in 40 CFR 60.8(b). [40 CFR 60.485(a)] Federally Enforceable Through Title V Permit

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77. The owner or operator shall determine compliance with the standards in 40 CFR 60.482, 60.483, and 60.484 as follows: Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21. The following calibration gases shall be used: (i) Zero air (less than 10 ppm of hydrocarbon in air); and (ii) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [40 CFR 60.485(b)] Federally Enforceable Through Title V Permit

78. The owner or operator shall determine compliance with the no detectable emission standards in 40 CFR 60.482-2(e), 60.482-3(i), 60.482-4, 60.482-7(f), and 60.482-10(e) as follows: 1) The requirements of 40 CFR 60.485(b) shall apply. 2) Method 21 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance. [40 CFR 60.485(c)] Federally Enforceable Through Title V Permit

79. The owner or operator shall test each piece of Subpart GGG equipment unless demonstrated that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used: 1) Procedures that conform to the general methods in ASTM E260-73, 91, or 96, E168-67, 77, or 92, E169-63, 77, or 93 (incorporated by reference as seen in 40 CFR 60.17) shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment; 2) Organic compounds that are considered by the Administrator to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid; and 3) Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Administrator disagrees with the judgment, the previous two procedures as specified in 40 CFR 60.485(d)(1) and (2) shall be used to resolve the disagreement. [40 CFR 60.485(d)] Federally Enforceable Through Title V Permit

80. The owner or operator shall demonstrate that the Subpart GGG equipment is in light liquid service by showing that all the following conditions apply: 1) The vapor pressure of one or more of the components is greater than 0.3 kPa at 20 degrees C (1.2 in. H2O at 68 degrees F). Standard reference texts or ASTM D2879-83, 96, or 97 (incorporated by reference as seen in 40 CFR 60.17) shall be used to determine the vapor pressures; 2) The total concentration of the pure components having a vapor pressure greater than 0.3 kPa at 20 degrees Celsius is equal to or greater than 20 percent by weight; and 3) The fluid is a liquid at operating conditions. [40 CFR 60.485(e)] Federally Enforceable Through Title V Permit

81. Samples used in conjunction with 40 CFR 60.485(d), (e), and (g) shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare. [40 CFR 60.485(f)] Federally Enforceable Through Title V Permit

82. The owner or operator shall determine compliance with the standards of flares as specified in 40 CFR 60.485(g)(1), (2), (3), (4), (5), (6), and (7). [40 CFR 60.485(g)] Federally Enforceable Through Title V Permit

83. An owner or operator of more than one affected facility subject to the provisions Subpart GGG may comply with the recordkeeping requirements for these facilities in one recordkeeping system if the system identifies each record by each facility. [40 CFR 60.486(a)] Federally Enforceable Through Title V Permit

84. When each Subpart GGG leak is detected as specified in 40 CFR 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following requirements apply: 1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment; 2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR 60.482-7(c) and no leak has been detected during those 2 months; and 3) The identification on equipment except on a valve, may be removed after it has been repaired. [40 CFR 60.486(b)] Federally Enforceable Through Title V Permit

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85. When each Subpart GGG leak is detected as specified in 40 CFR 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following information shall be recorded in a log and shall be kept for 5 years in a readily accessible location: 1) The instrument and operator identification numbers and the equipment identification number; 2) The date the leak was detected and the dates of each attempt to repair the leak; 3) Repair methods applied in each attempt to repair the leak; 4) ``Above 10,000" if the maximum instrument reading measured by the methods specified in 40 CFR 60.485(a) after each repair attempt is equal to or greater than 10,000 ppm; 5) ``Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak; 6) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown; 7) The expected date of successful repair of the leak if a leak is not repaired within 15 days; 8) Dates of process unit shutdown that occur while the equipment is unrepaired; and 9) The date of successful repair of the leak. [40 CFR 60.486(c) and District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

86. The following information pertaining to the design requirements for Subpart GGG closed vent systems and control devices described in 40 CFR 60.482-10 shall be recorded and kept in a readily accessible location: 1) Detailed schematics, design specifications, and piping and instrumentation diagrams; 2) The dates and descriptions of any changes in the design specifications; 3) A description of the parameter or parameters monitored, as required in 40 CFR 60.482-10(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring; 4) Periods when the closed vent systems and control devices required in 40 CFR 60.482-2, 60.482-3, 60.482-4, and 60.482-5 are not operated as designed, including periods when a flare pilot light does not have a flame; and 5) Dates of startups and shutdowns of the closed vent systems and control devices required in 40 CFR 60.482-2, 60.482-3, 60.482-4, and 60.482-5. [40 CFR 60.486(d)] Federally Enforceable Through Title V Permit

87. The following information pertaining to all equipment subject to the requirements in 40 CFR 60.482-1 to 60.482-10 shall be recorded in a log that is kept in a readily accessible location: 1) A list of identification numbers for equipment subject to the requirements of Subpart GGG; 2) (i) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 40 CFR 60.482-2(e), 60.482-3(i) and 60.482-7(f). (ii) The designation of equipment as subject to the requirements of 40 CFR 60.482-2(e), 60.482-3(i) and 60.482-7(f) shall be signed by the owner or operator; 3) A list of equipment identification numbers for pressure relief devices required to comply with 60.482-4; 4) (i) The dates of each compliance test as required in 40 CFR 60.482-2(e), 60.482-3(i), 60.482-4, and 60.482-7(f). (ii) The background level measured during each compliance test. (iii) The maximum instrument reading measured at the equipment during each compliance test; and 5) A list of identification numbers for equipment in vacuum service. [40 CFR 60.486(e)] Federally Enforceable Through Title V Permit

88. The following information pertaining to all Subpart GGG valves subject to the requirements of 40 CFR 60.482-7(g) and (h) and to all Subpart GGG pumps subject to the requirements of 40 CFR 60.482-2(g) shall be recorded in a log that is kept in a readily accessible location: 1) A list of identification numbers for valves and pumps that are designated as unsafe-to-monitor, an explanation for each valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump; and 2) A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve. [40 CFR 60.486(f)] Federally Enforceable Through Title V Permit

89. The following information shall be recorded for Subpart GGG valves complying with 40 CFR 60.483-2: 1) A schedule of monitoring; 2) The percent of valves found leaking during each monitoring period. [40 CFR 60.486(g)] Federally Enforceable Through Title V Permit

90. The following information shall be recorded in a log that is kept in a readily accessible location: 1) Design criterion required in 40 CFR 60.482-2(d)(5) and 60.482-3(e)(2) and explanation of the design criterion; and 2) Any changes to this criterion and the reasons for the changes. [40 CFR 60.486(h)] Federally Enforceable Through Title V Permit

91. The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in 40 CFR 60.480(d): 1) An analysis demonstrating the design capacity of the affected facility; 2) A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol; and 3) An analysis demonstrating that equipment is not in VOC service. [40 CFR 60.486(i)] Federally Enforceable Through Title V Permit

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92. Information and data used to demonstrate that a piece of equipment is not in Subpart GGG VOC service shall be recorded in a log that is kept in a readily accessible location. [40 CFR 60.486(j)] Federally Enforceable Through Title V Permit

93. The provisions of 40 CFR 60.7 (b) and (d) do not apply to affected facilities subject to Subpart GGG. [40 CFR 60.486(k)] Federally Enforceable Through Title V Permit

94. All Subpart GGG semiannual reports to the Administrator shall include the following information, summarized from the information in 40 CFR 60.486: 1) Process unit identification; 2) For each month during the semiannual reporting period, i) Number of valves for which leaks were detected as described in 40 CFR 60.482-7(b) or 40 CFR 60.483-2, (ii) Number of valves for which leaks were not repaired as required in 40 CFR 60.482-7(d)(1), (iii) Number of pumps for which leaks were detected as described in 40 CFR 60.482-2(b) and (d)(6)(i), (iv) Number of pumps for which leaks were not repaired as required in 40 CFR 60.482-2(c)(1) and (d)(6)(ii), (v) Number of compressors for which leaks were detected as described in 40 CFR 60.482-3(f), (vi) Number of compressors for which leaks were not repaired as required in 40 CFR 60.482-3(g)(1), and (vii) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible; 3) Dates of process unit shutdowns which occurred within the semiannual reporting period; 4) Revisions to items reported in the semiannual report if changes have occurred since the initial report, as required in 40 CFR 60.487 (a) and (b), or subsequent revisions to the initial report. [40 CFR 60.487(c)] Federally Enforceable Through Title V Permit

95. An owner or operator electing to comply with the provisions of 40 CFR 60.483-1 and 60.483-2 shall notify the Administrator of the alternative standard selected 90 days before implementing either of the provisions. [40 CFR 60.487(d)] Federally Enforceable Through Title V Permit

96. An owner or operator shall report the results of all performance tests in accordance with 40 CFR 60.8 of the General Provisions. The provisions of 40 CFR 60.8(d) do not apply to affected facilities subject to the provisions of Subpart GGG except that an owner or operator must notify the Administrator of the schedule for the initial performance tests at least 30 days before the initial performance tests. [40 CFR 60.487(e)] Federally Enforceable Through Title V Permit

97. The Subpart GGG semiannual reporting requirements of 40 CFR 60.487(a), (b), and (c) remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with the requirements of 40 CFR 60.487(a), (b), and (c), provided that they comply with the requirements established by the State. [40 CFR 60.487(f)] Federally Enforceable Through Title V Permit

98. Compressors are exempt from the standards of Subpart GGG if the owner or operator demonstrates that a compressor is in hydrogen service. Each compressor is presumed not to be in hydrogen service unless an owner or operator demonstrates that the piece of equipment is in hydrogen service. For a piece of equipment to be considered in hydrogen service, it must be determined that the percent hydrogen content can be reasonably expected always to exceed 50 percent by volume. For purposes of determining the percent hydrogen content in the process fluid that is contained in or contacts a compressor, procedures that conform to the general method described in ASTM E-260, E-168, or E-169 shall be used. An owner or operator may use engineering judgment to demonstrate that the percent content exceeds 50 percent by volume, provided the engineering judgment demonstrates that the content clearly exceeds 50 percent by volume. When an owner or operator and the Administrator do not agree on whether a piece of equipment is in hydrogen service, however, the procedures that conform to the general method described in ASTM E-260, E-168, or E-169 shall be used to resolve the disagreement. If an owner or operator determines that a piece of equipment is in hydrogen service, the determination can be revised only after following the procedures that conform to the general method described in ASTM E-260, E-168, or E-169. [40 CFR 60.593(b)] Federally Enforceable Through Title V Permit

99. Any existing reciprocating compressor that becomes an affected facility under provisions of 40 CFR 60.14 or 40 CFR 60.15 is exempt from 40 CFR 60.482-3 (a), (b), (c), (d), (e), and (h) provided the owner or operator demonstrates that recasting the distance piece or replacing the compressor are the only options available to bring the compressor into compliance with the provisions of 40 CFR 60.482-3 (a), (b), (c), (d), (e), and (h). [40 CFR 60.593(c)] Federally Enforceable Through Title V Permit

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100. For compliance with Subpart GGG an owner or operator may use the following provision in addition to 40 CFR 60.485(e): Equipment is in light liquid service if the percent evaporated is greater than 10 percent at 150 øC as determined by ASTM Method D86-78, 82, 90, 95, or 96. [40 CFR 60.593(d)] Federally Enforceable Through Title V Permit

101. Equipment that is in vacuum service is excluded from the requirements of 40 CFR 60.482-2 to 40 CFR 60.482-10 if it is identified as required in 40 CFR 60.486(e)(5). [40 CFR 60.482-1(d)] Federally Enforceable Through Title V Permit

102. Permittee shall comply with all applicable testing, recordkeeping, and reporting requirements specified in Rule 4001 - New Source Performance Standards, including but not limited to Subparts A, Dc and J. [District Rule 4001] Federally Enforceable Through Title V Permit

103. Operators shall not depressurize any vessel containing VOCs unless the process unit turnaround is accomplished by employing one of the following operating procedures: The organic vapors shall either be recovered, added to the refinery fuel gas system and combusted; or controlled and piped to an appropriate firebox or incinerated for combustion; or flared, until the pressure within the process vessel is as close to atmospheric pressure as is possible. All process vessels shall be depressurized into the control facilities to less than 1020 mm Hg (5 psig) before venting/opening to atmosphere. All organic compounds which emerge from a refinery process vessel during the purging of said vessel and which otherwise would be emitted to the atmosphere shall be either directed to a flare or incinerator or shall be used for fuel until such disposition of emissions is not technically feasible or is less safe than atmospheric venting. [District Rule 4454, 4.0] Federally Enforceable Through Title V Permit

104. Heaters shall be fired only on purchased commercial natural gas, refinery fuel gas, or any combination thereof. [District Rule 2201, 4001] Federally Enforceable Through Title V Permit

105. Except for complying with the applicable requirements of Sections 6.1 and 7.3, the requirements of this rule shall not apply to 1) components subject to Rule 4623 (adopted 5/19/05), 2) pressure relief devices, pumps, and compressors equipped with a closed vent system as defined in Section 3.0, 3) components buried below ground, 4) components exclusively handling liquid streams which have less than 10 percent by weight (<10 wt%) evaporation at 150 C, 5) components exclusively handling liquid streams with a VOC content less than ten percent by weight (<10 wt%), 6) components exclusively handling gas/vapor streams with a VOC content of less than one percent by weight (<1wt%), 7) components incorporated in lines exclusively in vacuum service, 8) components exclusively handling commercial natural gas, and 9) one-half inch nominal or less stainless steel tube fittings which have been demonstrated to the Air Pollution Control Officer (APCO) to be leak-free based on initial inspection. [District Rule 4455, 4.1 & 4.2] Federally Enforceable Through Title V Permit

106. Except for components subject to Rule 4623 (Storage of Organic Liquids) or for components included in the inspection and maintenance (I&M) program implemented pursuant to Section 5.7 of Rule 4623, the operator shall not use any component that leaks in excess of the allowable leak standards of Rule 4455, or is found to be in violation of the provisions specified in Section 5.1.3. A component identified as leaking in excess of an allowable leak standard may be used provided it has been identified with a tag for repair, has been repaired, or is awaiting re-inspection after repair, within the applicable time period specified within the rule. [District Rule 4455, 5.1.1] Federally Enforceable Through Title V Permit

107. Each hatch shall be closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4455, 5.1.2] Federally Enforceable Through Title V Permit

108. The operator shall be in violation of Rule 4455 if any District inspection demonstrates that one or more of the conditions in Section 5.1.4 (Leak Standards) exist at the facility. [District Rule 4455, 5.1.3.1] Federally Enforceable Through Title V Permit

109. Except for annual operator inspection described in Section 5.1.3.2.3, any operator inspection that demonstrates that one or more of the conditions in Section 5.1.4 exist at the facility shall not constitute a violation of Rule 4455 if the leaking components are repaired as soon as practicable but not later than the time frame specified in Rule 4455. Such components shall not be counted towards determination of compliance with the provisions of Section 5.1.4. [District Rule 4455, 5.1.3.2.1] Federally Enforceable Through Title V Permit

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110. Leaking components detected during operator inspection pursuant Section 5.1.3.2.1 that are not repaired, replaced, or removed from operation as soon as practicable but not later than the time frame specified in Rule 4455 shall be counted toward determination of compliance with the provisions of Section 5.1.4. [District Rule 4455, 5.1.3.2.2] Federally Enforceable Through Title V Permit

111. Any operator inspection conducted annually for a component type (including operator annual inspections pursuant to Section 5.2.5, 5.2.6, 5.2.7, or 5.2.8) that demonstrates one or more of the conditions in Section 5.1.4 exist at the facility shall constitute a violation of Rule 4455 regardless of whether or not the leaking components are repaired, replaced, or removed from operation within the allowable repair time frame specified in Rule 4455. [District Rule 4455, 5.1.3.2.3] Federally Enforceable Through Title V Permit

112. A component shall be considered leaking if one or more of the conditions specified in Sections 5.1.4.1 through 5.1.4.4 of Rule 4455 exist at the facility. Readings shall be taken as methane using a portable hydrocarbon detection instrument and shall be made in accordance with the methods specified in Section 6.4.1 of Rule 4455. [District Rule 4455, 5.1.4] Federally Enforceable Through Title V Permit

113. The operator shall audio-visually inspect for leaks all accessible operating pumps, compressors and Pressure Relief Devices (PRDs) in service at least once every 24 hours, except when operators do not report to the facility for that given 24 hours. Any identified leak that cannot be immediately repaired shall be reinspected within 24 hours using a portable analyzer. If a leak is found, it shall be repaired as soon as practical but not later than the time frame specified in Table 3. [District Rule 4455, 5.2.1 & 5.2.2] Federally Enforceable Through Title V Permit

114. The operator shall inspect all components at least once every calendar quarter, except for inaccessible components, unsafe-to-monitor components and pipes. Inaccessible components, unsafe-to-monitor components and pipes shall be inspected in accordance with the requirements set forth in Sections 5.2.5, 5.2.6, and 5.2.7. New, replaced, or repaired fittings, flanges and threaded connections shall be inspected immediately after being placed into service. Components shall be inspected using EPA Method 21. [District Rule 4455, 5.2.3, 5.2.4, 5.2.5, 5.2.6 & 5.2.7] Federally Enforceable Through Title V Permit

115. The operator may apply for a written approval from the APCO to change the inspection frequency from quarterly to annually for a component type, provided the operator meets all the criteria specified in Sections 5.2.8.1 through 5.2.8.3. This approval shall apply to accessible component types, specifically designated by the APCO, except pumps, compressors, and PRDs which shall continue to be inspected on a quarterly basis. [District Rule 4455, 5.2.8] Federally Enforceable Through Title V Permit

116. An annual inspection frequency approved by the APCO shall revert to quarterly inspection frequency for a component type if either the operator inspection or District inspection demonstrates that a violation of the provisions of Sections 5.1, 5.2 and 5.3 of the rule exists for that component type, or the APCO issued a Notice of Violation for violating any of the provisions of Rule 4455 during the annual inspection period for that component type. When the inspection frequency changes from annual to quarterly inspections, the operator shall notify the APCO in writing within five (5) calendar days after changing the inspection frequency, giving the reason(s) and date of change to quarterly inspection frequency. [District Rule 4455, 5.2.9 & 5.2.10] Federally Enforceable Through Title V Permit

117. The operator shall initially inspect a process PRD that releases to the atmosphere as soon as practicable but not later than 24 hours after the time of the release. To insure that the process PRD is operating properly, and is leak-free, the operator shall re-inspect the process PRD not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the date of the release using EPA Method 21. If the process PRD is found to be leaking at either inspection, the PRD leak shall be treated as if the leak was found during quarterly operator inspections. [District Rule 4455, 5.2.11] Federally Enforceable Through Title V Permit

118. Except for process PRD, a component shall be inspected within 15 calendar days after repairing the leak or replacing the component using EPA Method 21. [District Rule 4455, 5.2.12] Federally Enforceable Through Title V Permit

119. A District inspection in no way fulfills any of the mandatory inspection requirements that are placed upon operators and cannot be used or counted as an inspection required of an operator. Any attempt by an operator to count such District inspections as part of the mandatory operator's inspections is considered to be willful circumvention and is a violation of this rule. [District Rule 4455, 5.2.13] Federally Enforceable Through Title V Permit

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120. Upon detection of a leaking component, the operator shall affix to that component a weatherproof readily visible tag that contains the information specified in Section 5.3.3. The tag shall remain affixed to the component until the leaking component has been repaired or replaced; has been re-inspected using EPA Method 21; and is found to be in compliance with the requirements of Rule 4455. [District Rule 4455, 5.3.1 5.3.2 and 5.3.3] Federally Enforceable Through Title V Permit

121. An operator shall minimize all component leaks immediately to the extent possible, but not later than one (1) hour after detection of leaks in order to stop or reduce leakage to the atmosphere. [District Rule 4455, 5.3.4] Federally Enforceable Through Title V Permit

122. If the leak has been minimized but the leak still exceeds the applicable leak standards of Rule 4455, an operator shall repair or replace the leaking component, vent the leaking component to a closed vent system, or remove the leaking component from operation as soon as practicable but not later than the time period specified in Table 3. For each calendar quarter, the operator may be allowed to extend the repair period as specified in Table 3, for a total number of leaking components, not to exceed 0.05 percent of the number of components inspected, by type, rounded upward to the nearest integer where required. [District Rule 4455, 5.3.5] Federally Enforceable Through Title V Permit

123. If the leaking component is an essential component or a critical component and which cannot be immediately shut down for repairs, the operator shall minimize the leak within one hour after detection of the leak. If the leak has been minimized, but the leak still exceeds any of the applicable leak standards of Rule 4455, the essential component or critical component shall be repaired or replaced to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection, whichever comes earlier. [District Rule 4455 5.3.6] Federally Enforceable Through Title V Permit

124. For any component that has incurred five repair actions for major gas leaks or major liquid leaks, or any combination of major gas leaks and major liquid leaks within a continuous 12-month period, the operator shall comply with at least one of the requirements specified in Sections 5.3.7.1, 5.3.7.2, 5.3.7.3, or 5.3.7.4 by the applicable deadlines specified in Sections 5.3.7.5 and 5.3.7.6. If the original leaking component is replaced with a new like-in-kind component before incurring five repair actions for major leaks within 12-consecutive months, the repair count shall start over for the new component. An entire compressor or pump need not be replaced provided the compressor part(s) or pump part(s) that have incurred five repair actions as described in Section 5.3.7 are brought into compliance with at least one of the requirements of Sections 5.3.7.1 through 5.3.7.6. [District Rule 4455, 5.3.7] Federally Enforceable Through Title V Permit

125. The operator shall monitor process PRD by using electronic process control instrumentation that allows for real time continuous parameter monitoring or by using telltale indicators for the process PRD where parameter monitoring is not feasible. [District Rule 4455, 5.4.1] Federally Enforceable Through Title V Permit

126. After a release from a process PRD in excess of 500 pounds of VOC in a continuous 24-hour period, the operator shall immediately conduct a failure analysis and implement corrective actions as soon as practicable but not later than 30 days to prevent the reoccurrence of similar release. For refineries processing greater than 20,000 barrels of crude oil per day, any subsequent release in excess of 500 pounds of VOC within a continuous 24-hour period shall be subject to the requirements of Section 5.4.5. [District Rule 4455, 5.4.3 & 5.4.4] Federally Enforceable Through Title V Permit

127. The operator of a refinery processing greater than 20,000 barrels of crude oil per day shall connect all process PRDs serving that process equipment to an APCO-approved closed vent system as defined in Section 3.0 if any of the conditions specified in Sections 5.4.5.1 and 5.4.5.2 occurs. Process PRDs subject to the provisions of Section 5.4.5 shall be connected to an APCO-approved closed-vent system as soon as practicable, but no later than the first turnaround after the requirement to connect becomes effective. [District Rule 4455, 5.4.5] Federally Enforceable Through Title V Permit

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128. All major components and critical components shall be physically identified clearly and visibly for inspection, repair, and recordkeeping purposes. The physical identification shall consist of labels, tags, manufacturer's nameplate identifier, serial number, or model number, or other system approved by the APCO that enables an operator or District personnel to locate each individual component. The operator shall replace tags or labels that become missing or unreadable as soon as practicable but not later than 24 hours after discovery. The operator shall comply with the requirements of Sections 6.1.4 if there is any change in the description of major components or critical components. [District Rule 4455, 5.5.1 & 5.5.2] Federally Enforceable Through Title V Permit

129. The operator shall keep a copy of the operator management plan at the facility and make it available to the APCO, ARB and US EPA upon request. By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved operator management plan. [District Rule 4455, 6.1.2 & 6.1.4] Federally Enforceable Through Title V Permit

130. The operator shall maintain an inspection log containing, at a minimum, 1) total number of components inspected, and total number and percentage of leaking components found by component types, 2) location, type, name or description of each leaking component, and description of any unit where the leaking component is found, 3) date of leak detection and method of leak detection, 4) for gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak, 5) date of repair, replacement, or removal from operation of leaking components, 6) identification and location of essential component and critical components found leaking that cannot be repaired until the next process unit turnaround or not later one year after leak detection, whichever comes earlier, 7) methods used to minimize the leak from essential components and critical components that cannot be repaired until the next process unit turnaround or not later one year after leak detection, whichever comes earlier, 8) after the component is repaired or is replaced, the date of reinspection and the leak concentration in ppmv, 9) inspector's name, business mailing address, and business telephone number, and 10) the facility operator responsible for the inspection and repair program shall sign and date the inspection log certifying the accuracy of the information recorded in the log. [District Rule 4455, 6.2.1] Federally Enforceable Through Title V Permit

131. Records of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components, including a copy of current calibration gas certification from the vendor of said calibration gas cylinder, the date of calibration, concentration of calibration gas, analyzer reading of calibration gas before adjustment, instrument reading of calibration gas after adjustment, calibration gas expiration date, and calibration gas cylinder pressure at the time of calibration. [District Rule 4455, 6.2.3] Federally Enforceable Through Title V Permit

132. The operator shall notify the APCO, by telephone or other methods approved by the APCO, of any process PRD release described in Sections 5.4.4 and 5.4.5, and any release in excess of the reportable quantity limits as stipulated in 40 CFR, Part 117, Part 302 and Part 355, including any release in excess of 100 pounds of VOC, within one hour of such occurrence or within one hour of the time said person knew or reasonably should have known of its occurrence. [District Rule 4455, 6.3.1] Federally Enforceable Through Title V Permit

133. The operator shall submit a written report to the APCO within thirty (30) calendar days following a PRD release subject to 6.3.1. The written report shall include 1) process PRD type, size, and location, 2) date, time and duration of the process PRD release, 3) types of VOC released and individual amounts, in pounds, including supporting calculations, 4) cause of the process PRD release, and 5) corrective actions taken to prevent a subsequent process PRD release. [District Rule 4455 6.3.2] Federally Enforceable Through Title V Permit

134. Copies of all records shall be retained for a minimum of five (5) years after the date of an entry. Such records shall be made available to the APCO, ARB, or US EPA upon request. [District Rule 4455, 6.2.2, 6.2.3 & 6.2.4] Federally Enforceable Through Title V Permit

135. Measurements of gaseous leak concentrations shall be conducted according to US EPA Method 21 using an appropriate portable hydrocarbon detection instrument calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in US EPA Method 21 or the manufacturer's instruction, as appropriate, not more than 30 days prior to its use. The operator shall record the calibration date of the instrument. [District Rule 4455, 6.4.1] Federally Enforceable Through Title V Permit

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136. The VOC content of exempt streams shall be determined using American Society of Testing and Materials (ASTM) D 1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 for liquids. [District Rule 4455, 6.4.2] Federally Enforceable Through Title V Permit

137. For exempt streams, the percent by volume liquid evaporated at 150 deg C shall be determined using ASTM D 86. [District Rule 4455, 6.4.3] Federally Enforceable Through Title V Permit

138. Equivalent test methods other than specified in Sections 6.4.1 through 6.4.5 may be used provided such test methods have received prior approval from the US EPA, ARB, and APCO. [District Rule 4455, 6.4] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-78-3 **EXPIRATION DATE:** 08/31/2016

SECTION: NW25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
SULFUR SCRUBBING SYSTEM INCLUDING MEA/DEA CONTACTOR VESSEL (ABSORBER), GAS LIQUID SEPARATOR, AMINE REGENERATION VESSEL, LIQUID SOLID SEPARATOR, SULFUR FILTER, AND ASSOCIATED AIR BLOWERS, PUMPS AND PIPING

PERMIT UNIT REQUIREMENTS

1. Volatile organic compounds (VOC) emissions from pump ("device" as defined in Rule 4452) seals for the sulfur recovery unit shall not exceed 500 ppmv measured 1 cm or less from the source of the emission. [District NSR Rule] Federally Enforceable Through Title V Permit
2. VOC emissions from valves, pressure relief valves, flanges and threaded connections (as defined in Rule 4451) for the sulfur recovery unit shall not exceed 100 ppmv measured 1 cm or less from the source of the emission. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Spent caustics and waste liquids shall be disposed of in a manner preventing the creation of odors. [District Rule 4102]
4. Sulfur compound emissions calculated as sulfur dioxide (SO2) associated with the sulfur recovery unit shall not exceed 0.2% by volume averaged over 15 consecutive minutes. [District Rule 4801] Federally Enforceable Through Title V Permit
5. Testing for compliance with compressor, pump seal, valve, pressure relief valve, flange and threaded connection emission rates shall be conducted using EPA Test Method 21, 40 CFR, Part 60. [District Rule 2201] Federally Enforceable Through Title V Permit
6. An instrument for continuous monitoring and recording the concentration (on a dry basis) of H2S in fuel gas before being burned shall be installed, calibrated, maintained, and operated. [40 CFR 60.105(a)(4)] Federally Enforceable Through Title V Permit
7. The relative accuracy of the continuous H2S monitoring system must be no greater than 20 percent when the average reference method (RM) value is used to calculate RA or ten (10) percent when the applicable emission standard is used. [40 CFR 60.105(a)(4)(iii)] Federally Enforceable Through Title V Permit
8. Testing to determine H2S concentration in fuel gas shall be conducted using EPA Test Method 11, 15, 15A, or 16, 40 CFR 60, App. A. [40 CFR 60.105(a)(4)(iii)] Federally Enforceable Through Title V Permit
9. The calibration drift of the H2S monitoring system must not drift or deviate from the reference value of the calibration gas or reference source by more than five (5) percent of the established span value for six out of seven test days. [40 CFR 60.105(a)(4)(iii)] Federally Enforceable Through Title V Permit
10. The span value of the continuous H2S monitor is 425 mg/dscm [40 CFR 60.105(a)(4)(i)] Federally Enforceable Through Title V Permit

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11. The owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F, at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rules 1080 and 2520, 9.3.2] Federally Enforceable Through Title V Permit

12. Continuous emission monitoring records of H2S concentration in refinery process fuel gas shall be maintained for a period of at least five years and made readily available for District inspection upon request. [District NSR Rule, District Rule 2520, 9.3.2 and 9.4.2] Federally Enforceable Through Title V Permit

13. Except for complying with the applicable requirements of Sections 6.1 and 7.3, the requirements of this rule shall not apply to 1) components subject to Rule 4623 (adopted 5/19/05), 2) pressure relief devices, pumps, and compressors equipped with a closed vent system as defined in Section 3.0, 3) components buried below ground, 4) components exclusively handling liquid streams which have less than 10 percent by weight (<10 wt%) evaporation at 150 C, 5) components exclusively handling liquid streams with a VOC content less than ten percent by weight (<10 wt%), 6) components exclusively handling gas/vapor streams with a VOC content of less than one percent by weight (<1wt%), 7) components incorporated in lines exclusively in vacuum service, 8) components exclusively handling commercial natural gas, and 9) one-half inch nominal or less stainless steel tube fittings which have been demonstrated to the Air Pollution Control Officer (APCO) to be leak-free based on initial inspection. [District Rule 4455, 4.1 & 4.2] Federally Enforceable Through Title V Permit

14. Except for components subject to Rule 4623 (Storage of Organic Liquids) or for components included in the inspection and maintenance (I&M) program implemented pursuant to Section 5.7 of Rule 4623, the operator shall not use any component that leaks in excess of the allowable leak standards of Rule 4455, or is found to be in violation of the provisions specified in Section 5.1.3. A component identified as leaking in excess of an allowable leak standard may be used provided it has been identified with a tag for repair, has been repaired, or is awaiting re-inspection after repair, within the applicable time period specified within the rule. [District Rule 4455, 5.1.1] Federally Enforceable Through Title V Permit

15. Each hatch shall be closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4455, 5.1.2] Federally Enforceable Through Title V Permit

16. The operator shall be in violation of Rule 4455 if any District inspection demonstrates that one or more of the conditions in Section 5.1.4 (Leak Standards) exist at the facility. [District Rule 4455, 5.1.3.1] Federally Enforceable Through Title V Permit

17. Except for annual operator inspection described in Section 5.1.3.2.3, any operator inspection that demonstrates that one or more of the conditions in Section 5.1.4 exist at the facility shall not constitute a violation of Rule 4455 if the leaking components are repaired as soon as practicable but not later than the time frame specified in Rule 4455. Such components shall not be counted towards determination of compliance with the provisions of Section 5.1.4. [District Rule 4455, 5.1.3.2.1] Federally Enforceable Through Title V Permit

18. Leaking components detected during operator inspection pursuant Section 5.1.3.2.1 that are not repaired, replaced, or removed from operation as soon as practicable but not later than the time frame specified in Rule 4455 shall be counted toward determination of compliance with the provisions of Section 5.1.4. [District Rule 4455, 5.1.3.2.2] Federally Enforceable Through Title V Permit

19. Any operator inspection conducted annually for a component type (including operator annual inspections pursuant to Section 5.2.5, 5.2.6, 5.2.7, or 5.2.8) that demonstrates one or more of the conditions in Section 5.1.4 exist at the facility shall constitute a violation of Rule 4455 regardless of whether or not the leaking components are repaired, replaced, or removed from operation within the allowable repair time frame specified in Rule 4455. [District Rule 4455, 5.1.3.2.3] Federally Enforceable Through Title V Permit

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20. A component shall be considered leaking if one or more of the conditions specified in Sections 5.1.4.1 through 5.1.4.4 of Rule 4455 exist at the facility. Readings shall be taken as methane using a portable hydrocarbon detection instrument and shall be made in accordance with the methods specified in Section 6.4.1 of Rule 4455. [District Rule 4455, 5.1.4] Federally Enforceable Through Title V Permit

21. The operator shall audio-visually inspect for leaks all accessible operating pumps, compressors and Pressure Relief Devices (PRDs) in service at least once every 24 hours, except when operators do not report to the facility for that given 24 hours. Any identified leak that cannot be immediately repaired shall be reinspected within 24 hours using a portable analyzer. If a leak is found, it shall be repaired as soon as practical but not later than the time frame specified in Table 3. [District Rule 4455, 5.2.1 & 5.2.2] Federally Enforceable Through Title V Permit

22. The operator shall inspect all components at least once every calendar quarter, except for inaccessible components, unsafe-to-monitor components and pipes. Inaccessible components, unsafe-to-monitor components and pipes shall be inspected in accordance with the requirements set forth in Sections 5.2.5, 5.2.6, and 5.2.7. New, replaced, or repaired fittings, flanges and threaded connections shall be inspected immediately after being placed into service. Components shall be inspected using EPA Method 21. [District Rule 4455, 5.2.3, 5.2.4, 5.2.5, 5.2.6 & 5.2.7] Federally Enforceable Through Title V Permit

23. The operator may apply for a written approval from the APCO to change the inspection frequency from quarterly to annually for a component type, provided the operator meets all the criteria specified in Sections 5.2.8.1 through 5.2.8.3. This approval shall apply to accessible component types, specifically designated by the APCO, except pumps, compressors, and PRDs which shall continue to be inspected on a quarterly basis. [District Rule 4455, 5.2.8] Federally Enforceable Through Title V Permit

24. An annual inspection frequency approved by the APCO shall revert to quarterly inspection frequency for a component type if either the operator inspection or District inspection demonstrates that a violation of the provisions of Sections 5.1, 5.2 and 5.3 of the rule exists for that component type, or the APCO issued a Notice of Violation for violating any of the provisions of Rule 4455 during the annual inspection period for that component type. When the inspection frequency changes from annual to quarterly inspections, the operator shall notify the APCO in writing within five (5) calendar days after changing the inspection frequency, giving the reason(s) and date of change to quarterly inspection frequency. [District Rule 4455, 5.2.9 & 5.2.10] Federally Enforceable Through Title V Permit

25. The operator shall initially inspect a process PRD that releases to the atmosphere as soon as practicable but not later than 24 hours after the time of the release. To insure that the process PRD is operating properly, and is leak-free, the operator shall re-inspect the process PRD not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the date of the release using EPA Method 21. If the process PRD is found to be leaking at either inspection, the PRD leak shall be treated as if the leak was found during quarterly operator inspections. [District Rule 4455, 5.2.11] Federally Enforceable Through Title V Permit

26. Except for process PRD, a component shall be inspected within 15 calendar days after repairing the leak or replacing the component using EPA Method 21. [District Rule 4455, 5.2.12] Federally Enforceable Through Title V Permit

27. A District inspection in no way fulfills any of the mandatory inspection requirements that are placed upon operators and cannot be used or counted as an inspection required of an operator. Any attempt by an operator to count such District inspections as part of the mandatory operator's inspections is considered to be willful circumvention and is a violation of this rule. [District Rule 4455, 5.2.13] Federally Enforceable Through Title V Permit

28. Upon detection of a leaking component, the operator shall affix to that component a weatherproof readily visible tag that contains the information specified in Section 5.3.3. The tag shall remain affixed to the component until the leaking component has been repaired or replaced; has been re-inspected using EPA Method 21; and is found to be in compliance with the requirements of Rule 4455. [District Rule 4455, 5.3.1 5.3.2 and 5.3.3] Federally Enforceable Through Title V Permit

29. An operator shall minimize all component leaks immediately to the extent possible, but not later than one (1) hour after detection of leaks in order to stop or reduce leakage to the atmosphere. [District Rule 4455, 5.3.4] Federally Enforceable Through Title V Permit

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30. If the leak has been minimized but the leak still exceeds the applicable leak standards of Rule 4455, an operator shall repair or replace the leaking component, vent the leaking component to a closed vent system, or remove the leaking component from operation as soon as practicable but not later than the time period specified in Table 3. For each calendar quarter, the operator may be allowed to extend the repair period as specified in Table 3, for a total number of leaking components, not to exceed 0.05 percent of the number of components inspected, by type, rounded upward to the nearest integer where required. [District Rule 4455, 5.3.5] Federally Enforceable Through Title V Permit

31. If the leaking component is an essential component or a critical component and which cannot be immediately shut down for repairs, the operator shall minimize the leak within one hour after detection of the leak. If the leak has been minimized, but the leak still exceeds any of the applicable leak standards of Rule 4455, the essential component or critical component shall be repaired or replaced to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection, whichever comes earlier. [District Rule 4455 5.3.6] Federally Enforceable Through Title V Permit

32. For any component that has incurred five repair actions for major gas leaks or major liquid leaks, or any combination of major gas leaks and major liquid leaks within a continuous 12-month period, the operator shall comply with at least one of the requirements specified in Sections 5.3.7.1, 5.3.7.2, 5.3.7.3, or 5.3.7.4 by the applicable deadlines specified in Sections 5.3.7.5 and 5.3.7.6. If the original leaking component is replaced with a new like-in-kind component before incurring five repair actions for major leaks within 12-consecutive months, the repair count shall start over for the new component. An entire compressor or pump need not be replaced provided the compressor part(s) or pump part(s) that have incurred five repair actions as described in Section 5.3.7 are brought into compliance with at least one of the requirements of Sections 5.3.7.1 through 5.3.7.6. [District Rule 4455, 5.3.7] Federally Enforceable Through Title V Permit

33. The operator shall monitor process PRD by using electronic process control instrumentation that allows for real time continuous parameter monitoring or by using telltale indicators for the process PRD where parameter monitoring is not feasible. [District Rule 4455, 5.4.1] Federally Enforceable Through Title V Permit

34. After a release from a process PRD in excess of 500 pounds of VOC in a continuous 24-hour period, the operator shall immediately conduct a failure analysis and implement corrective actions as soon as practicable but not later than 30 days to prevent the reoccurrence of similar release. For refineries processing greater than 20,000 barrels of crude oil per day, any subsequent release in excess of 500 pounds of VOC within a continuous 24-hour period shall be subject to the requirements of Section 5.4.5. [District Rule 4455, 5.4.3 & 5.4.4] Federally Enforceable Through Title V Permit

35. The operator of a refinery processing greater than 20,000 barrels of crude oil per day shall connect all process PRDs serving that process equipment to an APCO-approved closed vent system as defined in Section 3.0 if any of the conditions specified in Sections 5.4.5.1 and 5.4.5.2 occurs. Process PRDs subject to the provisions of Section 5.4.5 shall be connected to an APCO-approved closed-vent system as soon as practicable, but no later than the first turnaround after the requirement to connect becomes effective. [District Rule 4455, 5.4.5] Federally Enforceable Through Title V Permit

36. All major components and critical components shall be physically identified clearly and visibly for inspection, repair, and recordkeeping purposes. The physical identification shall consist of labels, tags, manufacturer's nameplate identifier, serial number, or model number, or other system approved by the APCO that enables an operator or District personnel to locate each individual component. The operator shall replace tags or labels that become missing or unreadable as soon as practicable but not later than 24 hours after discovery. The operator shall comply with the requirements of Sections 6.1.4 if there is any change in the description of major components or critical components. [District Rule 4455, 5.5.1 & 5.5.2] Federally Enforceable Through Title V Permit

37. The operator shall keep a copy of the operator management plan at the facility and make it available to the APCO, ARB and US EPA upon request. By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved operator management plan. [District Rule 4455, 6.1.2 & 6.1.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

38. The operator shall maintain an inspection log containing, at a minimum, 1) total number of components inspected, and total number and percentage of leaking components found by component types, 2) location, type, name or description of each leaking component, and description of any unit where the leaking component is found, 3) date of leak detection and method of leak detection, 4) for gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak, 5) date of repair, replacement, or removal from operation of leaking components, 6) identification and location of essential component and critical components found leaking that cannot be repaired until the next process unit turnaround or not later one year after leak detection, whichever comes earlier, 7) methods used to minimize the leak from essential components and critical components that cannot be repaired until the next process unit turnaround or not later one year after leak detection, whichever comes earlier, 8) after the component is repaired or is replaced, the date of reinspection and the leak concentration in ppmv, 9) inspector's name, business mailing address, and business telephone number, and 10) the facility operator responsible for the inspection and repair program shall sign and date the inspection log certifying the accuracy of the information recorded in the log. [District Rule 4455, 6.2.1] Federally Enforceable Through Title V Permit

39. Records of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components, including a copy of current calibration gas certification from the vendor of said calibration gas cylinder, the date of calibration, concentration of calibration gas, analyzer reading of calibration gas before adjustment, instrument reading of calibration gas after adjustment, calibration gas expiration date, and calibration gas cylinder pressure at the time of calibration. [District Rule 4455, 6.2.3] Federally Enforceable Through Title V Permit

40. The operator shall notify the APCO, by telephone or other methods approved by the APCO, of any process PRD release described in Sections 5.4.4 and 5.4.5, and any release in excess of the reportable quantity limits as stipulated in 40 CFR, Part 117, Part 302 and Part 355, including any release in excess of 100 pounds of VOC, within one hour of such occurrence or within one hour of the time said person knew or reasonably should have known of its occurrence. [District Rule 4455, 6.3.1] Federally Enforceable Through Title V Permit

41. The operator shall submit a written report to the APCO within thirty (30) calendar days following a PRD release subject to 6.3.1. The written report shall include 1) process PRD type, size, and location, 2) date, time and duration of the process PRD release, 3) types of VOC released and individual amounts, in pounds, including supporting calculations, 4) cause of the process PRD release, and 5) corrective actions taken to prevent a subsequent process PRD release. [District Rule 4455 6.3.2] Federally Enforceable Through Title V Permit

42. Copies of all records shall be retained for a minimum of five (5) years after the date of an entry. Such records shall be made available to the APCO, ARB, or US EPA upon request. [District Rule 4455, 6.2.2, 6.2.3 & 6.2.4] Federally Enforceable Through Title V Permit

43. Measurements of gaseous leak concentrations shall be conducted according to US EPA Method 21 using an appropriate portable hydrocarbon detection instrument calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in US EPA Method 21 or the manufacturer's instruction, as appropriate, not more than 30 days prior to its use. The operator shall record the calibration date of the instrument. [District Rule 4455, 6.4.1] Federally Enforceable Through Title V Permit

44. The VOC content of exempt streams shall be determined using American Society of Testing and Materials (ASTM) D 1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 for liquids. [District Rule 4455, 6.4.2] Federally Enforceable Through Title V Permit

45. For exempt streams, the percent by volume liquid evaporated at 150 deg C shall be determined using ASTM D 86. [District Rule 4455, 6.4.3] Federally Enforceable Through Title V Permit

46. Equivalent test methods other than specified in Sections 6.4.1 through 6.4.5 may be used provided such test methods have received prior approval from the US EPA, ARB, and APCO. [District Rule 4455, 6.4] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-79-2 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
14,700 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK (#335) CONNECTED TO VAPOR RECOVERY SYSTEM LISTED ON PERMIT S-37-8

PERMIT UNIT REQUIREMENTS

1. VOC emission rate from fugitive components associated with this unit shall not exceed 0.5 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The Permittee shall maintain accurate component count for the tank according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2a 1995 EPA Protocol Refinery Screening Value Range Emissions Factors. Permittee shall update such records when new components are approved and installed. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
4. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
5. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
6. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
7. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
8. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
9. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
14. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
15. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-80-2 **EXPIRATION DATE:** 08/31/2016

EQUIPMENT DESCRIPTION:
471 BHP DETROIT MODEL 12V71T DIESEL FIRED IC ENGINE DRIVING AN EMERGENCY GENERATOR

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
2. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 17 CCR 93115 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
3. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rule 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
4. If the IC engine is not fired on CARB certified diesel fuel with a supplier certified sulfur content less than 0.0015% by weight, then the owner or operator shall determine the sulfur content of each delivery of diesel fuel being fired in the IC engine to demonstrate compliance with the 0.0015% sulfur by weight limit. The sulfur content shall be determined using ASTM Method D 2622 or other EPA or CARB approved method with prior written approval by the APCO. [District Rule 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
5. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
6. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
7. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit
8. This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702] Federally Enforceable Through Title V Permit
9. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [District Rule 4702, 17 CCR 93115 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
11. The permittee shall maintain monthly records of the type and source of fuel used including its sulfur content. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
12. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
13. On and after May 3, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ]
14. On and after May 3, 2013, the permittee must 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. [40 CFR 63 Subpart ZZZZ]
15. On and after May 3, 2013, the engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first [40 CFR 63 Subpart ZZZZ]
16. On and after May 3, 2013, the engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ]
17. On and after May 3, 2013, the engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ]
18. On and after May 3, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation [District Rule 1070 and 40 CFR 63 Subpart ZZZZ]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-81-2 **EXPIRATION DATE:** 08/31/2016

EQUIPMENT DESCRIPTION:
225 HP CUMMINS MODEL NT855F1 DIESEL FIRED IC ENGINE DRIVING AN EMERGENCY FIREWATER PUMP

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
2. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
3. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rule 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
4. If the IC engine is not fired on CARB certified diesel fuel with a supplier certified sulfur content less than 0.0015% by weight, then the owner or operator shall determine the sulfur content of each delivery of diesel fuel being fired in the IC engine to demonstrate compliance with the 0.0015% sulfur by weight limit. The sulfur content shall be determined using ASTM Method D 2622 or other EPA or CARB approved method with prior written approval by the APCO. [District NSR Rule and District Rule 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
5. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
6. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
7. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit
8. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. For testing purposes, the engine shall only be operated the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 - "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems", 1998 edition. Total hours of operation for all maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rule 4702, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. The permittee shall monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, and the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.). For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
10. The permittee shall maintain monthly records of the type and source of fuel used including its sulfur content. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
11. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
12. On and after May 3, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ]
13. On and after May 3, 2013, the permittee must 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. [40 CFR 63 Subpart ZZZZ]
14. On and after May 3, 2013, the engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first [40 CFR 63 Subpart ZZZZ]
15. On and after May 3, 2013, the engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ]
16. On and after May 3, 2013, the engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ]
17. On and after May 3, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation [District Rule 1070 and 40 CFR 63 Subpart ZZZZ]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-82-3 **EXPIRATION DATE:** 08/31/2016

EQUIPMENT DESCRIPTION:
60 BHP WAUKESHA MODEL 135 GZU-15861-G GAS-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN INSTRUMENT AIR COMPRESSOR

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101, 5.1] Federally Enforceable Through Title V Permit
2. The engine shall be equipped with a nonresettable elapsed operating time meter. The owner or operator shall utilize the required meters and shall maintain them in proper operating condition. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
3. This engine shall be operated only for the following purposes: (1) periodic maintenance, periodic readiness testing, or readiness testing during and after repair work; (2) unscheduled outages, or to supply power while maintenance is performed or repairs are made to the primary power supply. Operation of the engine for non-emergency purposes shall not exceed 100 hours per calendar year. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
4. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit
5. This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702] Federally Enforceable Through Title V Permit
6. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
7. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
8. Emission rates from this unit shall not exceed any of the following limits: NOx (as NO2) - 0.0165 lb/hp-hr; SOx (as SO2) - 0.0000156 lb/hp-hr; PM10 - 0.00014 lb/hp-hr; CO - 0.027 lb/hp-hr; or VOC (as methane) - 0.000215 lb/hp-hr. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Total sulfur content of natural gas combusted shall not exceed 0.75 grain/100 scf. [District NSR Rule, District Rule 4801, and Kern County Rule 407] Federally Enforceable Through Title V Permit
10. If the engine is fired on natural gas certified by the supplier to have a sulfur content of 0.75 grains per 100 dscf or less, then the permittee shall maintain on file copies of all natural gas bills and supplier certifications for a period of five years. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. If the engine is not fired on natural gas certified by the supplier to have a sulfur content of 0.75 grains per 100 dscf or less, then the sulfur content of the natural gas being fired in the engine shall be determined using ASTM method D 1072, D 4084, or D 3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. If the engine is not fired on natural gas certified by the supplier to have a sulfur content of 0.75 grains per 100 dscf or less, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
13. The permittee shall maintain annual records of hours of emergency and non-emergency operation. Records shall include the date; the number of hours of operation; the purpose of the operation (e.g., load testing, weekly testing, rolling blackout, general area power outage, etc.); and the type, quantity, and sulfur content of the fuel used. Such records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 2520 and 4702] Federally Enforceable Through Title V Permit
14. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
15. On and after October 19, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ]
16. On and after October 19, 2013, the permittee must 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. [40 CFR 63 Subpart ZZZZ]
17. On and after October 19, 2013, the engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first [40 CFR 63 Subpart ZZZZ]
18. On and after October 19, 2013, the engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ]
19. On and after October 19, 2013, the engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ]
20. On and after October 19, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation [District Rule 1070 and 40 CFR 63 Subpart ZZZZ]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-83-3 **EXPIRATION DATE:** 08/31/2016

EQUIPMENT DESCRIPTION:
150 BHP WAUKESHA MODEL 6 WAKB-10F GAS-FIRED EMERGENCY STANDBY IC ENGINE POWERING A UTILITY AIR COMPRESSOR

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101, 5.1] Federally Enforceable Through Title V Permit
2. The engine shall be equipped with a nonresettable elapsed operating time meter. The owner or operator shall utilize the required meters and shall maintain them in proper operating condition. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
3. This engine shall be operated only for the following purposes: (1) periodic maintenance, periodic readiness testing, or readiness testing during and after repair work; (2) unscheduled outages, or to supply power while maintenance is performed or repairs are made to the primary power supply. Operation of the engine for non-emergency purposes shall not exceed 100 hours per calendar year. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
4. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit
5. This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702] Federally Enforceable Through Title V Permit
6. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
7. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
8. Emission rates from this unit shall not exceed any of the following limits: NOx (as NO2) - 0.0165 lb/hp-hr; SOx (as SO2) - 0.0000156 lb/hp-hr; PM10 - 0.00014 lb/hp-hr; CO - 0.027 lb/hp-hr; or VOC (as methane) - 0.000215 lb/hp-hr. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Total sulfur content of natural gas combusted shall not exceed 0.75 grain/100 scf. [District NSR Rule, District Rule 4801, and Kern County Rule 407] Federally Enforceable Through Title V Permit
10. If the engine is fired on natural gas certified by the supplier to have a sulfur content of 0.75 grains per 100 dscf or less, then the permittee shall maintain on file copies of all natural gas bills and supplier certifications for a period of five years. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. If the engine is not fired on natural gas certified by the supplier to have a sulfur content of 0.75 grains per 100 dscf or less, then the sulfur content of the natural gas being fired in the engine shall be determined using ASTM method D 1072, D 4084, or D 3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. If the engine is not fired on natural gas certified by the supplier to have a sulfur content of 0.75 grains per 100 dscf or less, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
13. The permittee shall maintain annual records of hours of emergency and non-emergency operation. Records shall include the date; the number of hours of operation; the purpose of the operation (e.g., load testing, weekly testing, rolling blackout, general area power outage, etc.); and the type, quantity, and sulfur content of the fuel used. Such records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 2520 and 4702] Federally Enforceable Through Title V Permit
14. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
15. On and after October 19, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ]
16. On and after October 19, 2013, the permittee must 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. [40 CFR 63 Subpart ZZZZ]
17. On and after October 19, 2013, the engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first [40 CFR 63 Subpart ZZZZ]
18. On and after October 19, 2013, the engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ]
19. On and after October 19, 2013, the engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ]
20. On and after October 19, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation [District Rule 1070 and 40 CFR 63 Subpart ZZZZ]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-84-5 **EXPIRATION DATE:** 08/31/2016

SECTION: 05 **TOWNSHIP:** 31S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
165 BHP STATIONARY NATURAL GAS-FIRED INGERSOLL RAND, MODEL 6JVG (SERIAL #6AAJ226), I.C. ENGINE EQUIPPED WITH 3-WAY CATALYST SERVING THE NORTH HYDROGEN COMPRESSOR AT THE PLATFORMER UNIT (#S-37-4)

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
2. Kern Oil and Refining Company shall operate and maintain controls as recommended by the emission control system supplier. [District NSR Rule] Federally Enforceable Through Title V Permit
3. NOx emission concentrations shall not exceed 25 ppm by volume at 15% O2 or exhaust emission concentrations shall be reduced by 96%. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
4. VOC emissions concentrations shall not exceed 250 ppmv at 15% O2. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
5. CO emission concentrations shall not exceed 2000 ppm by volume at 15% O2. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
6. Emissions from the engine shall neither exceed SOx (as SO2) - 0.00002 lb/hp-hr, nor PM10 - 0.00014 lb/hp-hr. [District NSR Rule] Federally Enforceable Through Title V Permit
7. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. [In-stack O2 monitors may be allowed if approved by the APCO.] Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 2520, 9.3.2 & 9.4.2; 4701, 5.4; and 4702, 5.6 and 6.5] Federally Enforceable Through Title V Permit
8. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2; 4701, 5.4; and 4702, 5.6 and 6.5] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. All emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken by the portable analyzer shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701, 5.4 and 4702, 5.6] Federally Enforceable Through Title V Permit
10. NOx, CO, and VOC emissions shall be measured (source tested) not less than once every 24 months. [District Rules 4701, 6.3.1 and 4702, 6.3.1] Federally Enforceable Through Title V Permit
11. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081; 4701, 6.4; and 4702, 6.4] Federally Enforceable Through Title V Permit
12. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
13. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Unit shall be fired only on PUC-regulated natural gas with a sulfur content of less than or equal to 1.0 grain/100 scf. [District NSR Rule; District Rules 2520, 9.3.2 and 4801; Kern County Rule 407] Federally Enforceable Through Title V Permit
15. The permittee shall maintain on file copies of all natural gas bills or fuel throughput records for a period of five years. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. The permittee shall maintain records of: (1) total hours of operation; (2) type and quantity of fuel used; (3) maintenance or modifications performed; (4) the date and time of NOx, CO, and O2 measurements; (5) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2; (6) make and model of exhaust gas analyzer; (7) exhaust gas analyzer calibration records; and (8) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701, 6.2 and 4702, 6.2] Federally Enforceable Through Title V Permit
18. The permittee shall install and operate a nonresettable fuel meter and a nonresettable elapsed operating time meter. In lieu of installing a nonresettable fuel meter, the owner or operator may use a non-resettable elapsed operating time meter in conjunction with the engine manufacturer's maximum rated fuel consumption to determine annual fuel usage. The owner or operator shall maintain the required meters in proper operating condition. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
19. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 4702 and 40 CFR 63, ZZZZ]
20. On and after October 19, 2013, the permittee must 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. [40 CFR 63, ZZZZ]
21. On and after October 19, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63, ZZZZ]
22. On and after October 19, 2013, the engine's oil and filter shall be changed every 1,440 hours of operation or every 12 months, whichever comes first. [40 CFR 63, ZZZZ]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. On and after October 19, 2013, the engine's spark plugs shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ]

24. On and after October 19, 2013, the engine's hoses and belts shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ]

25. On and after October 19, 2013, the permittee shall maintain monthly records that include any information necessary to demonstrate compliance with 40 CFR 63, ZZZZ. [40 CFR 63, ZZZZ]

26. On and after October 19, 2013, the permittee shall maintain monthly records of all performance tests, opacity and visible emissions observations and required maintenance performed on the air pollution control and monitoring equipment. [District Rule 1070 and 40 CFR 63, ZZZZ]

27. On and after October 19, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of the operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of the action(s) taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning operation and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070 and 40 CFR 63, ZZZZ]

28. The Permittee shall begin the daily recording of the inlet temperature to the catalyst bed by June 26, 2012 in order to ensure compliance with the requirements of 40 CFR 64, Compliance Assurance Monitoring (CAM). [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

29. Pursuant to Rule 4702, beginning in 2014, the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by June 30 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4702 Table 2. [District Rule 4702]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-85-5 **EXPIRATION DATE:** 08/31/2016

SECTION: 05 **TOWNSHIP:** 31S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
165 BHP INGERSOLL-RAND MODEL 6JVG NATURAL GAS-FIRED IC ENGINE EQUIPPED WITH 3-WAY CATALYST SERVING THE #2 HYDROGEN COMPRESSOR - MIDDLE, AT THE PLATFORMER UNIT (#S-37-4)

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
2. Kern Oil and Refining Company shall operate and maintain controls as recommended by the emission control system supplier. [District NSR Rule] Federally Enforceable Through Title V Permit
3. NOx emission concentrations shall not exceed 25 ppm by volume at 15% O2 or exhaust emission concentrations shall be reduced by 96%. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
4. VOC emissions concentrations shall not exceed 250 ppmv at 15% O2. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
5. CO emission concentrations shall not exceed 2000 ppm by volume at 15% O2. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
6. Emissions from the engine shall neither exceed SOx (as SO2) - 0.00002 lb/hp-hr, nor PM10 - 0.00014 lb/hp-hr. [District NSR Rule] Federally Enforceable Through Title V Permit
7. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. [In-stack O2 monitors may be allowed if approved by the APCO.] Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 2520, 9.3.2 & 9.4.2; 4701, 5.4; and 4702, 5.6 and 6.5] Federally Enforceable Through Title V Permit
8. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2; 4701, 5.4; and 4702, 5.6 and 6.5] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. All emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken by the portable analyzer shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701, 5.4 and 4702, 5.6] Federally Enforceable Through Title V Permit
10. NOx, CO, and VOC emissions shall be measured (source tested) not less than once every 24 months. [District Rules 4701, 6.3.1 and 4702, 6.3.1] Federally Enforceable Through Title V Permit
11. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081; 4701, 6.4; and 4702, 6.4] Federally Enforceable Through Title V Permit
12. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
13. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Unit shall be fired only on PUC-regulated natural gas with a sulfur content of less than or equal to 1.0 grain/100 scf. [District NSR Rule; District Rules 2520, 9.3.2 and 4801; Kern County Rule 407] Federally Enforceable Through Title V Permit
15. The permittee shall maintain on file copies of all natural gas bills or fuel throughput records for a period of five years. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. The permittee shall maintain records of: (1) total hours of operation; (2) type and quantity of fuel used; (3) maintenance or modifications performed; (4) the date and time of NOx, CO, and O2 measurements; (5) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2; (6) make and model of exhaust gas analyzer; (7) exhaust gas analyzer calibration records; and (8) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701, 6.2 and 4702, 6.2] Federally Enforceable Through Title V Permit
18. The permittee shall install and operate a nonresettable fuel meter and a nonresettable elapsed operating time meter. In lieu of installing a nonresettable fuel meter, the owner or operator may use a non-resettable elapsed operating time meter in conjunction with the engine manufacturer's maximum rated fuel consumption to determine annual fuel usage. The owner or operator shall maintain the required meters in proper operating condition. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
19. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 4702 and 40 CFR 63, ZZZZ]
20. On and after October 19, 2013, the permittee must 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. [40 CFR 63, ZZZZ]
21. On and after October 19, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63, ZZZZ]
22. On and after October 19, 2013, the engine's oil and filter shall be changed every 1,440 hours of operation or every 12 months, whichever comes first. [40 CFR 63, ZZZZ]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. On and after October 19, 2013, the engine's spark plugs shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ]

24. On and after October 19, 2013, the engine's hoses and belts shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ]

25. On and after October 19, 2013, the permittee shall maintain monthly records that include any information necessary to demonstrate compliance with 40 CFR 63, ZZZZ. [40 CFR 63, ZZZZ]

26. On and after October 19, 2013, the permittee shall maintain monthly records of all performance tests, opacity and visible emissions observations and required maintenance performed on the air pollution control and monitoring equipment. [District Rule 1070 and 40 CFR 63, ZZZZ]

27. On and after October 19, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of the operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of the action(s) taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning operation and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070 and 40 CFR 63, ZZZZ]

28. The Permittee shall begin the daily recording of the inlet temperature to the catalyst bed by June 26, 2012 in order to ensure compliance with the requirements of 40 CFR 64, Compliance Assurance Monitoring (CAM). [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

29. Pursuant to Rule 4702, beginning in 2014, the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by June 30 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4702 Table 2. [District Rule 4702]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-86-5 **EXPIRATION DATE:** 08/31/2016

SECTION: 05 **TOWNSHIP:** 31S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
165 BHP INGERSOLL-RAND MODEL 6JVG NATURAL GAS-FIRED IC ENGINE EQUIPPED WITH 3-WAY CATALYST SERVING THE #1 HYDROGEN COMPRESSOR - SOUTH, AT THE PLATFORMER UNIT (#S-37-4)

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
2. Kern Oil and Refining Company shall operate and maintain controls as recommended by the emission control system supplier. [District NSR Rule] Federally Enforceable Through Title V Permit
3. NOx emission concentrations shall not exceed 25 ppm by volume at 15% O2 or exhaust emission concentrations shall be reduced by 96%. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
4. VOC emissions concentrations shall not exceed 250 ppmv at 15% O2. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
5. CO emission concentrations shall not exceed 2000 ppm by volume at 15% O2. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
6. Emissions from the engine shall neither exceed SOx (as SO2) - 0.00002 lb/hp-hr, nor PM10 - 0.00014 lb/hp-hr. [District NSR Rule] Federally Enforceable Through Title V Permit
7. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. [In-stack O2 monitors may be allowed if approved by the APCO.] Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 2520, 9.3.2 & 9.4.2; 4701, 5.4; and 4702, 5.6 and 6.5] Federally Enforceable Through Title V Permit
8. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2; 4701, 5.4; and 4702, 5.6 and 6.5] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. All emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken by the portable analyzer shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701, 5.4 and 4702, 5.6] Federally Enforceable Through Title V Permit
10. NOx, CO, and VOC emissions shall be measured (source tested) not less than once every 24 months. [District Rules 4701, 6.3.1 and 4702, 6.3.1] Federally Enforceable Through Title V Permit
11. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081; 4701, 6.4; and 4702, 6.4] Federally Enforceable Through Title V Permit
12. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
13. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Unit shall be fired only on PUC-regulated natural gas with a sulfur content of less than or equal to 1.0 grain/100 scf. [District NSR Rule; District Rules 2520, 9.3.2 and 4801; Kern County Rule 407] Federally Enforceable Through Title V Permit
15. The permittee shall maintain on file copies of all natural gas bills or fuel throughput records for a period of five years. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. The permittee shall maintain records of: (1) total hours of operation; (2) type and quantity of fuel used; (3) maintenance or modifications performed; (4) the date and time of NOx, CO, and O2 measurements; (5) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2; (6) make and model of exhaust gas analyzer; (7) exhaust gas analyzer calibration records; and (8) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701, 6.2 and 4702, 6.2] Federally Enforceable Through Title V Permit
18. The permittee shall install and operate a nonresettable fuel meter and a nonresettable elapsed operating time meter. In lieu of installing a nonresettable fuel meter, the owner or operator may use a non-resettable elapsed operating time meter in conjunction with the engine manufacturer's maximum rated fuel consumption to determine annual fuel usage. The owner or operator shall maintain the required meters in proper operating condition. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
19. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 4702 and 40 CFR 63, ZZZZ]
20. On and after October 19, 2013, the permittee must 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. [40 CFR 63, ZZZZ]
21. On and after October 19, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63, ZZZZ]
22. On and after October 19, 2013, the engine's oil and filter shall be changed every 1,440 hours of operation or every 12 months, whichever comes first. [40 CFR 63, ZZZZ]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. On and after October 19, 2013, the engine's spark plugs shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ]
24. On and after October 19, 2013, the engine's hoses and belts shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ]
25. On and after October 19, 2013, the permittee shall maintain monthly records that include any information necessary to demonstrate compliance with 40 CFR 63, ZZZZ. [40 CFR 63, ZZZZ]
26. On and after October 19, 2013, the permittee shall maintain monthly records of all performance tests, opacity and visible emissions observations and required maintenance performed on the air pollution control and monitoring equipment. [District Rule 1070 and 40 CFR 63, ZZZZ]
27. On and after October 19, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of the operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of the action(s) taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning operation and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070 and 40 CFR 63, ZZZZ]
28. The Permittee shall begin the daily recording of the inlet temperature to the catalyst bed by June 26, 2012 in order to ensure compliance with the requirements of 40 CFR 64, Compliance Assurance Monitoring (CAM). [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit
29. Pursuant to Rule 4702, beginning in 2016, the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by June 30 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4702 Table 2. [District Rule 4702]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-87-5 **EXPIRATION DATE:** 08/31/2016

SECTION: 05 **TOWNSHIP:** 31S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
120 BHP INGERSOLL-RAND MODEL 4JVG NATURAL GAS-FIRED IC ENGINE EQUIPPED WITH 3-WAY CATALYST SERVING THE EAST HYDROGEN COMPRESSOR AT THE UNIFIER UNIT (#S-37-3)

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
2. Kern Oil and Refining Company shall operate and maintain controls as recommended by the emission control system supplier. [District NSR Rule] Federally Enforceable Through Title V Permit
3. NOx emission concentrations shall not exceed 25 ppm by volume at 15% O2 or exhaust emission concentrations shall be reduced by 96%. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
4. VOC emissions concentrations shall not exceed 250 ppmv at 15% O2. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
5. CO emission concentrations shall not exceed 2000 ppm by volume at 15% O2. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
6. Emissions from the engine shall neither exceed SOx (as SO2) - 0.00002 lb/hp-hr, nor PM10 - 0.00014 lb/hp-hr. [District NSR Rule] Federally Enforceable Through Title V Permit
7. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. [In-stack O2 monitors may be allowed if approved by the APCO.] Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 2520, 9.3.2 & 9.4.2; 4701, 5.4; and 4702, 5.6 and 6.5] Federally Enforceable Through Title V Permit
8. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2; 4701, 5.4; 4702, 5.6 and 6.5] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. All emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken by the portable analyzer shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701, 5.4 and 4702, 5.6] Federally Enforceable Through Title V Permit
10. NOx, CO, and VOC emissions shall be measured (source tested) not less than once every 24 months. [District Rules 4701, 6.3.1 and 4702, 6.3.1] Federally Enforceable Through Title V Permit
11. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081; 4701, 6.4; and 4702, 6.4] Federally Enforceable Through Title V Permit
12. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
13. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Unit shall be fired only on PUC-regulated natural gas with a sulfur content of less than or equal to 1.0 grain/100 scf. [District NSR Rule; District Rules 2520, 9.3.2 and 4801; Kern County Rule 407] Federally Enforceable Through Title V Permit
15. The permittee shall maintain on file copies of all natural gas bills or fuel throughput records for a period of five years. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. The permittee shall maintain records of: (1) total hours of operation; (2) type and quantity of fuel used; (3) maintenance or modifications performed; (4) the date and time of NOx, CO, and O2 measurements; (5) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2; (6) make and model of exhaust gas analyzer; (7) exhaust gas analyzer calibration records; and (8) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701, 6.2 and 4702, 6.2] Federally Enforceable Through Title V Permit
18. The permittee shall install and operate a nonresettable fuel meter and a nonresettable elapsed operating time meter. In lieu of installing a nonresettable fuel meter, the owner or operator may use a non-resettable elapsed operating time meter in conjunction with the engine manufacturer's maximum rated fuel consumption to determine annual fuel usage. The owner or operator shall maintain the required meters in proper operating condition. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
19. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 4702 and 40 CFR 63, ZZZZ]
20. On and after October 19, 2013, the permittee must 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. [40 CFR 63, ZZZZ]
21. On and after October 19, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63, ZZZZ]
22. On and after October 19, 2013, the engine's oil and filter shall be changed every 1,440 hours of operation or every 12 months, whichever comes first. [40 CFR 63, ZZZZ]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. On and after October 19, 2013, the engine's spark plugs shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ]
24. On and after October 19, 2013, the engine's hoses and belts shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ]
25. On and after October 19, 2013, the permittee shall maintain monthly records that include any information necessary to demonstrate compliance with 40 CFR 63, ZZZZ. [40 CFR 63, ZZZZ]
26. On and after October 19, 2013, the permittee shall maintain monthly records of all performance tests, opacity and visible emissions observations and required maintenance performed on the air pollution control and monitoring equipment. [District Rule 1070 and 40 CFR 63, ZZZZ]
27. On and after October 19, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of the operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of the action(s) taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning operation and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070 and 40 CFR 63, ZZZZ]
28. Pursuant to Rule 4702, beginning in 2016, the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by June 30 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4702 Table 2. [District Rule 4702]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-88-5 **EXPIRATION DATE:** 08/31/2016

SECTION: 05 **TOWNSHIP:** 31S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
120 BHP INGERSOLL-RAND MODEL 4JVG NATURAL GAS-FIRED IC ENGINE EQUIPPED WITH 3-WAY CATALYST SERVING THE WEST HYDROGEN COMPRESSOR AT THE UNIFINER UNIT (#S-37-3)

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
2. Kern Oil and Refining Company shall operate and maintain controls as recommended by the emission control system supplier. [District NSR Rule] Federally Enforceable Through Title V Permit
3. NOx emission concentrations shall not exceed 25 ppm by volume at 15% O2 or exhaust emission concentrations shall be reduced by 96%. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
4. VOC emissions concentrations shall not exceed 250 ppmv at 15% O2. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
5. CO emission concentrations shall not exceed 2000 ppm by volume at 15% O2. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
6. Emissions from the engine shall neither exceed SOx (as SO2) - 0.00002 lb/hp-hr, nor PM10 - 0.00014 lb/hp-hr. [District NSR Rule] Federally Enforceable Through Title V Permit
7. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. [In-stack O2 monitors may be allowed if approved by the APCO.] Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 2520, 9.3.2 & 9.4.2; 4701, 5.4; and 4702, 5.6 and 6.5] Federally Enforceable Through Title V Permit
8. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2; 4701, 5.4; and 4702, 5.6 and 6.5] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. All emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken by the portable analyzer shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701, 5.4 and 4702, 5.6] Federally Enforceable Through Title V Permit
10. NOx, CO, and VOC emissions shall be measured (source tested) not less than once every 24 months. [District Rules 4701, 6.3.1 and 4702, 6.3.1] Federally Enforceable Through Title V Permit
11. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081; 4701, 6.4; and 4702, 6.4] Federally Enforceable Through Title V Permit
12. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
13. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Unit shall be fired only on PUC-regulated natural gas with a sulfur content of less than or equal to 1.0 grain/100 scf. [District NSR Rule; District Rules 2520, 9.3.2 and 4801; Kern County Rule 407] Federally Enforceable Through Title V Permit
15. The permittee shall maintain on file copies of all natural gas bills or fuel throughput records for a period of five years. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. The permittee shall maintain records of: (1) total hours of operation; (2) type and quantity of fuel used; (3) maintenance or modifications performed; (4) the date and time of NOx, CO, and O2 measurements; (5) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2; (6) make and model of exhaust gas analyzer; (7) exhaust gas analyzer calibration records; and (8) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701, 6.2 and 4702, 6.2] Federally Enforceable Through Title V Permit
18. The permittee shall install and operate a nonresettable fuel meter and a nonresettable elapsed operating time meter. In lieu of installing a nonresettable fuel meter, the owner or operator may use a non-resettable elapsed operating time meter in conjunction with the engine manufacturer's maximum rated fuel consumption to determine annual fuel usage. The owner or operator shall maintain the required meters in proper operating condition. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
19. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 4702 and 40 CFR 63, ZZZZ]
20. On and after October 19, 2013, the permittee must 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. [40 CFR 63, ZZZZ]
21. On and after October 19, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63, ZZZZ]
22. On and after October 19, 2013, the engine's oil and filter shall be changed every 1,440 hours of operation or every 12 months, whichever comes first. [40 CFR 63, ZZZZ]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. On and after October 19, 2013, the engine's spark plugs shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ]
24. On and after October 19, 2013, the engine's hoses and belts shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ]
25. On and after October 19, 2013, the permittee shall maintain monthly records that include any information necessary to demonstrate compliance with 40 CFR 63, ZZZZ. [40 CFR 63, ZZZZ]
26. On and after October 19, 2013, the permittee shall maintain monthly records of all performance tests, opacity and visible emissions observations and required maintenance performed on the air pollution control and monitoring equipment. [District Rule 1070 and 40 CFR 63, ZZZZ]
27. On and after October 19, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of the operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of the action(s) taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning operation and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070 and 40 CFR 63, ZZZZ]
28. Pursuant to Rule 4702, beginning in 2015, the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by June 30 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4702 Table 2. [District Rule 4702]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-90-4 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
2,500 BBL FIXED-ROOF ORGANIC LIQUID STORAGE TANK (#2501) WITH A SHARED VAPOR RECOVERY SYSTEM (LISTED ON PERMIT UNIT S-37-8)

PERMIT UNIT REQUIREMENTS

1. Operation shall include vapor piping shared between tanks #S-37-90 and '-91, and connected to refinery vapor recovery system. [District NSR Rule] Federally Enforceable Through Title V Permit
2. This tank shall have no provisions for the heating of stored substances. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The tank shall be equipped with a fixed-roof with no holes or openings. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Tank P/V valve shall be set to within 10% of the maximum allowable working pressure of the tank. [District NSR Rule] Federally Enforceable Through Title V Permit
5. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
6. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
7. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
8. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
9. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
10. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Upon detection of a gas leak, defined as a VOC concentration of greater than 500 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3 and 40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit
12. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. Liquid leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
14. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
15. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
16. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
17. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
18. The operator shall submit to the APCO an operating plan as described in 40 CFR 60.113b(c) and shall operate the closed vent system and monitor the parameters of the system in accordance with the approved operating plan. The operator shall keep a record of the measured values of the parameters monitored in accordance with the approved operating plan. The operating plan shall be retained for the life of the control equipment. [40 CFR 60.113b(c), 60.115b(c)] Federally Enforceable Through Title V Permit
19. Storage vessel shall be equipped with a closed vent system designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections. Emissions from the closed vent system in excess of this limit shall be considered a leak. [40 CFR 60.112b(a)(3)(i), District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. Operator shall determine the presence of VOC leaks by EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases; 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane [40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit
21. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
22. VOC emissions from fugitive emissions sources in this permit unit shall not exceed 4.6 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. Permittee shall maintain accurate records of number of fugitive emissions components and calculated emissions using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2a "1995 EPA Protocol Refinery Screening Value Ranges Emission Factors". [District NSR Rule and District Rule 1070] Federally Enforceable Through Title V Permit
24. Operator shall maintain a record showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. [40 CFR 60.116b(b)] Federally Enforceable Through Title V Permit
25. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
26. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart Kb (except 60.113b(c)) and SJVUAPCD Rule 4623 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
27. This unit commenced construction, modification, or reconstruction after July 23, 1984. Therefore, the requirements of 40 CFR 60 Subpart K and Ka do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-91-5 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
2,500 BBL FIXED-ROOF ORGANIC LIQUID STORAGE TANK (#2502) WITH A SHARED VAPOR RECOVERY SYSTEM (LISTED ON PERMIT UNIT S-37-8)

PERMIT UNIT REQUIREMENTS

1. Operation shall include vapor piping shared between tanks #S-37-90 and '-91, and connected to refinery vapor recovery system. [District NSR Rule] Federally Enforceable Through Title V Permit
2. This tank shall have no provisions for the heating of stored substances. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The tank shall be equipped with a fixed-roof with no holes or openings. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Tank P/V valve shall be set to within 10% of the maximum allowable working pressure of the tank. [District NSR Rule] Federally Enforceable Through Title V Permit
5. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
6. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
7. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
8. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
9. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
10. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Upon detection of a gas leak, defined as a VOC concentration of greater than 500 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3 and 40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit
12. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. Liquid leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
14. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
15. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
16. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
17. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
18. The operator shall submit to the APCO an operating plan as described in 40 CFR 60.113b(c) and shall operate the closed vent system and monitor the parameters of the system in accordance with the approved operating plan. The operator shall keep a record of the measured values of the parameters monitored in accordance with the approved operating plan. The operating plan shall be retained for the life of the control equipment. [40 CFR 60.113b(c), 60.115b(c)] Federally Enforceable Through Title V Permit
19. Storage vessel shall be equipped with a closed vent system designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections. Emissions from the closed vent system in excess of this limit shall be considered a leak. [40 CFR 60.112b(a)(3)(i), District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. Operator shall determine the presence of VOC leaks by EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases; 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane [40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit
21. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
22. VOC emissions from fugitive emissions sources in this permit unit shall not exceed 1.3 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. Permittee shall maintain accurate records of number of fugitive emissions components and calculated emissions using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2a "1995 EPA Protocol Refinery Screening Value Ranges Emission Factors". [District NSR Rule and District Rule 1070] Federally Enforceable Through Title V Permit
24. Operator shall maintain a record showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. [40 CFR 60.116b(b)] Federally Enforceable Through Title V Permit
25. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
26. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart Kb (except 60.113b(c)) and SJVUAPCD Rule 4623 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
27. This unit commenced construction, modification, or reconstruction after July 23, 1984. Therefore, the requirements of 40 CFR 60 Subpart K and Ka do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-92-4 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
180 BHP INGERSOLL-RAND, MODEL JVG-6, NATURAL GAS-FIRED IC ENGINE (SERIAL # 6AJ450) WITH NON-SELECTIVE CATALYTIC REDUCTION (NSCR) TO SERVE HYDROGEN BOOSTER COMPRESSOR AT THE PLATFORMER UNIT (S-37-4)

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101, 5.1] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
3. Kern Oil and Refining Company shall operate and maintain controls as recommended by the emission control system supplier. [District NSR Rule] Federally Enforceable Through Title V Permit
4. NOx emission concentrations shall not exceed 25 ppm by volume at 15% O2 or exhaust emission concentrations shall be reduced by 96%. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
5. VOC emissions concentrations shall not exceed 250 ppmv at 15% O2. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
6. CO emission concentrations shall not exceed 2000 ppm by volume at 15% O2. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
7. Emissions from the engine shall neither exceed SOx (as SO2) - 0.0006 lb/MMBtu, nor PM10 - 0.011 lb/MMBtu. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Volume of fuel gas combusted shall not exceed 41,420 Scf/day. [District NSR Rule] Federally Enforceable Through Title V Permit
9. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. [In-stack O2 monitors may be allowed if approved by the APCO.] Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 2520, 9.3.2 & 9.4.2; 4701, 5.4; and 4702, 5.6 and 6.5] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2; 4701, 5.4; and 4702, 5.6 and 6.5] Federally Enforceable Through Title V Permit
11. All emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken by the portable analyzer shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701, 5.4 and 4702, 5.6] Federally Enforceable Through Title V Permit
12. NOx, CO, and VOC emissions shall be measured (source tested) not less than once every 24 months. [District Rules 4701, 6.3.1 and 4702, 6.3.1] Federally Enforceable Through Title V Permit
13. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081; 4701, 6.4; and 4702, 6.4] Federally Enforceable Through Title V Permit
14. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
15. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
16. Unit shall be fired only on PUC-regulated natural gas with a sulfur content of less than or equal to 1.0 grain/100 scf. [District Rules 2520, 9.3.2 and 4801; Kern County Rule 407] Federally Enforceable Through Title V Permit
17. The permittee shall maintain on file copies of all natural gas bills or fuel throughput records for a period of five years. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
19. The permittee shall maintain records of: (1) total hours of operation; (2) type and quantity of fuel used; (3) maintenance or modifications performed; (4) the date and time of NOx, CO, and O2 measurements; (5) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2; (6) make and model of exhaust gas analyzer; (7) exhaust gas analyzer calibration records; and (8) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701, 6.2 and 4702, 6.2] Federally Enforceable Through Title V Permit
20. The permittee shall operate a nonresettable fuel meter and a nonresettable elapsed operating time meter. In lieu of a nonresettable fuel meter, the owner or operator may use a non-resettable elapsed operating time meter in conjunction with the engine manufacturer's maximum rated fuel consumption to determine annual fuel usage. The owner or operator shall maintain the required meters in proper operating condition. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
21. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 4702 and 40 CFR 63, ZZZZ]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. On and after October 19, 2013, the permittee must 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. [40 CFR 63, ZZZZ]

23. On and after October 19, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63, ZZZZ]

24. On and after October 19, 2013, the engine's oil and filter shall be changed every 1,440 hours of operation or every 12 months, whichever comes first. [40 CFR 63, ZZZZ]

25. On and after October 19, 2013, the engine's spark plugs shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ]

26. On and after October 19, 2013, the engine's hoses and belts shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ]

27. On and after October 19, 2013, the permittee shall maintain monthly records that include any information necessary to demonstrate compliance with 40 CFR 63, ZZZZ. [40 CFR 63, ZZZZ]

28. On and after October 19, 2013, the permittee shall maintain monthly records of all performance tests, opacity and visible emissions observations and required maintenance performed on the air pollution control and monitoring equipment. [District Rule 1070 and 40 CFR 63, ZZZZ]

29. On and after October 19, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of the operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of the action(s) taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning operation and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070 and 40 CFR 63, ZZZZ]

30. The Permittee shall begin the daily recording of the inlet temperature to the catalyst bed by June 26, 2012 in order to ensure compliance with the requirements of 40 CFR 64, Compliance Assurance Monitoring (CAM). [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

31. Pursuant to Rule 4702, beginning in 2014, the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by June 30 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4702 Table 2. [District Rule 4702]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-93-3 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
TRUCK LOADING RACK, INCLUDING 4 FUEL OIL LOADING SPOTS AND 2 ATMOSPHERIC GAS OIL (AGO) LOADING SPOTS

PERMIT UNIT REQUIREMENTS

1. This rack shall only be used to transfer organic liquids with a true vapor pressure (TVP) less than 1.5 psia at actual loading temperature. [District Rule 4624] Federally Enforceable Through Title V Permit
2. The permittee shall keep accurate daily records of organic liquid TVP, loading temperature and types of liquids loaded, for a period of five years, and shall make such records available for District inspection upon request. [District Rule 4624] Federally Enforceable Through Title V Permit
3. The TVP shall be determined whenever there is a change in the type of liquid being transferred. Organic liquid TVP shall be determined using one of the following methods: (1) Rule 4624, Appendix A, for any of the listed liquids provided the storage temperature listed in Appendix A is not exceeded at any time; (2) A material safety data sheet (MSDS) in place of TVP testing if the transferred organic liquid is not crude oil or a petroleum distillate; (3) TVP test by measuring the Reid Vapor Pressure (RVP) using ASTM D 323 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the storage container's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in Rule 4624, Appendix B. Appendix B is an excerpt from the oil and gas section of "ARB Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588", dated August 1989. As an alternative to using ASTM D 323, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO and EPA. The latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA, shall be used to determine the TVP of crude oil with an API gravity of 26 degrees or less, or for any API gravity that is specified in this test method. The API gravity of crude oil or petroleum distillate shall be determined using ASTM Method D 287 (Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 (Standard Practices for Manual Sampling of Petroleum and Petroleum Products). [District Rule 4624] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-94-6 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
RAILCAR LIQUID TRANSFER FACILITY INCLUDING 48 ORGANIC LIQUID TRANSFER HOSES, 6 BUTANE TRANSFER HOSES, 8 TRANSFER PUMPS, AND 1 TRANSFER COMPRESSOR

PERMIT UNIT REQUIREMENTS

1. There shall be no loading of organic liquids with TVP at actual transfer temperature of 1.5 psia or greater. [District Rule 4624] Federally Enforceable Through Title V Permit
2. The TVP shall be determined whenever there is a change to a new liquid not previously loaded. [District Rule 4624] Federally Enforceable Through Title V Permit
3. An operator may use a material safety data sheet (MSDS) in place of TVP testing if the organic liquid loaded is not crude oil or a petroleum distillate. [District Rule 4624] Federally Enforceable Through Title V Permit
4. Liquid TVP shall be determined using Appendix A or the applicable test method in Section 6.3 of District Rule 4624. [District Rule 4624] Federally Enforceable Through Title V Permit
5. Total number of disconnects shall not exceed 144 per day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. During hose disconnects the maximum liquid spillage for liquids shall not exceed 10 milliliters/disconnect based on an average from 3 consecutive disconnects. [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit
7. All unloaded liquids and gases shall be routed to one of the following systems: a vapor collection and control system; a fixed roof container that meets the control requirements specified in Rule 4623 (Storage of Organic Liquids); a floating roof container that meets the control requirements specified in Rule 4623 (Storage of Organic Liquids); or a pressure vessel equipped with an APCO-approved vapor recovery system that meets the control requirements specified in Rule 4623 (Storage of Organic Liquids); or a closed VOC emission control system. [District Rules 4623 and 4624] Federally Enforceable Through Title V Permit
8. Emissions from fugitive emissions components and excess liquid drainage from railcar gas/liquid transfer facility shall not exceed 3.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. For this Class 1 organic liquid transfer facility, the emission of VOC from the transfer operation shall not exceed 0.08 pounds per 1,000 gallons of organic liquid transferred. [District Rule 4624] Federally Enforceable Through Title V Permit
10. A leak is defined as the dripping of VOC-containing liquid at a rate of more than three (3) drops per minute; or for organic liquids other than gasoline, the detection of any gaseous or vapor emissions with a concentration of VOC greater than 1,000 ppmv above a background as methane when measured in accordance with the test method in Section 6.3.7; gasoline, a concentration of VOC greater than 10,000 ppmv, as methane, above background when measured in accordance with the test method in Section 6.3.7. Any liquid or gas coming from a component undergoing repair or replacement, or during sampling of process fluid from equipment into a container is not considered a leak provided such activities are accomplished as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4624] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. A gas or liquid leak is a violation of this permit and shall be reported as a deviation. [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit
12. Permittee shall maintain accurate component count and emissions calculated using CAPCOA Screening Range Emissions Factors for Marketing Terminals, from California Implementation Guidelines for Estimating Emissions of Fugitive Hydrocarbon Leaks at Marketing Terminals, Table IV-2b, February 1999. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The operator of an organic liquid transfer facility shall inspect the vapor collection system, the vapor disposal system, and each transfer rack handling organic liquids for leaks during transfer at least once every calendar quarter using the test method prescribed in Section 6.3.8 of Rule 4624. [District Rule 4624] Federally Enforceable Through Title V Permit
14. An operator may apply for a written approval from the APCO to change the inspection frequency from quarterly to annually provided no leaks were found during the inspections required under provisions of Sections 5.9.1 and 5.9.2 of Rule 4624 during five consecutive quarterly inspections. Upon identification of any leak during an annual inspection the frequency shall revert back to quarterly and the operator shall contact the APCO in writing within 14 days. [District Rule 4624] Federally Enforceable Through Title V Permit
15. A floating roof container that meets the applicable control requirements of Section 5.0 of Rule 4623 (Storage of Organic Liquids) shall be considered not leaking when receiving unloaded liquids for compliance with Rule 4624. [District Rule 4624] Federally Enforceable Through Title V Permit
16. All equipment that are found leaking shall be repaired or replaced within 72 hours. If the leaking component cannot be repaired or replaced within 72 hours, the component shall be taken out of service until such time the component is repaired or replaced. The repaired or replacement equipment shall be reinspected the first time the equipment is in operation after the repair or replacement. [District Rule 4624] Federally Enforceable Through Title V Permit
17. Operator shall keep records of the throughputs of materials transferred and the results of any required leak inspections. [District Rule 4624] Federally Enforceable Through Title V Permit
18. Daily records of the number of disconnects from railcar liquid/gas transfer facility shall be maintained, retained on the premises for a period of at least five years and made available for District inspection upon request. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
19. The permittee shall keep accurate daily records of TVP, transfer temperature, and types of liquids/gases transferred for a period of five years, and shall make such records available for District inspection upon request. [District Rules 2520 and 4624] Federally Enforceable Through Title V Permit
20. All records required by this permit shall be retained for a period of at least 5 years and shall be made available to the District, ARB, and USEPA upon request. [District Rules 1070 and 4455] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-95-6 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
10,000 BBL FIXED-ROOF ORGANIC LIQUID STORAGE TANK (#10003) VENTING TO A 2,000 LB CARBON CANISTER (SHARED WITH PERMIT UNIT S-37-96)

PERMIT UNIT REQUIREMENTS

1. Except as otherwise authorized by this permit, tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in gas-tight condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in District Rule 4623. [District NSR Rule, District Rule 4623] Federally Enforceable Through Title V Permit
2. Tank shall be vented to vapor control system when storing organic liquids with a TVP of 0.0181 psi or greater. When storing organic liquids with a TVP less than 0.0181 psia or water that meets the VOC standard specified in the definition of "clean produced water" in Rule 1020, vapor control system may be disconnected. Vapor control requirements of NSPS Subpart Kb and Rule 4623 shall not be required when vapor control system is disconnected. Prior to removal of the vapor control system permittee shall provide to the District test results of TVP of the oil or VOC content of the clean produced water as applicable. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Throughput shall not exceed 28,767 gallons/day when storing organic liquids with a TVP less than of 0.0181 psi. There is no throughput limit when storing clean produced water. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Within one week after switching from storage of organic liquids with TVP less than 0.0181 psia to storage of organic liquids with TVP greater than 0.0181 psia, vapor control system fugitive emissions components shall be inspected by the facility operator to ensure compliance with the provisions of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from vapor control system requirement. If the tank stores crude oil or petroleum distillates, the operator shall also conduct an API gravity testing. [District Rules 2201 and 4623, 6.2.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

6. Except for crude oil with a API gravity 26 degrees or less, the TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures from the oil and gas section of "ARB Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588," dated August 1989 (see Rule 4623, Appendix B). As an alternative to using ASTM D 323-94, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and US EPA. In lieu of performing a TVP test, an operator may use Appendix A of District Rule 4623 to determine the TVP of the stored organic liquid provided the storage temperature listed in Appendix A is not exceeded at any time. [District Rule 4623, 6.4.2 and 6.4.3] Federally Enforceable Through Title V Permit
7. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. The TVP testing shall be conducted at the actual storage temperature of the organic liquid in the tank. [District Rules 2201 and 4623, 6.4.4] Federally Enforceable Through Title V Permit
8. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287-92 (2000) e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)." Sampling for API gravity shall be performed in accordance with ASTM Method D 4057-95 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit
9. The permittee shall keep accurate records of true vapor pressure, storage temperature and types of liquids stored, for a period of five years, and shall make such records available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
11. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
12. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
13. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
14. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
15. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
16. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3 and 40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

17. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
18. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
19. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
20. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
21. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
22. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
23. Carbon canister shall be replaced when vapor concentration exceeds 150% of the initial vapor concentration. If the initial vapor concentration is less than 7 ppmv the canister shall be replaced when the concentration is greater than 10 ppmv. [District NSR Rule] Federally Enforceable Through Title V Permit
24. The operator shall submit to the APCO an operating plan as described in 40 CFR 60.113b(c) and shall operate the closed vent system and monitor the parameters of the system in accordance with the approved operating plan. The operator shall keep a record of the measured values of the parameters monitored in accordance with the approved operating plan. The operating plan shall be retained for the life of the control equipment. [40 CFR 60.113b(c), 60.115b(c)] Federally Enforceable Through Title V Permit
25. Storage vessel shall be equipped with a closed vent system designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections. Emissions from the closed vent system in excess of this limit shall be considered a leak. [40 CFR 60.112b(a)(3)(i), District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
26. Operator shall determine the presence of VOC leaks by EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases; 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane [40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit
27. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
28. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

29. VOC emissions from fugitive emissions sources in this permit unit shall not exceed 1.3 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit

30. Permittee shall maintain accurate records of number of fugitive emissions components and calculated emissions using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2a "1995 EPA Protocol Refinery Screening Value Ranges Emission Factors". [District NSR Rule and District Rule 1070] Federally Enforceable Through Title V Permit

31. Operator shall maintain a record showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. [40 CFR 60.116b(b)] Federally Enforceable Through Title V Permit

32. The operator shall ensure that the granular activated carbon vapor control system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

33. Operator shall maintain records of dates and times of disconnection and connection of tank vapor control system. [District Rule 1070] Federally Enforceable Through Title V Permit

34. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

35. The permittee shall keep accurate records of each organic liquid stored in the tank, throughput, storage temperature, TVP, and API gravity. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

36. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

37. This unit commenced construction, modification, or reconstruction after July 23, 1984. Therefore, the requirements of 40 CFR 60 Subpart K and Ka do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-96-5 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
10,000 BBL FIXED-ROOF ORGANIC LIQUID STORAGE TANK (#10004) VENTING TO A 2,000 LB CARBON CANISTER (SHARED WITH PERMIT UNIT S-37-95)

PERMIT UNIT REQUIREMENTS

1. Except as otherwise authorized by this permit, tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in gas-tight condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in District Rule 4623. [District NSR Rule, District Rule 4623] Federally Enforceable Through Title V Permit
2. Tank shall be vented to vapor control system when storing organic liquids with a TVP of 0.0181 psi or greater. When storing organic liquids with a TVP less than 0.0181 psia or water that meets the VOC standard specified in the definition of "clean produced water" in Rule 1020, vapor control system may be disconnected. Vapor control requirements of NSPS Subpart Kb and Rule 4623 shall not be required when vapor control system is disconnected. Prior to removal of the vapor control system permittee shall provide to the District test results of TVP of the oil or VOC content of the clean produced water as applicable. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Throughput shall not exceed 28,767 gallons/day when storing organic liquids with a TVP less than of 0.0181 psi. There is no throughput limit when storing clean produced water. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Within one week after switching from storage of organic liquids with TVP less than 0.0181 psia to storage of organic liquids with TVP greater than 0.0181 psia, vapor control system fugitive emissions components shall be inspected by the facility operator to ensure compliance with the provisions of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from vapor control system requirement. If the tank stores crude oil or petroleum distillates, the operator shall also conduct an API gravity testing. [District Rules 2201 and 4623, 6.2.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

6. Except for crude oil with a API gravity 26 degrees or less, the TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures from the oil and gas section of "ARB Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588," dated August 1989 (see Rule 4623, Appendix B). As an alternative to using ASTM D 323-94, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and US EPA. In lieu of performing a TVP test, an operator may use Appendix A of District Rule 4623 to determine the TVP of the stored organic liquid provided the storage temperature listed in Appendix A is not exceeded at any time. [District Rule 4623, 6.4.2 and 6.4.3] Federally Enforceable Through Title V Permit
7. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. The TVP testing shall be conducted at the actual storage temperature of the organic liquid in the tank. [District Rules 2201 and 4623, 6.4.4] Federally Enforceable Through Title V Permit
8. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287-92 (2000) e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)." Sampling for API gravity shall be performed in accordance with ASTM Method D 4057-95 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit
9. The permittee shall keep accurate records of true vapor pressure, storage temperature and types of liquids stored, for a period of five years, and shall make such records available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623, 5.6] Federally Enforceable Through Title V Permit
11. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
12. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
13. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
14. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
15. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
16. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3 and 40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

17. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

18. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

19. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

20. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

21. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit

22. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

23. Carbon canister shall be replaced when vapor concentration exceeds 150% of the initial vapor concentration. If the initial vapor concentration is less than 7 ppmv the canister shall be replaced when the concentration is greater than 10 ppmv. [District NSR Rule] Federally Enforceable Through Title V Permit

24. The operator shall submit to the APCO an operating plan as described in 40 CFR 60.113b(c) and shall operate the closed vent system and monitor the parameters of the system in accordance with the approved operating plan. The operator shall keep a record of the measured values of the parameters monitored in accordance with the approved operating plan. The operating plan shall be retained for the life of the control equipment. [40 CFR 60.113b(c), 60.115b(c)] Federally Enforceable Through Title V Permit

25. Storage vessel shall be equipped with a closed vent system designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections. Emissions from the closed vent system in excess of this limit shall be considered a leak. [40 CFR 60.112b(a)(3)(i), District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

26. Operator shall determine the presence of VOC leaks by EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases; 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane [40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit

27. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

28. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

29. VOC emissions from fugitive emissions sources in this permit unit shall not exceed 1.3 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit

30. Permittee shall maintain accurate records of number of fugitive emissions components and calculated emissions using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2a "1995 EPA Protocol Refinery Screening Value Ranges Emission Factors". [District NSR Rule and District Rule 1070] Federally Enforceable Through Title V Permit

31. Operator shall maintain a record showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. [40 CFR 60.116b(b)] Federally Enforceable Through Title V Permit

32. The operator shall ensure that the granular activated carbon vapor control system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

33. Operator shall maintain records of dates and times of disconnection and connection of tank vapor control system. [District Rule 1070] Federally Enforceable Through Title V Permit

34. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

35. The permittee shall keep accurate records of each organic liquid stored in the tank, throughput, storage temperature, TVP, and API gravity. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

36. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

37. This unit commenced construction, modification, or reconstruction after July 23, 1984. Therefore, the requirements of 40 CFR 60 Subpart K and Ka do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-97-4 **EXPIRATION DATE:** 08/31/2016

SECTION: NE25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
3,000 BBL FIXED ROOF ORGANIC LIQUID STORAGE TANK (#3012) WITH A VAPOR CONTROL SYSTEM (LISTED ON PERMIT UNIT S-37-8)

PERMIT UNIT REQUIREMENTS

1. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in gas-tight condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in District Rule 4623. [District NSR Rule, District Rule 4623] Federally Enforceable Through Title V Permit
2. The operator shall submit to the APCO an operating plan as described in 40 CFR 60.113b(c) and shall operate the closed vent system and monitor the parameters of the system in accordance with the approved operating plan. The operator shall keep a record of the measured values of the parameters monitored in accordance with the approved operating plan. The operating plan shall be retained for the life of the control equipment. [40 CFR 60.113b(c), 60.115b(c)] Federally Enforceable Through Title V Permit
3. Storage vessel shall be equipped with a closed vent system designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections. Emissions from the closed vent system in excess of this limit shall be considered a leak. [40 CFR 60.112b(a)(3)(i), District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
4. Operator shall determine the presence of VOC leaks by EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases; 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane [40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit
5. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
6. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
7. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit
8. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
10. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3 and 40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit
11. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
14. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
15. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
16. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
17. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
19. VOC emissions from fugitive emissions sources in this permit unit shall not exceed 4.0 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
20. Permittee shall maintain accurate records of number of fugitive emissions components and calculated emissions using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2a "1995 EPA Protocol Refinery Screening Value Ranges Emission Factors". [District NSR Rule and District Rule 1070] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

21. Operator shall maintain a record showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. [40 CFR 60.116b(b)] Federally Enforceable Through Title V Permit

22. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-100-4 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
180 BHP INGERSOLL-RAND, MODEL JVG-6, GAS-FIRED IC ENGINE (SERIAL # 6BJ537) WITH NSCR DRIVING MAKEUP COMPRESSOR UNIT SERVING THE DIESEL HYDROTREATER (S-37-77)

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
2. Kern Oil and Refining Company shall operate and maintain controls as recommended by the emission control system supplier. [District NSR Rule] Federally Enforceable Through Title V Permit
3. NOx emission concentrations shall not exceed 25 ppm by volume at 15% O2 or exhaust emission concentrations shall be reduced by 96%. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
4. VOC emissions concentrations shall not exceed 250 ppmv at 15% O2. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
5. CO emission concentrations shall not exceed 2000 ppm by volume at 15% O2. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
6. Unit shall be fired only on natural gas with a sulfur content of less than or equal to 0.75 grains per 100 dry standard cubic feet of fuel gas. [District NSR Rule, District Rule 4801; and Kern County Rule 407] Federally Enforceable Through Title V Permit
7. Emissions from the engine shall neither exceed SOx (as SO2) - 0.00214 lb/1,000 scf of fuel burned, nor PM10 - 0.017 lb/1,000 scf of fuel burned. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Total volume of fuel gas combusted by the IC engine compressor shall not exceed 1,620 scf/hr. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Leaks from valves and connectors subject to a BACT requirement and subject to the provisions of Rule 4451 shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 100 ppmv above background when measured one (1) cm from potential source. [District NSR Rule & District Rule 4451] Federally Enforceable Through Title V Permit
10. Leaks from pump and compressor seals subject to a BACT requirement and subject to the provisions of Rule 4452 shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 500 ppmv above background when measured one (1) cm from potential source. [District NSR Rule & District Rule 4452] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. [In-stack O2 monitors may be allowed if approved by the APCO.] Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 2520, 9.3.2 & 9.4.2; 4701, 5.4; and 4702, 5.6 and 6.5] Federally Enforceable Through Title V Permit

12. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2; 4701, 5.4; and 4702, 5.6 and 6.5] Federally Enforceable Through Title V Permit

13. All emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken by the portable analyzer shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701, 5.4 and 4702, 5.6] Federally Enforceable Through Title V Permit

14. NOx, CO, and VOC emissions shall be measured (source tested) not less than once every 24 months. [District Rules 4701, 6.3.1 and 4702, 6.3.1] Federally Enforceable Through Title V Permit

15. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081; 4701, 6.4; and 4702, 6.4] Federally Enforceable Through Title V Permit

16. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

17. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

18. If the engine is fired on natural gas certified by the supplier to have a sulfur content of 0.75 grains per 100 dscf or less, then the permittee shall maintain on file copies of all natural gas bills and supplier certifications for a period of five years. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

19. If the engine is not fired on natural gas certified by the supplier to have a sulfur content of 0.75 grains per 100 dscf or less, then the sulfur content of the natural gas being fired in the engine shall be determined using ASTM method D 1072, D 3031, D 4084 or D 3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

20. If the engine is not fired on natural gas certified by the supplier to have a sulfur content of 0.75 grains per 100 dscf or less, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

21. Permittee shall maintain accurate records of fuel gas BTU content, and daily records of volume and sulfur content of gas burned. [District Rule 1070] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

23. The permittee shall maintain records of: (1) total hours of operation; (2) type and quantity of fuel used; (3) maintenance or modifications performed; (4) the date and time of NOx, CO, and O2 measurements; (5) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2; (6) make and model of exhaust gas analyzer; (7) exhaust gas analyzer calibration records; and (8) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701, 6.2 and 4702, 6.2] Federally Enforceable Through Title V Permit

24. The permittee shall install and operate a nonresettable fuel meter and a nonresettable elapsed operating time meter. In lieu of installing a nonresettable fuel meter, the owner or operator may use a non-resettable elapsed operating time meter in conjunction with the engine manufacturer's maximum rated fuel consumption to determine annual fuel usage. The owner or operator shall maintain the required meters in proper operating condition. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit

25. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 4702 and 40 CFR 63, ZZZZ]

26. On and after October 19, 2013, the permittee must 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. [40 CFR 63, ZZZZ]

27. On and after October 19, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63, ZZZZ]

28. On and after October 19, 2013, the engine's oil and filter shall be changed every 1,440 hours of operation or every 12 months, whichever comes first. [40 CFR 63, ZZZZ]

29. On and after October 19, 2013, the engine's spark plugs shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ]

30. On and after October 19, 2013, the engine's hoses and belts shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ]

31. On and after October 19, 2013, the permittee shall maintain monthly records that include any information necessary to demonstrate compliance with 40 CFR 63, ZZZZ. [40 CFR 63, ZZZZ]

32. On and after October 19, 2013, the permittee shall maintain monthly records of all performance tests, opacity and visible emissions observations and required maintenance performed on the air pollution control and monitoring equipment. [District Rule 1070 and 40 CFR 63, ZZZZ]

33. On and after October 19, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of the operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of the action(s) taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning operation and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070 and 40 CFR 63, ZZZZ]

34. The Permittee shall begin the daily recording of the inlet temperature to the catalyst bed by June 26, 2012 in order to ensure compliance with the requirements of 40 CFR 64, Compliance Assurance Monitoring (CAM). [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

35. Pursuant to Rule 4702, beginning in 2015, the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by June 30 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4702 Table 2. [District Rule 4702]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-101-4 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
180 BHP INGERSOLL-RAND, MODEL JVG-6, GAS-FIRED IC ENGINE (SERIAL # 6BJ518) WITH NSCR DRIVING RECYCLE COMPRESSOR UNIT SERVING THE DIESEL HYDROTREATER (#S 37-77)

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
2. Kern Oil and Refining Company shall operate and maintain controls as recommended by the emission control system supplier. [District NSR Rule] Federally Enforceable Through Title V Permit
3. NOx emission concentrations shall not exceed 25 ppm by volume at 15% O2 or exhaust emission concentrations shall be reduced by 96%. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
4. VOC emissions concentrations shall not exceed 250 ppmv at 15% O2. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
5. CO emission concentrations shall not exceed 2000 ppm by volume at 15% O2. [District NSR Rule; District Rule 4701, 5.1; and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
6. Unit shall be fired only on natural gas with a sulfur content of less than or equal to 0.75 grains per 100 dry standard cubic feet of fuel gas. [District NSR Rule, District Rule 4801; and Kern County Rule 407] Federally Enforceable Through Title V Permit
7. Emissions from the engine shall neither exceed SOx (as SO2) - 0.00214 lb/1,000 scf of fuel burned, nor PM10 - 0.017 lb/1,000 scf of fuel burned. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Total volume of fuel gas combusted by the IC engine compressor shall not exceed 1,620 scf/hr. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Leaks from valves and connectors subject to a BACT requirement and subject to the provisions of Rule 4451 shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 100 ppmv above background when measured one (1) cm from potential source. [District NSR Rule & District Rule 4451] Federally Enforceable Through Title V Permit
10. Leaks from pump and compressor seals subject to a BACT requirement and subject to the provisions of Rule 4452 shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 500 ppmv above background when measured one (1) cm from potential source. [District NSR Rule & District Rule 4452] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. [In-stack O2 monitors may be allowed if approved by the APCO.] Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 2520, 9.3.2 & 9.4.2; 4701, 5.4; and 4702, 5.6 and 6.5] Federally Enforceable Through Title V Permit

12. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 2520, 9.3.2; 4701, 5.4; and 4702, 5.6 and 6.5] Federally Enforceable Through Title V Permit

13. All emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken by the portable analyzer shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701, 5.4 and 4702, 5.6] Federally Enforceable Through Title V Permit

14. NOx, CO, and VOC emissions shall be measured (source tested) not less than once every 24 months. [District Rules 4701, 6.3.1 and 4702, 6.3.1] Federally Enforceable Through Title V Permit

15. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081; 4701, 6.4; and 4702, 6.4] Federally Enforceable Through Title V Permit

16. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

17. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

18. If the engine is fired on natural gas certified by the supplier to have a sulfur content of 0.75 grains per 100 dscf or less, then the permittee shall maintain on file copies of all natural gas bills and supplier certifications for a period of five years. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

19. If the engine is not fired on natural gas certified by the supplier to have a sulfur content of 0.75 grains per 100 dscf or less, then the sulfur content of the natural gas being fired in the engine shall be determined using ASTM method D 1072, D 3031, D 4084 or D 3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

20. If the engine is not fired on natural gas certified by the supplier to have a sulfur content of 0.75 grains per 100 dscf or less, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

21. Permittee shall maintain accurate records of fuel gas BTU content, and daily records of volume and sulfur content of gas burned. [District Rule 1070] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

23. The permittee shall maintain records of: (1) total hours of operation; (2) type and quantity of fuel used; (3) maintenance or modifications performed; (4) the date and time of NOx, CO, and O2 measurements; (5) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2; (6) make and model of exhaust gas analyzer; (7) exhaust gas analyzer calibration records; and (8) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701, 6.2 and 4702, 6.2] Federally Enforceable Through Title V Permit

24. The permittee shall install and operate a nonresettable fuel meter and a nonresettable elapsed operating time meter. In lieu of installing a nonresettable fuel meter, the owner or operator may use a non-resettable elapsed operating time meter in conjunction with the engine manufacturer's maximum rated fuel consumption to determine annual fuel usage. The owner or operator shall maintain the required meters in proper operating condition. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit

25. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 4702 and 40 CFR 63, ZZZZ]

26. On and after October 19, 2013, the permittee must 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. [40 CFR 63, ZZZZ]

27. On and after October 19, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63, ZZZZ]

28. On and after October 19, 2013, the engine's oil and filter shall be changed every 1,440 hours of operation or every 12 months, whichever comes first. [40 CFR 63, ZZZZ]

29. On and after October 19, 2013, the engine's spark plugs shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ]

30. On and after October 19, 2013, the engine's hoses and belts shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ]

31. On and after October 19, 2013, the permittee shall maintain monthly records that include any information necessary to demonstrate compliance with 40 CFR 63, ZZZZ. [40 CFR 63, ZZZZ]

32. On and after October 19, 2013, the permittee shall maintain monthly records of all performance tests, opacity and visible emissions observations and required maintenance performed on the air pollution control and monitoring equipment. [District Rule 1070 and 40 CFR 63, ZZZZ]

33. On and after October 19, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of the operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of the action(s) taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning operation and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070 and 40 CFR 63, ZZZZ]

34. The Permittee shall begin the daily recording of the inlet temperature to the catalyst bed by June 26, 2012 in order to ensure compliance with the requirements of 40 CFR 64, Compliance Assurance Monitoring (CAM). [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

35. Pursuant to Rule 4702, beginning in 2015, the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by June 30 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4702 Table 2. [District Rule 4702]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-102-5 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
10,000 BBL (420,000 GALLON) FIXED ROOF ORGANIC LIQUID STORAGE TANK #10005 SERVED BY VAPOR CONTROL SYSTEM LISTED ON PTO S-37-8

PERMIT UNIT REQUIREMENTS

1. Tank shall vent only to vapor recovery system listed on permit S-37-8. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in District Rule 4623. [District NSR Rule, District Rule 4623] Federally Enforceable Through Title V Permit
3. The operator shall submit to the APCO an operating plan as described in 40 CFR 60.113b(c) and shall operate the closed vent system and monitor the parameters of the system in accordance with the approved operating plan. The operator shall keep a record of the measured values of the parameters monitored in accordance with the approved operating plan. The operating plan shall be retained for the life of the control equipment. [40 CFR 60.113b(c), 60.115b(c)] Federally Enforceable Through Title V Permit
4. Storage vessel shall be equipped with a closed vent system designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections. Emissions from the closed vent system in excess of this limit shall be considered a leak. [40 CFR 60.112b(a)(3)(i), District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. If a flare is used as the control device, it shall meet the specifications described in the general control device requirements of 40 CFR 60.18. The operator of each source that is equipped with a closed vent system and a flare to meet the requirements of 40 CFR 60.112b(a)(3) or 40 CFR 60.112b(b)(1) shall meet the requirements as specified in the general control device requirements of 40 CFR 60.18(e) and (f). [40 CFR 60.112b(a)(3)(ii), 40 CFR 60.113b(d)] Federally Enforceable Through Title V Permit
6. Operator shall determine the presence of VOC leaks by EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases; 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane [40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit
7. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
8. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit

10. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

11. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

12. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3 and 40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit

13. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

14. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

15. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

16. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit

17. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit

18. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

19. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

20. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

21. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
22. VOC emissions from fugitive emissions sources in this permit unit shall not exceed 4.5 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
23. Permittee shall maintain accurate records of number of fugitive emissions components and calculated emissions using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2a "1995 EPA Protocol Refinery Screening Value Ranges Emission Factors". [District NSR Rule and District Rule 1070] Federally Enforceable Through Title V Permit
24. Operator shall maintain a record showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. [40 CFR 60.116b(b)] Federally Enforceable Through Title V Permit
25. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-103-8 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
49.0 MMBTU/HR NATURAL-GAS/REFINERY FIRED FORCED AIR BOILER #11 WITH A NORTH AMERICAN MODEL 4796-24 MAGNA-FLAME BURNER AND FGR UTILIZING ELECTRIC OR STEAM FANS

PERMIT UNIT REQUIREMENTS

1. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
2. The duration of each startup and shutdown period for the 49.0 MMBtu/hr Coen dual-fired induced draft broiler shall not exceed 6.1 hours and 3.5 hours respectively. Emission limits of District Rule 4305 and 4306 shall be waived during periods of startup and shutdown. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
3. Particulate matter emissions shall not exceed 0.1 grain/dscf, calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
4. Total combined steam production shall not exceed 80,000 lbm/hr from this permit unit and permit S-37-6. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Emission rates shall not exceed any of the following: PM10: 0.005 lb/MMBtu; SOx (as SO2): 0.027 lb/MMBtu (@ 161 ppmv-H2S); NOx: 0.036 lb/MMBtu (@ 3% O2) VOC: 0.0048 lb/MMBtu; or CO: 0.2578 lb/MMBtu or 344 ppmv @ 3% O2. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
6. Source testing to demonstrate compliance with NOx, CO, and VOC emission limits shall be conducted not less than once every 12 months for NOx and CO, except as provided below. [District NSR Rule and District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
7. District witnessed source testing to demonstrate compliance with NOx and CO emission limits shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
8. If permittee fails any compliance demonstration for NOx and/or CO emission limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
9. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by CARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
10. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
11. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, and stack gas oxygen - EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
13. Permittee shall comply with all applicable testing, recordkeeping, and reporting requirements specified in Rule 4001 - New Source Performance Standards, including but not limited to Subparts A and J. [District Rule 4001] Federally Enforceable Through Title V Permit
14. The permittee shall monitor and record the stack concentration of NOX, CO, and O2 at least once every month (in which a source test is not performed) using a portable analyzer that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305 and 4306]
15. If either the NOX or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305 and 4306]
16. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305 and 4306]
17. The permittee shall maintain records of: (1) the date and time of NOX, CO, and O2 measurements, (2) the O2 concentration in percent by volume and the measured NOX and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305 and 4306]
18. Refinery fuel gas burned in this unit shall be continuously monitored for H2S content and records of such measurements shall be maintained for a period of at least five years and exceedances of 161 ppmv H2S shall be reported as required by Rule 4001. [District Rule 4001] Federally Enforceable Through Title V Permit
19. The permittee shall maintain accurate records of the following: fuel usage and higher heating value (HHV); fuel gas sulfur content; and hourly steam production rate for this permit unit and permit S-37-6. [District Rule 1070 and 40CFR 60.48c(g)(2)] Federally Enforceable Through Title V Permit
20. Draeger tubes shall be used as an alternative method for measuring fuel gas H2S during scheduled maintenance or unscheduled interruptions of CEMs. Draeger tube use shall be limited to no more than 96 continuous hours and fuel gas H2S shall be checked a minimum of every two hours during scheduled maintenance or unscheduled interruptions of CEMs. Alternate method of measuring fuel gas H2S shall occur no more than 192 hours in any calendar year. [40CFR60.13(i)] Federally Enforceable Through Title V Permit
21. Operator shall maintain all records of the reason for alternative monitoring and required fuel gas H2S monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
22. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-107-2 **EXPIRATION DATE:** 08/31/2016

EQUIPMENT DESCRIPTION:
LPG, NATURAL GASOLINE, & MIXED LIGHT HYDROCARBON LOADING/UNLOADING RACK WITH VAPOR COLLECTION SYSTEM SERVING TANKS S-37-108 & -109

PERMIT UNIT REQUIREMENTS

1. Valves, flanges, and threaded connections shall be operated and maintained in leak free condition. A gas leak shall be defined as a reading of methane, in excess of 100 ppmv above the background when measured at distance of one (1) centimeter from potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Pump and compressor seals shall be operated and maintained in leak free condition. A gas leak shall be defined as a reading of methane, in excess of 500 ppmv above the background when measured at distance of one (1) centimeter from potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
3. All truck unloading lines and hoses and vapor return line and hoses shall be operated and maintained in leak-free condition. A leak shall be defined as a reading of methane, in excess of 100 ppmv above the background when measured at distance of one (1) centimeter from potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
4. All liquids remaining in loading/unloading arms shall be drained back into tank before disconnect. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Only LPG, natural gasoline, and mixed light hydrocarbons shall be loaded and unloaded. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Truck contents shall only be unloaded into pressure storage tanks operating with valid SJVUAPCD Permit to Operate. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Fugitive VOC emissions from components in the piping from loading/unloading rack to pressure tanks (S-37-108 & -109) shall not exceed 23.42 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Liquid drippage on disconnects shall not exceed 10 milliliters (mL)/disconnect. [District NSR Rule] Federally Enforceable Through Title V Permit
9. No more than 56 disconnects shall be allowed in any day without prior District approval. [District NSR Rule] Federally Enforceable Through Title V Permit
10. Vapor return lines shall be used whenever tank trucks are loading or unloading to return vapors to tank vapor space. [District NSR Rule] Federally Enforceable Through Title V Permit
11. For a Class 1 organic liquid transfer facility, the emission of VOC from the transfer operation shall not exceed 0.08 pounds per 1,000 gallons of organic liquid transferred. Compliance with the leak standards on this permit will serve to demonstrate compliance with this limit. [District Rule 4624]
12. The VOC from the transfer operation shall be routed to a pressure vessel equipped with an APCO-approved vapor recovery system that meets the control requirements specified in Rule 4623 (Storage of Organic Liquids). [District Rule 4624]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. All delivery tanks which previously contained organic liquids with a TVP 1.5 psia or greater at the storage container's maximum organic liquid storage temperature shall be filled only at Class 1 loading facilities using bottom loading equipment with a vapor collection and control system operating such that VOC emissions do not exceed 0.08 lb/1000 gallons loaded; or Class 2 loading facilities equipped with a system to control at least 95% of VOC displaced. [District Rule 4624] Federally Enforceable Through Title V Permit
14. Construction, reconstruction (as defined in District Rule 4001) or expansion of any top loading facility shall not be allowed. [District Rule 4624] Federally Enforceable Through Title V Permit
15. Loading and vapor collection and control equipment shall be designed, installed, maintained and operated such that there are no leaks or excess organic liquid drainage at disconnections. A liquid leak shall be defined as the dripping of organic compounds at a rate of more than three drops per minute. Excess liquid drainage shall be defined as exceeding 10 mL per disconnect. [District Rules 2201 and 4624]
16. During the loading of organic liquids, the operator shall perform and record the results of monthly leak inspections of the loading and vapor collection equipment at each loading arm. Leak inspections shall be conducted using sight, sound, smell and instrument methods to detect leaks. Instrument detection shall be conducted using EPA Method 21 and shall be measured at a distance of one centimeter from the potential source. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: A) Zero air (less than 10 ppm of hydrocarbon in air); and B) Mixture of methane or n-hexane and air at a concentration of about, but less than 100 ppmv (or 500 ppmv for pump and compressor seal leak inspection) methane or n-hexane. [District Rule 2520] Federally Enforceable Through Title V Permit
17. All equipment that are found leaking shall be repaired or replaced within 72 hours. If the leaking component cannot be repaired or replaced within 72 hours, the component shall be taken out of service until such time the component is repaired or replaced. The repaired or replacement equipment shall be reinspected the first time the equipment is in operation after the repair or replacement. [District Rule 4624]
18. Corrective steps shall be taken at any time the operator observes excess drainage at disconnect. In addition, the operator shall perform and record the results of monthly drainage inspections at disconnect for each loading arm. If no excess drainage conditions are found during five consecutive monthly inspections, the drainage inspection frequency may be changed from monthly to quarterly. However, if one or more excess drainage condition is found during a quarterly inspection, the inspection frequency shall return to monthly. [District Rule 2520, 9.1, 9.3.2, 9.4.2] Federally Enforceable Through Title V Permit
19. All inspections shall be documented with an inspection log. Inspection records shall include, at a minimum, 1) date of inspection, 2) location and description of any missing, loose, leaking, or damaged equipment and any malfunction requiring repair, 3) corrective steps taken to repair or replace the equipment, 4) test method and results for leak and drainage inspections, 5) location and description of any equipment to be inspected upon commencing operation after repair or replacement and 6) inspector name and signature. [District Rule 4624, 6.1.3]
20. Permittee shall maintain with the permit, accurate fugitive component counts (from loading/unloading rack to pressure tanks) and resulting emissions calculated using U.S. EPA publication EPA-453/R-95-017. [District NSR Rule] Federally Enforceable Through Title V Permit
21. Permittee shall maintain records of disconnects occurred in any one day on daily basis and shall make such records available for District inspection upon request. [District Rule 1070]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-108-2 **EXPIRATION DATE:** 08/31/2016

EQUIPMENT DESCRIPTION:
5,000 BBL SPHERICAL PRESSURE VESSEL STORING LPG, NATURAL GASOLINE, OR MIXED LIGHT HYDROCARBONS (TANK S-5000, EAST SPHERE)

PERMIT UNIT REQUIREMENTS

1. Pressure vessel shall maintain sufficient working pressure all the times that no organic liquid loss or VOC loss to the atmosphere shall occur. [District Rule 4623 & District NSR Rule] Federally Enforceable Through Title V Permit
2. Valves, flanges, and threaded connection shall be operated and maintained in leak free condition. A leak shall be defined as a reading of methane, in excess of 100 ppmv above the background when measured at distance of one (1) centimeter from potential source. [District Rule 4451 & District NSR Rule] Federally Enforceable Through Title V Permit
3. Pump and compressor seals shall be operated and maintained in leak free condition. A leak shall be defined as a reading of methane, in excess of 500 ppmv above the background when measured at distance of one (1) centimeter from potential source. [District Rule 4452 & District NSR Rule] Federally Enforceable Through Title V Permit
4. Leaks from valves, flanges, and threaded connections shall be inspected and repaired in accordance with District Rule 4451. [District Rule 4451] Federally Enforceable Through Title V Permit
5. Leaks from pump and compressor seals shall be inspected and repaired in accordance with District Rule 4452. [District Rule 4452] Federally Enforceable Through Title V Permit
6. Fugitive VOC emissions from components in the piping from pressure tanks (S-37-108 & -109) to blending manifold shall not exceed 3.91 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Permittee shall maintain with the permit, accurate fugitive component counts (from pressure tanks to blending manifold) and resulting emissions calculated using U.S. EPA publication EPA-453/R-95-017. [District NSR Rule] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-109-2 **EXPIRATION DATE:** 08/31/2016

EQUIPMENT DESCRIPTION:
5,000 BBL SPHERICAL PRESSURE VESSEL STORING LPG, NATURAL GASOLINE, OR MIXED LIGHT HYDROCARBONS (TANK S-5001, WEST SPHERE)

PERMIT UNIT REQUIREMENTS

1. Pressure vessel shall maintain sufficient working pressure all the times that no organic liquid loss or VOC loss to the atmosphere shall occur. [District Rule 4623 & District NSR Rule] Federally Enforceable Through Title V Permit
2. Valves, flanges, and threaded connection shall be operated and maintained in leak free condition. A leak shall be defined as a reading of methane, in excess of 100 ppmv above the background when measured at distance of one (1) centimeter from potential source. [District Rule 4451 & District NSR Rule] Federally Enforceable Through Title V Permit
3. Pump and compressor seals shall be operated and maintained in leak free condition. A leak shall be defined as a reading of methane, in excess of 500 ppmv above the background when measured at distance of one (1) centimeter from potential source. [District Rule 4452 & District NSR Rule] Federally Enforceable Through Title V Permit
4. Leaks from valves, flanges, and threaded connections shall be inspected and repaired in accordance with District Rule 4451. [District Rule 4451] Federally Enforceable Through Title V Permit
5. Leaks from pump and compressor seals shall be inspected and repaired in accordance with District Rule 4452. [District Rule 4452] Federally Enforceable Through Title V Permit
6. Fugitive VOC emissions from components in the piping from pressure tanks (S-37-108 & -109) to blending manifold shall not exceed 3.91 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Permittee shall maintain with the permit, accurate fugitive component counts (from pressure tanks to blending manifold) and resulting emissions calculated using U.S. EPA publication EPA-453/R-95-017. [District NSR Rule] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-111-6 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30E **RANGE:** 28E

EQUIPMENT DESCRIPTION:
55,000 BBL ORGANIC LIQUID INTERNAL FLOATING ROOF TANK (#55000), WELDED CONSTRUCTION WITH MECHANICAL SHOE PRIMARY SEAL AND RIM-MOUNTED SECONDARY SEAL

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623, 5.4.1, 5.3.2.1.1] Federally Enforceable Through Title V Permit
3. The cumulative length of all primary seal gaps greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623, 5.4.1, 5.3.2.1.1] Federally Enforceable Through Title V Permit
4. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623, 5.4.1, 5.3.2.1.1] Federally Enforceable Through Title V Permit
5. No continuous gap greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623, 5.4.1, 5.3.2.1.1] Federally Enforceable Through Title V Permit
6. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623, 5.4.1, 5.3.2.1.2] Federally Enforceable Through Title V Permit
7. The cumulative length of all secondary seal gaps greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623, 5.4.1, 5.3.2.1.2] Federally Enforceable Through Title V Permit
8. The metallic shoe-type seal shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 18 inches above the stored liquid surface. [District Rule 4623, 5.4.1, 5.3.2.1.3] Federally Enforceable Through Title V Permit
9. The maximum gap between the shoe and the tank shell shall be no greater than double the gap allowed by the seal gap criteria for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623, 5.4.1, 5.3.2.1.4] Federally Enforceable Through Title V Permit
10. There shall be no tears, holes or openings in the secondary seal or in the primary seal envelope surrounding the annular vapor space enclosed by the roof edge, stored liquid surface, shoe, and seal fabric. [District Rule 4623, 5.4.1, 5.3.2.1.5] Federally Enforceable Through Title V Permit
11. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.4.1, 5.3.2.1.6] Federally Enforceable Through Title V Permit
12. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623, 5.4.1, 5.3.2.1.7] Federally Enforceable Through Title V Permit
13. Pressure-vacuum valves shall be set to within ten (10) percent of the maximum allowable working pressure of the roof. [District Rule 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

14. All roof openings used for sampling and gauging, except pressure vacuum valves, shall be closed at all times, with no visible gaps and be leak free (as defined in Rule 4623), except when the roof opening is in use. [District Rule 4623] Federally Enforceable Through Title V Permit
15. Any roof drain shall be provided with a slotted membrane fabric cover, or equivalent, that covers at least 90% of the area of the opening. [District Rule 4623] Federally Enforceable Through Title V Permit
16. The permittee shall keep accurate records of Reid vapor pressure, storage temperature, daily tank throughput, and types of liquids stored, for a period of five years, and shall make such records available for District inspection upon request. [District Rules 2201 & 4623] Federally Enforceable Through Title V Permit
17. Daily tank throughput shall not exceed 30,000 bbl/day of fluid. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Reid vapor pressure of the stored liquid shall not exceed 11 psia. [District Rules 2201 & 4623] Federally Enforceable Through Title V Permit
19. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal roof shall be floating on the liquid surface except during initial fill and when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. [40 CFR 60.112b(a)(1)(i)] Federally Enforceable Through Title V Permit
20. Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and rim space vents is to provide a projection below the liquid surface. [40 CFR 60.112b(a)(1)(iii)] Federally Enforceable Through Title V Permit
21. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use. [40 CFR 60.112b(a)(1)(iv)] Federally Enforceable Through Title V Permit
22. Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. [40 CFR 60.112b(a)(1)(v)] Federally Enforceable Through Title V Permit
23. Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [40 CFR 60.112b(a)(1)(vi)] Federally Enforceable Through Title V Permit
24. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening. [40 CFR 60.112b(a)(1)(vii)] Federally Enforceable Through Title V Permit
25. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover. [40 CFR 60.112b(a)(1)(viii)] Federally Enforceable Through Title V Permit
26. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover. [40 CFR 60.112b(a)(1)(ix)] Federally Enforceable Through Title V Permit
27. This tank must have two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous. [40 CFR 60.112b(a)(1)(ii)(B)] Federally Enforceable Through Title V Permit
28. The operator shall visually inspect the internal floating roof, the primary seal and, the secondary seal prior to filling the storage vessel. If holes, tears, or other openings are found, they shall be repaired prior to filling the storage vessel. [40 CFR 60.113b(a)(1)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

29. The operator shall visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years. [40 CFR 60.113b(a)(4)] Federally Enforceable Through Title V Permit
30. Operator shall notify the APCO in writing 30 days prior to the filing or refilling of the vessel. If the inspection is not planned and the operator could not have known about the inspection 30 days in advance of refilling the tank, the operator shall make notification 7 days prior to refilling the tank. [40 CFR 60.113b(a)(5)] Federally Enforceable Through Title V Permit
31. Records of each inspection shall be maintained. Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment. If any defects are detected during an inspection, operator shall provide the APCO with a report within 30 days of the inspection. The report shall identify the storage vessel, the nature of the defects, and the date the vessel was emptied or the nature of and date the repair was made. [40 CFR 60.115b(a)(2), (3) and (4)] Federally Enforceable Through Title V Permit
32. Operator shall maintain, for the life of the source, a record showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. [40 CFR 60.116b(a) and (b)] Federally Enforceable Through Title V Permit
33. The operator shall keep readily available accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. The operator shall also keep a record of the liquid stored, the period of storage, and the maximum true vapor pressure of the liquid during the respective storage period. [40 CFR 60.116b(b) and (c)] Federally Enforceable Through Title V Permit
34. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually inspect the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4326, Table 5]
35. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 5]
36. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 5]
37. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 5]
38. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 5 shall constitute a violation of this rule. [District Rule 4623, Table 5]
39. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623, Table 5]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

40. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 5]

41. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-114-5 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
SOLAR CENTAUR C-50 COGENERATION SYSTEM WITH NATURAL GAS FIRED SOLAR TURBINE, INC. GAS TURBINE ENGINE (GTE) WITH DRY LOW NOX (DLN) COMBUSTORS POWERING A 4.968 MEGAWATT ELECTRICAL GENERATOR, 23 MMBTU/HR NATURAL GAS FIRED DUCT BURNER, HEAT RECOVERY STEAM GENERATOR, SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM, AND OXIDATION CATALYST

PERMIT UNIT REQUIREMENTS

1. Heat recovery steam generator design shall provide space for additional catalysts if additional catalyst are necessary to achieve NOx or CO emissions limits. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Gas turbine engine lube oil vents, generator lube oil vents, and lube oil accumulator vents shall be equipped with mist eliminators. Lube oil vents shall not exhibit visible emission of 5% opacity or greater except for up to three minutes in any hour. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Gas turbine engine shall be equipped with continuously monitoring and totalizing fuel gas fuel flowmeter. Duct burner shall be equipped with continuously monitoring and totalizing fuel gas flowmeter. Selective catalytic reduction system shall be equipped with continuously monitoring ammonia injection flowmeter and continuously monitoring catalyst inlet temperature indicator. The permittee shall record the ammonia injection rate and catalyst inlet temperature at least once every 8 hours. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods. [District Rule 1081] Federally Enforceable Through Title V Permit
5. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Each startup and each shutdown shall not exceed three hours and one hour, respectively, in duration. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. [District Rule 4703] Federally Enforceable Through Title V Permit
8. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rule 4703] Federally Enforceable Through Title V Permit
9. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit
10. Gas turbine engine and duct burner shall be fired on natural gas, consisting primarily of methane and ethane, with a sulfur content no greater than 1.0 grains of sulfur compounds (as S) per 100 dry scf of natural gas. [District Rules 2201, 4001, and 40 CFR 60.332 and 40 CFR 60.334] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Sulfur content of the natural gas being fired in the turbine shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for eight (8) consecutive weeks, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the permittee must return to weekly testing until eight (8) consecutive weeks show compliance. Natural gas vendor test data consistent with the natural gas fuel sulfur content test method listed in this permit may be used as verification of compliance with the fuel sulfur content limit. [District Rule 4001 and 40 CFR 60.334(i)] Federally Enforceable Through Title V Permit
12. The permittee shall maintain records of natural gas fuel sulfur content verification. [District Rule 4001 and 40 CFR 60.334(h)] Federally Enforceable Through Title V Permit
13. Total heat input to the gas turbine engine and duct burner shall not exceed 674,520 MMBtu in any rolling twelve month period. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Ammonia shall be injected whenever the selective catalytic reduction system catalyst temperature exceeds the minimum ammonia injection temperature recommended by the manufacturer. The minimum ammonia injection rate shall not be less than 6.5 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
15. If the ammonia injection rate is less than the minimum ammonia injection rate the permittee shall return the ammonia injection rate above the minimum ammonia injection rate as soon as possible, but no longer than 8 hours after detection. If the ammonia injection rate is not returned above the minimum ammonia injection rate within 8 hours, the permittee shall notify the District within the following 1 hour and conduct a source test within 60 days of the first exceedance to demonstrate compliance with the applicable emission limits at the reduced ammonia injection rate. A District-approved portable analyzer may be used in lieu of a source test to demonstrate compliance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Emissions rates from gas turbine engine and duct burner, except during startup and shutdown, shall not exceed any of the following: NOx (as NO2) 5.0 ppmvd @ 15% O2; PM10 0.0069 lb/MMBtu; CO 10.0 ppmvd @ 15% O2; VOC 6.25 ppmvd @ 15% O2; or ammonia 10 ppmvd @ 15% O2. NOx emissions limit is a one hour average. All other emissions limits are three hour rolling averages. [District Rules 2201, 4703, 5.1.2, 5.2 and 7.2; and 40 CFR 60.332(a)(2)] Federally Enforceable Through Title V Permit
17. Emissions from gas turbine engine and duct burner shall not exceed any of the following: NOx (as NO2) 36.5 lb/day; SOx (as SO2) 5.8 lb/day; PM10 13.7 lb/day; CO 44.4 lb/day; or VOC 15.8 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Emissions in any rolling 12 month period from gas turbine engine and duct burner shall not exceed any of the following: NOx (as NO2) 12,411 lb; SOx (as SO2) 1,956 lb; PM10 4,650 lb; CO 15,109 lb; or VOC 5,396 lb. [District Rule 2201] Federally Enforceable Through Title V Permit
19. The exhaust gas concentration of NOx (as NO2), CO, and O2 shall be measured and recorded at least once a week using District approved portable analyzers. [District Rule 2201] Federally Enforceable Through Title V Permit
20. If the NOx and/or CO concentrations, as measured by the permittee with a portable analyzer, exceed the permitted emission limits, the permittee shall notify the District and return the NOx and CO concentrations to the permitted emission limits as soon as possible but no longer than eight (8) hours after detection. If the permittee's portable analyzer readings continue to exceed the permitted emission limits after eight (8) hour, the permittee shall notify the District within the following one (1) hour, and conduct a certified source test within 60 days to demonstrate compliance with permitted emissions limits. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

21. Source testing to determine NOx (as NO2), CO, VOC, ammonia emissions, and fuel gas sulfur content shall be conducted at least once every twelve months. SCR catalyst inlet temperature and ammonia injection rate shall be recorded during any source testing. [District Rules 1081 and 4703] Federally Enforceable Through Title V Permit

22. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any source test, and a source test plan must be submitted for approval 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

23. The following test methods shall be used NOx: EPA Method 7E or 20; PM10: EPA method 5 (front half and back half); CO: EPA method 10 or 10B; VOC: EPA method 18; O2: EPA Method 3, 3A, or 20; ammonia: BAAQMD ST-1B; natural gas fuel total reduced sulfur content: ASTM D1945, D3246, D5504, or D6228; and natural gas higher heating value (HHV): ASTM D3588, 1826, or 1945. [District Rules 1081, 2201, 4001, 40 CFR 60 Subpart GG, and District Rule 4703, 6.4.4 and 6.4.5] Federally Enforceable Through Title V Permit

24. The permittee shall maintain records of the date and time of all NOx, CO, and O2 measurements, the measured NO2 and CO concentrations corrected to 15% O2, and the O2 concentration. The records shall also include a description of any corrective action taken to maintain the emissions in the acceptable range. [District Rule 1070] Federally Enforceable Through Title V Permit

25. The permittee shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local startup and stop time, length and reason for reduced load periods, total hours of operation, the type and quantity of fuel used, duration of each start-up (or black start) and shutdown period, and the date, time, and duration of each primary re-ignition period. [District Rule 4703] Federally Enforceable Through Title V Permit

26. The permittee shall maintain records of daily and rolling twelve month natural gas consumption (MMBtu) of gas turbine engine and duct burner, daily and rolling twelve month calculated emissions, ammonia injection rate, and catalyst inlet temperature. [District Rule 2201] Federally Enforceable Through Title V Permit

27. All records required to be maintained by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-116-5 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
14.1 MMBTU/HR SPLITTER REBOILER HEATER

PERMIT UNIT REQUIREMENTS

1. Copies of all fuel invoices, gas purchase contract, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. Operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel [District NSR Rule and 2520, 9.4.2 and 40 CFR 60.48c(g)] Federally Enforceable Through Title V Permit
2. Refinery fuel gas supply to heater shall be equipped with continuous H2S monitor meeting the requirements of NSPS Subpart J. [District Rule 4001]
3. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. [District Rule 2520, 9.3.2; District Rule 4301, 5.2.1] Federally Enforceable Through Title V Permit
4. Particulate matter emissions shall not exceed 0.1 grain/dscf. Emissions of combustion contaminants shall not exceed 0.1 grain per cubic foot of gas calculated to 12% CO2 at dry standard conditions. Emissions of combustion contaminants shall not exceed ten (10) pounds per hour. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
5. Nitrogen oxide (NOx) emission concentrations in ppmv shall be referenced at dry stack gas conditions, and shall be calculated to 3.00 percent by volume stack gas oxygen and averaged over 60 minutes, and lb/MMBtu rates shall be calculated as lb NO2/MMBtu of heat input (hhv). [District Rules 4305, 5.0, 8.2, 4306, 5.0, 8.2 and 4351, 8.1] Federally Enforceable Through Title V Permit
6. Nitrogen oxide (NOx) emissions shall not exceed 0.036 lb NOx/MMBtu or 30 ppmv @ 3% O2 . [District Rule 4351, 5.2.2 and 5.4, and /or District Rule 4305, 5.1, and /or District Rule 4306, 5.1 and subsumed District Rule 4301] Federally Enforceable Through Title V Permit
7. Splitter reboiler process heater shall be equipped with John Zink PSMR and shall be fired exclusively on PUC or FERC regulated natural gas or refinery fuel gas. [District NSR Rule and District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit
8. The duration of each startup and shutdown period for the 14.1 MMBtu/hr Splitter Reboiler process heater shall not exceed 8.5 hours and 5.6 hours respectfully. Emission limits of District Rule 4305 and 4306 shall be waived during periods of startup and shutdown. [District Rules 4305, 5.5.6 and 4306, 5.3] Federally Enforceable Through Title V Permit
9. Daily fuel throughput shall not exceed 338,000 scf/day. [District NSR Rule and 4102] Federally Enforceable Through Title V Permit
10. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 2520, 9.3.2; District Rule 4801] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Compliance with sulfur compound emission limits may be demonstrated by firing this unit either on PUC or FERC regulated natural gas or refinery gas with a sulfur content of no more than 1 gr/100 scf (17 ppmv H2S) for PUC or FERC-regulated gas and 100 ppmv (100 ppmv H2S) for refinery fuel gas according to the H2S monitor installed downstream of the sulfur recovery unit. [District NSR Rule, 4301, 4801 and 2520, 9.3.2]
12. Fuel sulfur content shall not exceed 100 ppmv (as H2S). [District Rule 2201]
13. Emission rates for the 14.1 MMBtu/hr splitter reboiler process heater shall not exceed any of the following: PM10: 0.005 lb/MMBtu; NOx (as NO2): 0.036 lb/MMBtu or 30 ppmv @3% O2; VOC: 0.0028 lb/MMBtu; or CO: 239 ppmvd @ 3% O2. [District NSR Rule and District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit
14. Compliance source testing shall be conducted under conditions representative of normal operation. [District Rule 1081] Federally Enforceable Through Title V Permit
15. Process heaters exhaust stacks shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 1081] Federally Enforceable Through Title V Permit
16. Source testing to measure NOx and CO emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305 and 4306]
17. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305 and 4306]
18. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
19. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305 and 4306]
20. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305 and 4306]
21. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305 and 4306]
22. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305 and 4306]
23. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
24. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, and 4306]
25. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
26. The permittee shall monitor and record the stack concentration of NOX, CO, and O2 at least once every month (in which a source test is not performed) using a portable analyzer that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305 and 4306]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

27. If either the NOX or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 4305 and 4306]
28. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305 and 4306]
29. The permittee shall maintain records of: (1) the date and time of NOX, CO, and O2 measurements, (2) the O2 concentration in percent by volume and the measured NOX and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305 and 4306]
30. Draeger tubes shall be used as an alternative method for measuring fuel gas H2S during scheduled maintenance or unscheduled interruptions of CEMs. Draeger tube use shall be limited to no more than 96 continuous hours and fuel gas H2S shall be checked a minimum of every two hours during scheduled maintenance or unscheduled interruptions of CEMs. Alternate method of measuring fuel gas H2S shall occur no more than 192 hours in any calendar year. [40CFR60.13(i)] Federally Enforceable Through Title V Permit
31. Operator shall maintain all records of the reason for alternative monitoring and required fuel gas H2S monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
32. Operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2]
33. Permittee shall comply with all notification and recordkeeping requirements of 40 CFR 60.19. [District Rule 4001]
34. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320]
35. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-118-3 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
NAPHTHA FEED PRETREATMENT UNIT (NAPHTHA HYDROTREATER) WITH 12.6 MMBTU/HR CHARGE HEATER WITH JOHN ZINK COOLSTAR LOW NOX BURNER, 11.1 MMBTU/HR STRIPPER REBOILER HEATER WITH JOHN ZINK COOLSTAR LOW NOX BURNER, REACTOR VESSEL, HYDROGEN COMPRESSORS, HEAT EXCHANGERS, AND ASSOCIATED SEPARATOR VESSELS, KNOCKOUTS, PIPING, AND COMPONENTS

PERMIT UNIT REQUIREMENTS

1. Permittee shall comply with all applicable testing, recordkeeping, and reporting requirements specified in Rule 4001 - New Source Performance Standards, including but not limited to Subparts A and J. [District Rule 4001] Federally Enforceable Through Title V Permit
2. Heaters shall be fired only on purchased commercial natural gas, refinery fuel gas, or any combination thereof. [District Rule 2201, 4001] Federally Enforceable Through Title V Permit
3. Operator shall not burn in any fuel gas combustion device any fuel gas that contains hydrogen sulfide (H2S) in excess of 100 ppmv@ 0% O2. [District Rules 2201 ,2520, 9.4.2 and 4301, 5.2.1, & 40 CFR Part 60, Subpart J, 60.104(a)(1)] Federally Enforceable Through Title V Permit
4. The combustion in the fuel gas combustion devices of gases released as a result of start-up, shutdown, upset, malfunction, or the result of relief valve leakage is exempt from the 100 ppmv@ 0% O2 requirement. [District Rules 2201, 4001, Subpart J, 60.104(a)(1)] Federally Enforceable Through Title V Permit
5. All refinery fuel gas combusted in the heaters shall be monitored for H2S content by a continuous emissions monitoring (CEM) system. CEM shall be installed, calibrated, operated, and reported according to EPA guidelines as specified under 40 CFR 60, Subpart J, Specification 7, and general requirements. CEM results shall be calculated on a rolling three (3) hour basis. [District Rules 2201, 4001, Subpart J, 60.105(a)(4) and 60.105(a)(4)iii] Federally Enforceable Through Title V Permit
6. Operator shall report all rolling 3-hour periods during which the average concentration of H2S as measured by the H2S continuous monitoring system exceeds 100 ppmv@ 0% O2. [District Rules 2201, 4001, Subpart J, 60.105(e)(3)(ii)] Federally Enforceable Through Title V Permit
7. Emission rates from each heater, except during startup and shutdown, shall not exceed any of the following: NOx (as NO2): 25 ppmv @ 3% O2, VOC: 0.0055 lb/MMBtu, or CO: 150 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
8. PM10 emission rates from each heater shall not exceed 0.0076 lb/MMBtu. [District Rules 2201, 2520, 4201, 4301] Federally Enforceable Through Title V Permit
9. The duration of each startup and shutdown period for the charge heater shall not exceed 12.0 hours and 5.8 hours respectfully. The duration of each startup and shutdown period for the reboiler heater shall not exceed 12.0 hours and 5.0 hours respectfully. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit

11. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

12. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

13. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

14. Heater exhaust stacks shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 1081] Federally Enforceable Through Title V Permit

15. Source testing to demonstrate compliance with NOx and CO emission limits shall be conducted within 60 days of startup and not less than once every 12 months, except as provided below. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

16. Source testing to demonstrate compliance with NOx and CO emission limits shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

17. If permittee fails any compliance demonstration for NOx or CO emission limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

18. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit

19. Compliance source testing shall be conducted under conditions representative of normal operation. [District Rule 1081] Federally Enforceable Through Title V Permit

20. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

21. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, and stack gas oxygen - EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

23. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(Amended December 16, 1993). [District Rule 1081, and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit

24. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results used to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel. [District Rule 2520, 9.4.2 and 40 CFR 60.48c(g)] Federally Enforceable Through Title V Permit

25. Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit

26. Test results submitted to the District from unit(s) representing a group of units may be used to demonstrate compliance with NOx limits for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. [District Rule 4305, 6.3.2 and 4351, 6.3] Federally Enforceable Through Title V Permit

27. The following conditions must be met for representative unit(s) used to demonstrate compliance for NOx limits for a group of units: 1) all units are initially source tested and emissions from all units in group are similar, 2) all units in group are similar in terms of rated heat input, make and series, operation conditions, fuel used, and control method, 3) the group is owned by a single owner and located at a single stationary source, and 4) all units in the group shall have received the same maintenance and tune-up procedures as the representative unit(s). [District Rule 4305, 6.3.2] Federally Enforceable Through Title V Permit

28. The number of representative units source tested to demonstrate compliance for NOx limits shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that when 3 source test cycles have been completed, all units in the entire group will have been tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

29. Nitrogen oxide (NOx) emission concentrations in ppmv shall be referenced at dry stack gas conditions, and shall be calculated to 3.00 percent by volume stack gas oxygen and averaged over 60 minutes, and lb/MMBtu rates shall be calculated as lb NO2/MMBtu of heat input (hhv). [District Rule 4305, 5.0, 8.2 and/or 4351, 8.1] Federally Enforceable Through Title V Permit

30. Draeger tubes shall be used as an alternative method for measuring fuel gas H2S during scheduled maintenance or unscheduled interruptions of CEMs. Draeger tube use shall be limited to no more than 96 continuous hours and fuel gas H2S shall be checked a minimum of every two hours during scheduled maintenance or unscheduled interruptions of CEMs. Alternate method of measuring fuel gas H2S shall occur no more than 192 hours in any calendar year. [40CFR60.13(i)] Federally Enforceable Through Title V Permit

31. Operator shall maintain all records of the reason for alternative monitoring and required fuel gas H2S monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

32. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320]

33. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320]

34. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, and 4306] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

35. VOC emission rate from fugitive components associated with this emissions unit shall not exceed 30.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

36. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. Permit holder shall update such records when new components are approved and installed. Components shall be screened and leak rate shall be measured in accordance with the frequency of inspection specified in Rule 4455 as applicable. [District Rule 2201] Federally Enforceable Through Title V Permit

37. As referenced in this permit, a fugitive component leak shall be defined as the lower of the level specified in applicable rules, permit conditions, or the following: pumps in light liquid service - 1,000 ppmv; compressors - 500 ppmv; pressure relief devices in gas/vapor service - 500 ppmv; valves in gas/vapor and light liquid service - 500 ppmv; agitators - 10,000 ppmv; pumps in heavy liquid service - 2,000 ppmv; valves, and connectors in heavy liquid service, instrumentation systems, and pressure relief devices in liquid service - 500 ppmv; connectors in gas/vapor service and in light liquid service - 500 ppmv. Component type and service referenced in this condition shall be as defined in 40 CFR 63 Subpart H. [District Rule 2201] Federally Enforceable Through Title V Permit

38. Permit unit shall comply with applicable District Rule 4001 (NSPS, Subpart GGG) requirements. [District Rule 4001] Federally Enforceable Through Title V Permit

39. The owner or operator may apply to the Administrator for a determination of equivalency for any means of emission limitation that achieves a reduction in emissions of VOC at least equivalent to the reduction in emissions of VOC achieved by the controls required in Subpart GGG. In doing so, the owner or operator shall comply with the requirements of 40 CFR 60.484. [40 CFR 60.592(c)] Federally Enforceable Through Title V Permit

40. Each pump in light liquid service (PLLS) shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485(b), except as provided in 40 CFR 60.482-1(c) and 40 CFR 60.482-2(d), (e), and (f). Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. A leak is detected if an instrument reading of 10,000 ppm or greater is measured or if there are indications of liquids dripping from the pump seal. [40 CFR 60.482-2(a) and (b)] Federally Enforceable Through Title V Permit

41. When a leak is detected for each PLLS, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. [40 CFR 60.482-2(c)] Federally Enforceable Through Title V Permit

42. Any PLLS equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of 40 CFR 60.482-2(a) provided the requirements specified in 40 CFR 60.482-2(d)(1) through (6) are met. [40 CFR 60.482(d)] Federally Enforceable Through Title V Permit

43. Any PLLS that is designated, as described in 40 CFR 60.486(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 60.482-2(a), (c), and (d) if the pump meets the requirements specified in 40 CFR 60.482-2(e)(1), (2), and (3). [40 CFR 60.482-2(e)] Federally Enforceable Through Title V Permit

44. If any PLLS is equipped with a closed vent system capable of capturing and transporting leakage from the seal or seals to a control device that complies with the requirements of 40 CFR 60.482-10, it is exempt from the requirements of 40 CFR 60.482-2(a) through (e). [40 CFR 60.482-2(f)] Federally Enforceable Through Title V Permit

45. Any pump in PLLS that is designated, as described in 40 CFR 60.486(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of 40 CFR 60.482-2(a) and 40 CFR 60.482-2(d)(4) through (6) if: 1). The owner or operator of the pump demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-2(a); and 2) The owner or operator of the pump has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in 40 CFR 60.482-2(c) if a leak is detected. [40 CFR 60.482-2(g)] Federally Enforceable Through Title V Permit

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46. Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in 40 CFR 60.485(c). [40 CFR 60.482-4(a)] Federally Enforceable Through Title V Permit

47. After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in 40 CFR 60.482-9. No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in 40 CFR 60.485(c). [40 CFR 60.482-4(b)] Federally Enforceable Through Title V Permit

48. Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in 40 CFR 60.482-10 is exempted from the requirements of 40 CFR 60.482-4(a) and (b). [40 CFR 60.482-4(c)] Federally Enforceable Through Title V Permit

49. Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the 40 CFR 60.482-4(a) and (b), provided the owner or operator complies with the requirements in 40 CFR 60.482-4(d)(2) of this section. After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 60.482-9. [40 CFR 60.482-4(d)] Federally Enforceable Through Title V Permit

50. Except for in-situ sampling systems and sampling systems without purges, each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR 60.482-1(c). Each closed-purge, closed-loop, or closed-vent system shall comply with the requirements specified in 40 CFR 60.482-5(b)(1), (2), (3), and (4). [40 CFR 60.482-5(a), (b), and (c)] Federally Enforceable Through Title V Permit

51. Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR 60.482-1(c). The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line. When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with this condition at all other times. [40 CFR 60.482-6(a) and (c)] Federally Enforceable Through Title V Permit

52. Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed. [40 CFR 60.482-6(b)] Federally Enforceable Through Title V Permit

53. Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of 40 CFR 60.482-6(a), (b) and (c). [40 CFR 60.482-6(d)] Federally Enforceable Through Title V Permit

54. Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in 40 CFR 60.482-6(a) through (c) are exempt from the requirements of 40 CFR 60.482-6(a) through (c). [40 CFR 60.482-6(e)] Federally Enforceable Through Title V Permit

55. Each valve in gas/vapor service and in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485(b) and shall comply with 40 CFR 60.482-7(b) through (e), except as provided in 40 CFR 60.482-7(f), (g), and (h), 40 CFR 60.483-1, 40 CFR 60.483-2, and 40 CFR 60.482-1(c). A leak is detected if an instrument reading of 10,000 ppm or greater is measured. [40 CFR 60.482-7(a) and (b)] Federally Enforceable Through Title V Permit

56. Any valve in gas/vapor service or in light liquid service for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected. If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months. [40 CFR 60.482-7(c)] Federally Enforceable Through Title V Permit

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57. When a leak is detected for any valve in gas/vapor service or in light liquid service, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices specified in 40 CFR 60.482-7(e)(1), (2), (3), and (4), where practicable. [40 CFR 60.482-7(d) and (e)] Federally Enforceable Through Title V Permit

58. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 60.482-7(a) if the valve meets the requirements specified in 40 CFR 60.482-7(f)(1), (2), and (3). [40 CFR 60.482-7(f)] Federally Enforceable Through Title V Permit

59. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7(a) if: 1) The owner or operator of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-7(a); and 2) The owner or operator of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times. [40 CFR 60.482-7(g)] Federally Enforceable Through Title V Permit

60. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(f)(2), as a difficult-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7(a) if: 1) The owner or operator of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface; 2) The process unit within which the valve is located either becomes an affected facility through 40 CFR 60.14 or 40 CFR 60.15 or the owner or operator designates less than 3.0 percent of the total number of valves as difficult-to-monitor; and 3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year. [40 CFR 60.482-7(h)] Federally Enforceable Through Title V Permit

61. The owner or operator may elect to comply with the applicable provisions for valves in gas/vapor service and in light liquid service as specified in 40 CFR 60.483-1 and 60.483-2. [40 CFR 60.592(b)] Federally Enforceable Through Title V Permit

62. If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, the owner or operator shall follow either one of the following procedures: 1) The owner or operator shall monitor the equipment within 5 days by the method specified in 40 CFR 60.485(b) and shall comply with the requirements of 40 CFR 60.482-8(b) through (d); or 2) The owner or operator shall eliminate the visual, audible, olfactory, or other indication of a potential leak. A leak is detected if an instrument reading of 10,000 ppm or greater is measured. [40 CFR 60.482-8(a) and (b)] Federally Enforceable Through Title V Permit

63. When a leak is detected in pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices described under 40 CFR 60.482-7(e). [40 CFR 60.482-8(c) and (d)] Federally Enforceable Through Title V Permit

64. Delay of leak repair will be allowed if the repair is technologically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown. Delay of repair is allowed for equipment which is isolated from the process and which does not remain in VOC service. Delay of repair beyond a process unit shutdown will be allowed for a valve, if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown. [40 CFR 60.482-9(a)(b)(e)] Federally Enforceable Through Title V Permit

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65. Delay of leak repair for valves will be allowed if the owner or operator demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair and when repair procedures are effected and when repair procedures ar effected, the purged material is collected and destroyed or recovered in a control device complying with 40 CFR 60.482-10. Delay of leak repair for pumps will be allowed if the repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and repair is completed as soon as practicable, but no later than 6 months after the leak was detected. [40 cfr 60.482-9(c)(d)] Federally Enforceable Through Title V Permit

66. For closed vent systems and control devices, vapor recovery systems shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, whichever is less stringent. [40 CFR 60.482-10(b)] Federally Enforceable Through Title V Permit

67. For closed vent systems and control devices, enclosed combustion devices shall be designed and operated to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816 degrees C. [40 CFR 60.482-10(c)] Federally Enforceable Through Title V Permit

68. Except as provided in 40 CFR 60.482-10(i) through (k), each closed vent system used to comply with the provisions of Subpart GGG shall be inspected according to the procedures and schedule specified in 40 CFR 60.482-10(f)(1) and (f)(2). Leaks, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, shall be repaired as soon as practicable except as provided in 40 CFR 60.482-10(h). A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. Repair shall be completed no later than 15 calendar days after the leak is detected. [40 CFR 60.482-10(f) and (g)] Federally Enforceable Through Title V Permit

69. Delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown. [40 CFR 60.482-10(h)] Federally Enforceable Through Title V Permit

70. If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2). [40 CFR 60.482-10(i)] Federally Enforceable Through Title V Permit

71. Any parts of the closed vent system that are designated, as described in 40 CFR 60.482-10(l)(1), as unsafe to inspect are exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR 60.482-10 (j)(1) and (j)(2). [40 CFR 60.482-10(j)] Federally Enforceable Through Title V Permit

72. Any parts of the closed vent system that are designated, as described in 40 CFR 60.482-10(l)(2), as difficult to inspect are exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR 60.482-10(k)(1) through (k)(3). [40 CFR 60.482-10(k)] Federally Enforceable Through Title V Permit

73. The owner or operator shall record the following information: 1) Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment; 2) Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment; 3) For each inspection during which a leak is detected, a record of the information specified in 40 CFR 60.486(c); 4) For each inspection conducted in accordance with 40 CFR 60.485(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected; and 5) For each visual inspection conducted in accordance with 40 CFR 60.482-10(f)(1)(ii) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected. [40 CFR 60.482-10(l)] Federally Enforceable Through Title V Permit

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74. Closed vent systems and control devices used to comply with provisions Subpart GGG shall be operated at all times when emissions may be vented to them. [40 CFR 60.482-10(m)] Federally Enforceable Through Title V Permit

75. In conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in 40 CFR 60, Appendix A or other methods and procedures as specified in 40 CFR 60.485, except as provided in 40 CFR 60.8(b). [40 CFR 60.485(a)] Federally Enforceable Through Title V Permit

76. The owner or operator shall determine compliance with the standards in 40 CFR 60.482, 60.483, and 60.484 as follows: Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21. The following calibration gases shall be used: (i) Zero air (less than 10 ppm of hydrocarbon in air); and (ii) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [40 CFR 60.485(b)] Federally Enforceable Through Title V Permit

77. The owner or operator shall determine compliance with the no detectable emission standards in 40 CFR 60.482-2(e), 60.482-3(i), 60.482-4, 60.482-7(f), and 60.482-10(e) as follows: 1) The requirements of 40 CFR 60.485(b) shall apply. 2) Method 21 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance. [40 CFR 60.485(c)] Federally Enforceable Through Title V Permit

78. The owner or operator shall test each piece of equipment unless demonstrated that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used: 1) Procedures that conform to the general methods in ASTM E260-73, 91, or 96, E168-67, 77, or 92, E169-63, 77, or 93 (incorporated by reference as seen in 40 CFR 60.17) shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment; 2) Organic compounds that are considered by the Administrator to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid; and 3) Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Administrator disagrees with the judgment, the previous two procedures as specified in 40 CFR 60.485(d)(1) and (2) shall be used to resolve the disagreement. [40 CFR 60.485(d)] Federally Enforceable Through Title V Permit

79. The owner or operator shall demonstrate that an equipment is in light liquid service by showing that all the following conditions apply: 1) The vapor pressure of one or more of the components is greater than 0.3 kPa at 20 øC (1.2 in. H2O at 68 degrees F). Standard reference texts or ASTM D2879-83, 96, or 97 (incorporated by reference as seen in 40 CFR 60.17) shall be used to determine the vapor pressures; 2) The total concentration of the pure components having a vapor pressure greater than 0.3 kPa at 20 degrees Celsius is equal to or greater than 20 percent by weight; and 3) The fluid is a liquid at operating conditions. [40 CFR 60.485(e)] Federally Enforceable Through Title V Permit

80. Samples used in conjunction with 40 CFR 60.485(d), (e), and (g) shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare. [40 CFR 60.485(f)] Federally Enforceable Through Title V Permit

81. An owner or operator of more than one affected facility subject to the provisions Subpart GGG may comply with the recordkeeping requirements for these facilities in one recordkeeping system if the system identifies each record by each facility. [40 CFR 60.486(a)] Federally Enforceable Through Title V Permit

82. When each leak is detected as specified in 40 CFR 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following requirements apply: 1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment; 2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR 60.482-7(c) and no leak has been detected during those 2 months; and 3) The identification on equipment except on a valve, may be removed after it has been repaired. [40 CFR 60.486(b)] Federally Enforceable Through Title V Permit

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83. When each leak is detected as specified in 40 CFR 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following information shall be recorded in a log and shall be kept for 5 years in a readily accessible location: 1) The instrument and operator identification numbers and the equipment identification number; 2) The date the leak was detected and the dates of each attempt to repair the leak; 3) Repair methods applied in each attempt to repair the leak; 4) ``Above 10,000" if the maximum instrument reading measured by the methods specified in 40 CFR 60.485(a) after each repair attempt is equal to or greater than 10,000 ppm; 5) ``Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak; 6) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown; 7) The expected date of successful repair of the leak if a leak is not repaired within 15 days; 8) Dates of process unit shutdown that occur while the equipment is unrepaired; and 9) The date of successful repair of the leak. [40 CFR 60.486(c) and District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

84. The following information pertaining to the design requirements for closed vent systems and control devices described in 40 CFR 60.482-10 shall be recorded and kept in a readily accessible location: 1) Detailed schematics, design specifications, and piping and instrumentation diagrams; 2) The dates and descriptions of any changes in the design specifications; 3) A description of the parameter or parameters monitored, as required in 40 CFR 60.482-10(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring; 4) Periods when the closed vent systems and control devices required in 40 CFR 60.482-2, 60.482-3, 60.482-4, and 60.482-5 are not operated as designed, including periods when a flare pilot light does not have a flame; and 5) Dates of startups and shutdowns of the closed vent systems and control devices required in 40 CFR 60.482-2, 60.482-3, 60.482-4, and 60.482-5. [40 CFR 60.486(d)] Federally Enforceable Through Title V Permit

85. The following information pertaining to all equipment subject to the requirements in 40 CFR 60.482-1 to 60.482-10 shall be recorded in a log that is kept in a readily accessible location: 1) A list of identification numbers for equipment subject to the requirements of Subpart GGG; 2) (i) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 40 CFR 60.482-2(e), 60.482-3(i) and 60.482-7(f). (ii) The designation of equipment as subject to the requirements of 40 CFR 60.482-2(e), 60.482-3(i) and 60.482-7(f) shall be signed by the owner or operator; 3) A list of equipment identification numbers for pressure relief devices required to comply with 60.482-4; 4) (i) The dates of each compliance test as required in 40 CFR 60.482-2(e), 60.482-3(i), 60.482-4, and 60.482-7(f). (ii) The background level measured during each compliance test. (iii) The maximum instrument reading measured at the equipment during each compliance test; and 5) A list of identification numbers for equipment in vacuum service. [40 CFR 60.486(e)] Federally Enforceable Through Title V Permit

86. The following information pertaining to all valves subject to the requirements of 40 CFR 60.482-7(g) and (h) and to all pumps subject to the requirements of 40 CFR 60.482-2(g) shall be recorded in a log that is kept in a readily accessible location: 1) A list of identification numbers for valves and pumps that are designated as unsafe-to-monitor, an explanation for each valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump; and 2) A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve. [40 CFR 60.486(f)] Federally Enforceable Through Title V Permit

87. The following information shall be recorded for valves complying with 40 CFR 60.483-2: 1) A schedule of monitoring; 2) The percent of valves found leaking during each monitoring period. [40 CFR 60.486(g)] Federally Enforceable Through Title V Permit

88. The following information shall be recorded in a log that is kept in a readily accessible location: 1) Design criterion required in 40 CFR 60.482-2(d)(5) and 60.482-3(e)(2) and explanation of the design criterion; and 2) Any changes to this criterion and the reasons for the changes. [40 CFR 60.486(h)] Federally Enforceable Through Title V Permit

89. The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in 40 CFR 60.480(d): 1) An analysis demonstrating the design capacity of the affected facility; 2) A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol; and 3) An analysis demonstrating that equipment is not in VOC service. [40 CFR 60.486(i)] Federally Enforceable Through Title V Permit

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90. Information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location. [40 CFR 60.486(j)] Federally Enforceable Through Title V Permit

91. The provisions of 40 CFR 60.7 (b) and (d) do not apply to affected facilities subject to Subpart GGG. [40 CFR 60.486(k)] Federally Enforceable Through Title V Permit

92. All semiannual reports to the Administrator shall include the following information, summarized from the information in 40 CFR 60.486: 1) Process unit identification; 2) For each month during the semiannual reporting period, i) Number of valves for which leaks were detected as described in 40 CFR 60.482-7(b) or 40 CFR 60.483-2, (ii) Number of valves for which leaks were not repaired as required in 40 CFR 60.482-7(d)(1), (iii) Number of pumps for which leaks were detected as described in 40 CFR 60.482-2(b) and (d)(6)(i), (iv) Number of pumps for which leaks were not repaired as required in 40 CFR 60.482-2(c)(1) and (d)(6)(ii), (v) Number of compressors for which leaks were detected as described in 40 CFR 60.482-3(f), (vi) Number of compressors for which leaks were not repaired as required in 40 CFR 60.482-3(g)(1), and (vii) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible; 3) Dates of process unit shutdowns which occurred within the semiannual reporting period; 4) Revisions to items reported in the semiannual report if changes have occurred since the initial report, as required in 40 CFR 60.487 (a) and (b), or subsequent revisions to the initial report. [40 CFR 60.487(c)] Federally Enforceable Through Title V Permit

93. An owner or operator electing to comply with the provisions of 40 CFR 60.483-1 and 60.483-2 shall notify the Administrator of the alternative standard selected 90 days before implementing either of the provisions. [40 CFR 60.487(d)] Federally Enforceable Through Title V Permit

94. An owner or operator shall report the results of all performance tests in accordance with 40 CFR 60.8 of the General Provisions. The provisions of 40 CFR 60.8(d) do not apply to affected facilities subject to the provisions of Subpart GGG except that an owner or operator must notify the Administrator of the schedule for the initial performance tests at least 30 days before the initial performance tests. [40 CFR 60.487(e)] Federally Enforceable Through Title V Permit

95. The semiannual reporting requirements of 40 CFR 60.487(a), (b), and (c) remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with the requirements of 40 CFR 60.487(a), (b), and (c), provided that they comply with the requirements established by the State. [40 CFR 60.487(f)] Federally Enforceable Through Title V Permit

96. Compressors are exempt from the standards of Subpart GGG if the owner or operator demonstrates that a compressor is in hydrogen service. Each compressor is presumed not to be in hydrogen service unless an owner or operator demonstrates that the piece of equipment is in hydrogen service. For a piece of equipment to be considered in hydrogen service, it must be determined that the percent hydrogen content can be reasonably expected always to exceed 50 percent by volume. For purposes of determining the percent hydrogen content in the process fluid that is contained in or contacts a compressor, procedures that conform to the general method described in ASTM E-260, E-168, or E-169 shall be used. An owner or operator may use engineering judgment to demonstrate that the percent content exceeds 50 percent by volume, provided the engineering judgment demonstrates that the content clearly exceeds 50 percent by volume. When an owner or operator and the Administrator do not agree on whether a piece of equipment is in hydrogen service, however, the procedures that conform to the general method described in ASTM E-260, E-168, or E-169 shall be used to resolve the disagreement. If an owner or operator determines that a piece of equipment is in hydrogen service, the determination can be revised only after following the procedures that conform to the general method described in ASTM E-260, E-168, or E-169. [40 CFR 60.593(b)] Federally Enforceable Through Title V Permit

97. An owner or operator may use the following provision in addition to 40 CFR 60.485(e): Equipment is in light liquid service if the percent evaporated is greater than 10 percent at 150 øC as determined by ASTM Method D86-78, 82, 90, 95, or 96. [40 CFR 60.593(d)] Federally Enforceable Through Title V Permit

98. Equipment that is in vacuum service is excluded from the requirements of 40 CFR 60.482-2 to 40 CFR 60.482-10 if it is identified as required in 40 CFR 60.486(e)(5). [40 CFR 60.482-1(d)] Federally Enforceable Through Title V Permit

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99. Except for complying with the applicable requirements of Sections 6.1 and 7.3, the requirements of this rule shall not apply to 1) components subject to Rule 4623 (adopted 5/19/05), 2) pressure relief devices, pumps, and compressors equipped with a closed vent system as defined in Section 3.0, 3) components buried below ground, 4) components exclusively handling liquid streams which have less than 10 percent by weight (<10 wt%) evaporation at 150 C, 5) components exclusively handling liquid streams with a VOC content less than ten percent by weight (<10 wt%), 6) components exclusively handling gas/vapor streams with a VOC content of less than one percent by weight (<1wt%), 7) components incorporated in lines exclusively in vacuum service, 8) components exclusively handling commercial natural gas, and 9) one-half inch nominal or less stainless steel tube fittings which have been demonstrated to the Air Pollution Control Officer (APCO) to be leak-free based on initial inspection. [District Rule 4455, 4.1 & 4.2] Federally Enforceable Through Title V Permit

100. Except for components subject to Rule 4623 (Storage of Organic Liquids) or for components included in the inspection and maintenance (I&M) program implemented pursuant to Section 5.7 of Rule 4623, the operator shall not use any component that leaks in excess of the allowable leak standards of Rule 4455, or is found to be in violation of the provisions specified in Section 5.1.3. A component identified as leaking in excess of an allowable leak standard may be used provided it has been identified with a tag for repair, has been repaired, or is awaiting re-inspection after repair, within the applicable time period specified within the rule. [District Rule 4455, 5.1.1] Federally Enforceable Through Title V Permit

101. Each hatch shall be closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4455, 5.1.2] Federally Enforceable Through Title V Permit

102. The operator shall be in violation of Rule 4455 if any District inspection demonstrates that one or more of the conditions in Section 5.1.4 (Leak Standards) exist at the facility. [District Rule 4455, 5.1.3.1] Federally Enforceable Through Title V Permit

103. Except for annual operator inspection described in Section 5.1.3.2.3, any operator inspection that demonstrates that one or more of the conditions in Section 5.1.4 exist at the facility shall not constitute a violation of Rule 4455 if the leaking components are repaired as soon as practicable but not later than the time frame specified in Rule 4455. Such components shall not be counted towards determination of compliance with the provisions of Section 5.1.4. [District Rule 4455, 5.1.3.2.1] Federally Enforceable Through Title V Permit

104. Leaking components detected during operator inspection pursuant Section 5.1.3.2.1 that are not repaired, replaced, or removed from operation as soon as practicable but not later than the time frame specified in Rule 4455 shall be counted toward determination of compliance with the provisions of Section 5.1.4. [District Rule 4455, 5.1.3.2.2] Federally Enforceable Through Title V Permit

105. Any operator inspection conducted annually for a component type (including operator annual inspections pursuant to Section 5.2.5, 5.2.6, 5.2.7, or 5.2.8) that demonstrates one or more of the conditions in Section 5.1.4 exist at the facility shall constitute a violation of Rule 4455 regardless of whether or not the leaking components are repaired, replaced, or removed from operation within the allowable repair time frame specified in Rule 4455. [District Rule 4455, 5.1.3.2.3] Federally Enforceable Through Title V Permit

106. A component shall be considered leaking if one or more of the conditions specified in Sections 5.1.4.1 through 5.1.4.4 of Rule 4455 exist at the facility. Readings shall be taken as methane using a portable hydrocarbon detection instrument and shall be made in accordance with the methods specified in Section 6.4.1 of Rule 4455. [District Rule 4455, 5.1.4] Federally Enforceable Through Title V Permit

107. The operator shall audio-visually inspect for leaks all accessible operating pumps, compressors and Pressure Relief Devices (PRDs) in service at least once every 24 hours, except when operators do not report to the facility for that given 24 hours. Any identified leak that cannot be immediately repaired shall be reinspected within 24 hours using a portable analyzer. If a leak is found, it shall be repaired as soon as practical but not later than the time frame specified in Table 3. [District Rule 4455, 5.2.1 & 5.2.2] Federally Enforceable Through Title V Permit

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108. The operator shall inspect all components at least once every calendar quarter, except for inaccessible components, unsafe-to-monitor components and pipes. Inaccessible components, unsafe-to-monitor components and pipes shall be inspected in accordance with the requirements set forth in Sections 5.2.5, 5.2.6, and 5.2.7. New, replaced, or repaired fittings, flanges and threaded connections shall be inspected immediately after being placed into service. Components shall be inspected using EPA Method 21. [District Rule 4455, 5.2.3, 5.2.4, 5.2.5, 5.2.6 & 5.2.7] Federally Enforceable Through Title V Permit

109. The operator may apply for a written approval from the APCO to change the inspection frequency from quarterly to annually for a component type, provided the operator meets all the criteria specified in Sections 5.2.8.1 through 5.2.8.3. This approval shall apply to accessible component types, specifically designated by the APCO, except pumps, compressors, and PRDs which shall continue to be inspected on a quarterly basis. [District Rule 4455, 5.2.8] Federally Enforceable Through Title V Permit

110. An annual inspection frequency approved by the APCO shall revert to quarterly inspection frequency for a component type if either the operator inspection or District inspection demonstrates that a violation of the provisions of Sections 5.1, 5.2 and 5.3 of the rule exists for that component type, or the APCO issued a Notice of Violation for violating any of the provisions of Rule 4455 during the annual inspection period for that component type. When the inspection frequency changes from annual to quarterly inspections, the operator shall notify the APCO in writing within five (5) calendar days after changing the inspection frequency, giving the reason(s) and date of change to quarterly inspection frequency. [District Rule 4455, 5.2.9 & 5.2.10] Federally Enforceable Through Title V Permit

111. The operator shall initially inspect a process PRD that releases to the atmosphere as soon as practicable but not later than 24 hours after the time of the release. To insure that the process PRD is operating properly, and is leak-free, the operator shall re-inspect the process PRD not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the date of the release using EPA Method 21. If the process PRD is found to be leaking at either inspection, the PRD leak shall be treated as if the leak was found during quarterly operator inspections. [District Rule 4455, 5.2.11] Federally Enforceable Through Title V Permit

112. Except for process PRD, a component shall be inspected within 15 calendar days after repairing the leak or replacing the component using EPA Method 21. [District Rule 4455, 5.2.12] Federally Enforceable Through Title V Permit

113. A District inspection in no way fulfills any of the mandatory inspection requirements that are placed upon operators and cannot be used or counted as an inspection required of an operator. Any attempt by an operator to count such District inspections as part of the mandatory operator's inspections is considered to be willful circumvention and is a violation of this rule. [District Rule 4455, 5.2.13] Federally Enforceable Through Title V Permit

114. Upon detection of a leaking component, the operator shall affix to that component a weatherproof readily visible tag that contains the information specified in Section 5.3.3. The tag shall remain affixed to the component until the leaking component has been repaired or replaced; has been re-inspected using EPA Method 21; and is found to be in compliance with the requirements of Rule 4455. [District Rule 4455, 5.3.1 5.3.2 and 5.3.3] Federally Enforceable Through Title V Permit

115. An operator shall minimize all component leaks immediately to the extent possible, but not later than one (1) hour after detection of leaks in order to stop or reduce leakage to the atmosphere. [District Rule 4455, 5.3.4] Federally Enforceable Through Title V Permit

116. If the leak has been minimized but the leak still exceeds the applicable leak standards of Rule 4455, an operator shall repair or replace the leaking component, vent the leaking component to a closed vent system, or remove the leaking component from operation as soon as practicable but not later than the time period specified in Table 3. For each calendar quarter, the operator may be allowed to extend the repair period as specified in Table 3, for a total number of leaking components, not to exceed 0.05 percent of the number of components inspected, by type, rounded upward to the nearest integer where required. [District Rule 4455, 5.3.5] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

117. If the leaking component is an essential component or a critical component and which cannot be immediately shut down for repairs, the operator shall minimize the leak within one hour after detection of the leak. If the leak has been minimized, but the leak still exceeds any of the applicable leak standards of Rule 4455, the essential component or critical component shall be repaired or replaced to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection, whichever comes earlier. [District Rule 4455 5.3.6] Federally Enforceable Through Title V Permit

118. For any component that has incurred five repair actions for major gas leaks or major liquid leaks, or any combination of major gas leaks and major liquid leaks within a continuous 12-month period, the operator shall comply with at least one of the requirements specified in Sections 5.3.7.1, 5.3.7.2, 5.3.7.3, or 5.3.7.4 by the applicable deadlines specified in Sections 5.3.7.5 and 5.3.7.6. If the original leaking component is replaced with a new like-in-kind component before incurring five repair actions for major leaks within 12-consecutive months, the repair count shall start over for the new component. An entire compressor or pump need not be replaced provided the compressor part(s) or pump part(s) that have incurred five repair actions as described in Section 5.3.7 are brought into compliance with at least one of the requirements of Sections 5.3.7.1 through 5.3.7.6. [District Rule 4455, 5.3.7] Federally Enforceable Through Title V Permit

119. The operator shall monitor process PRD by using electronic process control instrumentation that allows for real time continuous parameter monitoring or by using telltale indicators for the process PRD where parameter monitoring is not feasible. [District Rule 4455, 5.4.1] Federally Enforceable Through Title V Permit

120. After a release from a process PRD in excess of 500 pounds of VOC in a continuous 24-hour period, the operator shall immediately conduct a failure analysis and implement corrective actions as soon as practicable but not later than 30 days to prevent the reoccurrence of similar release. For refineries processing greater than 20,000 barrels of crude oil per day, any subsequent release in excess of 500 pounds of VOC within a continuous 24-hour period shall be subject to the requirements of Section 5.4.5. [District Rule 4455, 5.4.3 & 5.4.4] Federally Enforceable Through Title V Permit

121. The operator of a refinery processing greater than 20,000 barrels of crude oil per day shall connect all process PRDs serving that process equipment to an APCO-approved closed vent system as defined in Section 3.0 if any of the conditions specified in Sections 5.4.5.1 and 5.4.5.2 occurs. Process PRDs subject to the provisions of Section 5.4.5 shall be connected to an APCO-approved closed-vent system as soon as practicable, but no later than the first turnaround after the requirement to connect becomes effective. [District Rule 4455, 5.4.5] Federally Enforceable Through Title V Permit

122. All major components and critical components shall be physically identified clearly and visibly for inspection, repair, and recordkeeping purposes. The physical identification shall consist of labels, tags, manufacturer's nameplate identifier, serial number, or model number, or other system approved by the APCO that enables an operator or District personnel to locate each individual component. The operator shall replace tags or labels that become missing or unreadable as soon as practicable but not later than 24 hours after discovery. The operator shall comply with the requirements of Sections 6.1.4 if there is any change in the description of major components or critical components. [District Rule 4455, 5.5.1 & 5.5.2] Federally Enforceable Through Title V Permit

123. The operator shall keep a copy of the operator management plan at the facility and make it available to the APCO, ARB and US EPA upon request. By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved operator management plan. [District Rule 4455, 6.1.2 & 6.1.4] Federally Enforceable Through Title V Permit

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124. The operator shall maintain an inspection log containing, at a minimum, 1) total number of components inspected, and total number and percentage of leaking components found by component types, 2) location, type, name or description of each leaking component, and description of any unit where the leaking component is found, 3) date of leak detection and method of leak detection, 4) for gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak, 5) date of repair, replacement, or removal from operation of leaking components, 6) identification and location of essential component and critical components found leaking that cannot be repaired until the next process unit turnaround or not later one year after leak detection, whichever comes earlier, 7) methods used to minimize the leak from essential components and critical components that cannot be repaired until the next process unit turnaround or not later one year after leak detection, whichever comes earlier, 8) after the component is repaired or is replaced, the date of reinspection and the leak concentration in ppmv, 9) inspector's name, business mailing address, and business telephone number, and 10) the facility operator responsible for the inspection and repair program shall sign and date the inspection log certifying the accuracy of the information recorded in the log. [District Rule 4455, 6.2.1] Federally Enforceable Through Title V Permit

125. Records of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components, including a copy of current calibration gas certification from the vendor of said calibration gas cylinder, the date of calibration, concentration of calibration gas, analyzer reading of calibration gas before adjustment, instrument reading of calibration gas after adjustment, calibration gas expiration date, and calibration gas cylinder pressure at the time of calibration. [District Rule 4455, 6.2.3] Federally Enforceable Through Title V Permit

126. The operator shall notify the APCO, by telephone or other methods approved by the APCO, of any process PRD release described in Sections 5.4.4 and 5.4.5, and any release in excess of the reportable quantity limits as stipulated in 40 CFR, Part 117, Part 302 and Part 355, including any release in excess of 100 pounds of VOC, within one hour of such occurrence or within one hour of the time said person knew or reasonably should have known of its occurrence. [District Rule 4455, 6.3.1] Federally Enforceable Through Title V Permit

127. The operator shall submit a written report to the APCO within thirty (30) calendar days following a PRD release subject to 6.3.1. The written report shall include 1) process PRD type, size, and location, 2) date, time and duration of the process PRD release, 3) types of VOC released and individual amounts, in pounds, including supporting calculations, 4) cause of the process PRD release, and 5) corrective actions taken to prevent a subsequent process PRD release. [District Rule 4455 6.3.2] Federally Enforceable Through Title V Permit

128. Copies of all records shall be retained for a minimum of five (5) years after the date of an entry. Such records shall be made available to the APCO, ARB, or US EPA upon request. [District Rule 4455, 6.2.2, 6.2.3 & 6.2.4] Federally Enforceable Through Title V Permit

129. Measurements of gaseous leak concentrations shall be conducted according to US EPA Method 21 using an appropriate portable hydrocarbon detection instrument calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in US EPA Method 21 or the manufacturer's instruction, as appropriate, not more than 30 days prior to its use. The operator shall record the calibration date of the instrument. [District Rule 4455, 6.4.1] Federally Enforceable Through Title V Permit

130. The VOC content of exempt streams shall be determined using American Society of Testing and Materials (ASTM) D 1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 for liquids. [District Rule 4455, 6.4.2] Federally Enforceable Through Title V Permit

131. For exempt streams, the percent by volume liquid evaporated at 150 deg C shall be determined using ASTM D 86. [District Rule 4455, 6.4.3] Federally Enforceable Through Title V Permit

132. Equivalent test methods other than specified in Sections 6.4.1 through 6.4.5 may be used provided such test methods have received prior approval from the US EPA, ARB, and APCO. [District Rule 4455, 6.4] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-119-3 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
NAPHTHA REFORMER UNIT WITH 25.7 MMBTU/HR CHARGE HEATER #1 WITH JOHN ZINK SMR LOW NOX BURNER OR EQUIVALENT, 13.4 MMBTU/HR CHARGE HEATER #2 WITH JOHN ZINK SMR LOW NOX BURNER OR EQUIVALENT, 8.9 MMBTU/HR CHARGE HEATER #3 WITH JOHN ZINK SMR LOW NOX BURNER OR EQUIVALENT, 8.3 MMBTU/HR SPLITTER/STABILIZER HEATER WITH JOHN ZINK SMR LOW NOX BURNER OR EQUIVALENT, REACTOR VESSELS, HYDROGEN COMPRESSORS, HEAT EXCHANGERS, AND ASSOCIATED SEPARATOR VESSELS, KNOCKOUTS, PIPING, AND COMPONENTS

PERMIT UNIT REQUIREMENTS

1. Emission rates from each heater, except during startup and shutdown, shall not exceed any of the following: NOx (as NO2): 25 ppmv @ 3% O2, VOC: 0.0055 lb/MMBtu, or CO: 150 ppmv @ 3% O2. [District Rules 2201, 2520, 4301, 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
2. PM10 emission rates from each heater shall not exceed 0.0076 lb/MMBtu. [District Rules 2201, 2520, 4201, 4301] Federally Enforceable Through Title V Permit
3. The duration of each startup and shutdown period for reactor charge heaters #1, #2, and #3 shall not exceed 12.0 hours and 9.0 hours each respectfully. The duration of each startup and shutdown period for the splitter/stabilizer heater shall not exceed 8.5 hours and 5.0 hours respectfully. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
4. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
5. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

6. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit
7. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit
8. Heater exhaust stacks shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 1081] Federally Enforceable Through Title V Permit
9. Source testing to demonstrate compliance with NOx and CO emission limits shall be conducted within 60 days of startup and not less than once every 12 months, except as provided below. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit
10. Source testing to demonstrate compliance with NOx and CO emission limits shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit
11. If permittee fails any compliance demonstration for NOx or CO emission limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit
12. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
13. Compliance source testing shall be conducted under conditions representative of normal operation. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
15. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
16. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, and stack gas oxygen - EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit
17. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(Amended December 16, 1993). [District Rule 1081, and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
18. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results used to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel. [District Rule 2520, 9.4.2 and 40 CFR 60.48c(g)] Federally Enforceable Through Title V Permit
19. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit
20. Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

21. Test results submitted to the District from unit(s) representing a group of units may be used to demonstrate compliance with NOx limits for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. [District Rule 4305, 6.3.2 and 4351, 6.3] Federally Enforceable Through Title V Permit

22. The following conditions must be met for representative unit(s) used to demonstrate compliance for NOx limits for a group of units: 1) all units are initially source tested and emissions from all units in group are similar, 2) all units in group are similar in terms of rated heat input, make and series, operation conditions, fuel used, and control method, 3) the group is owned by a single owner and located at a single stationary source, and 4) all units in the group shall have received the same maintenance and tune-up procedures as the representative unit(s). [District Rule 4305, 6.3.2] Federally Enforceable Through Title V Permit

23. The number of representative units source tested to demonstrate compliance for NOx limits shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that when 3 source test cycles have been completed, all units in the entire group will have been tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

24. Nitrogen oxide (NOx) emission concentrations in ppmv shall be referenced at dry stack gas conditions, and shall be calculated to 3.00 percent by volume stack gas oxygen and averaged over 60 minutes, and lb/MMBtu rates shall be calculated as lb NO2/MMBtu of heat input (hhv). [District Rule 4305, 5.0, 8.2 and/or 4351, 8.1] Federally Enforceable Through Title V Permit

25. Draeger tubes shall be used as an alternative method for measuring fuel gas H2S during scheduled maintenance or unscheduled interruptions of CEMs. Draeger tube use shall be limited to no more than 96 continuous hours and fuel gas H2S shall be checked a minimum of every two hours during scheduled maintenance or unscheduled interruptions of CEMs. Alternate method of measuring fuel gas H2S shall occur no more than 192 hours in any calendar year. [40CFR60.13(i)] Federally Enforceable Through Title V Permit

26. Operator shall maintain all records of the reason for alternative monitoring and required fuel gas H2S monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

27. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320]

28. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320]

29. VOC emission rate from fugitive components associated with this emissions unit shall not exceed 77.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

30. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. Permit holder shall update such records when new components are approved and installed. Components shall be screened and leak rate shall be measured in accordance with the frequency of inspection specified in Rule 4455 as applicable. [District Rule 2201] Federally Enforceable Through Title V Permit

31. As referenced in this permit, a fugitive component leak shall be defined as the lower of the level specified in applicable rules, permit conditions, or the following: pumps in light liquid service - 1,000 ppmv; compressors - 500 ppmv; pressure relief devices in gas/vapor service - 500 ppmv; valves in gas/vapor and light liquid service - 500 ppmv; agitators - 10,000 ppmv; pumps in heavy liquid service - 2,000 ppmv; valves, and connectors in heavy liquid service, instrumentation systems, and pressure relief devices in liquid service - 500 ppmv; connectors in gas/vapor service and in light liquid service - 500 ppmv. Component type and service referenced in this condition shall be as defined in 40 CFR 63 Subpart H. [District Rule 2201] Federally Enforceable Through Title V Permit

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32. Permit unit shall comply with applicable District Rule 4001 (NSPS, Subpart GGG) requirements. [District Rule 4001] Federally Enforceable Through Title V Permit

33. The owner or operator may apply to the Administrator for a determination of equivalency for any means of emission limitation that achieves a reduction in emissions of VOC at least equivalent to the reduction in emissions of VOC achieved by the controls required in Subpart GGG. In doing so, the owner or operator shall comply with the requirements of 40 CFR 60.484. [40 CFR 60.592(c)] Federally Enforceable Through Title V Permit

34. Each pump in light liquid service (PLLS) shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485(b), except as provided in 40 CFR 60.482-1(c) and 40 CFR 60.482-2(d), (e), and (f). Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. A leak is detected if an instrument reading of 10,000 ppm or greater is measured or if there are indications of liquids dripping from the pump seal. [40 CFR 60.482-2(a) and (b)] Federally Enforceable Through Title V Permit

35. When a leak is detected for each PLLS, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. [40 CFR 60.482-2(c)] Federally Enforceable Through Title V Permit

36. Any PLLS equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of 40 CFR 60.482-2(a) provided the requirements specified in 40 CFR 60.482-2(d)(1) through (6) are met. [40 CFR 60.482(d)] Federally Enforceable Through Title V Permit

37. Any PLLS that is designated, as described in 40 CFR 60.486(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 60.482-2(a), (c), and (d) if the pump meets the requirements specified in 40 CFR 60.482-2(e)(1), (2), and (3). [40 CFR 60.482-2(e)] Federally Enforceable Through Title V Permit

38. If any PLLS is equipped with a closed vent system capable of capturing and transporting leakage from the seal or seals to a control device that complies with the requirements of 40 CFR 60.482-10, it is exempt from the requirements of 40 CFR 60.482-2(a) through (e). [40 CFR 60.482-2(f)] Federally Enforceable Through Title V Permit

39. Any pump in PLLS that is designated, as described in 40 CFR 60.486(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of 40 CFR 60.482-2(a) and 40 CFR 60.482-2(d)(4) through (6) if: 1). The owner or operator of the pump demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-2(a); and 2) The owner or operator of the pump has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in 40 CFR 60.482-2(c) if a leak is detected. [40 CFR 60.482-2(g)] Federally Enforceable Through Title V Permit

40. Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in 40 CFR 60.485(c). [40 CFR 60.482-4(a)] Federally Enforceable Through Title V Permit

41. After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in 40 CFR 60.482-9. No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in 40 CFR 60.485(c). [40 CFR 60.482-4(b)] Federally Enforceable Through Title V Permit

42. Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in 40 CFR 60.482-10 is exempted from the requirements of 40 CFR 60.482-4(a) and (b). [40 CFR 60.482-4(c)] Federally Enforceable Through Title V Permit

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43. Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the 40 CFR 60.482-4(a) and (b), provided the owner or operator complies with the requirements in 40 CFR 60.482-4(d)(2) of this section. After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 60.482-9. [40 CFR 60.482-4(d)] Federally Enforceable Through Title V Permit

44. Except for in-situ sampling systems and sampling systems without purges, each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR 60.482-1(c). Each closed-purge, closed-loop, or closed-vent system shall comply with the requirements specified in 40 CFR 60.482-5(b)(1), (2), (3), and (4). [40 CFR 60.482-5(a), (b), and (c)] Federally Enforceable Through Title V Permit

45. Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR 60.482-1(c). The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line. When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with this condition at all other times. [40 CFR 60.482-6(a) and (c)] Federally Enforceable Through Title V Permit

46. Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed. [40 CFR 60.482-6(b)] Federally Enforceable Through Title V Permit

47. Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of 40 CFR 60.482-6(a), (b) and (c). [40 CFR 60.482-6(d)] Federally Enforceable Through Title V Permit

48. Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in 40 CFR 60.482-6(a) through (c) are exempt from the requirements of 40 CFR 60.482-6(a) through (c). [40 CFR 60.482-6(e)] Federally Enforceable Through Title V Permit

49. Each valve in gas/vapor service and in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485(b) and shall comply with 40 CFR 60.482-7(b) through (e), except as provided in 40 CFR 60.482-7(f), (g), and (h), 40 CFR 60.483-1, 40 CFR 60.483-2, and 40 CFR 60.482-1(c). A leak is detected if an instrument reading of 10,000 ppm or greater is measured. [40 CFR 60.482-7(a) and (b)] Federally Enforceable Through Title V Permit

50. Any valve in gas/vapor service or in light liquid service for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected. If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months. [40 CFR 60.482-7(c)] Federally Enforceable Through Title V Permit

51. When a leak is detected for any valve in gas/vapor service or in light liquid service, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices specified in 40 CFR 60.482-7(e)(1), (2), (3), and (4), where practicable. [40 CFR 60.482-7(d) and (e)] Federally Enforceable Through Title V Permit

52. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 60.482-7(a) if the valve meets the requirements specified in 40 CFR 60.482-7(f)(1), (2), and (3). [40 CFR 60.482-7(f)] Federally Enforceable Through Title V Permit

53. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7(a) if: 1) The owner or operator of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-7(a); and 2) The owner or operator of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times. [40 CFR 60.482-7(g)] Federally Enforceable Through Title V Permit

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54. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(f)(2), as a difficult-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7(a) if: 1) The owner or operator of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface; 2) The process unit within which the valve is located either becomes an affected facility through 40 CFR 60.14 or 40 CFR 60.15 or the owner or operator designates less than 3.0 percent of the total number of valves as difficult-to-monitor; and 3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year. [40 CFR 60.482-7(h)] Federally Enforceable Through Title V Permit

55. The owner or operator may elect to comply with the applicable provisions for valves in gas/vapor service and in light liquid service as specified in 40 CFR 60.483-1 and 60.483-2. [40 CFR 60.592(b)] Federally Enforceable Through Title V Permit

56. If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, the owner or operator shall follow either one of the following procedures: 1) The owner or operator shall monitor the equipment within 5 days by the method specified in 40 CFR 60.485(b) and shall comply with the requirements of 40 CFR 60.482-8(b) through (d); or 2) The owner or operator shall eliminate the visual, audible, olfactory, or other indication of a potential leak. A leak is detected if an instrument reading of 10,000 ppm or greater is measured. [40 CFR 60.482-8(a) and (b)] Federally Enforceable Through Title V Permit

57. When a leak is detected in pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices described under 40 CFR 60.482-7(e). [40 CFR 60.482-8(c) and (d)] Federally Enforceable Through Title V Permit

58. Delay of leak repair will be allowed if the repair is technologically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown. Delay of repair is allowed for equipment which is isolated from the process and which does not remain in VOC service. Delay of repair beyond a process unit shutdown will be allowed for a valve, if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown. [40 CFR 60.482-9(a)(b)(e)] Federally Enforceable Through Title V Permit

59. Delay of leak repair for valves will be allowed if the owner or operator demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair and when repair procedures are effected and when repair procedures ar effected, the purged material is collected and destroyed or recovered in a control device complying with 40 CFR 60.482-10. Delay of leak repair for pumps will be allowed if the repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and repair is completed as soon as practicable, but no later than 6 months after the leak was detected. [40 cfr 60.482-9(c)(d)] Federally Enforceable Through Title V Permit

60. For closed vent systems and control devices, vapor recovery systems shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, whichever is less stringent. [40 CFR 60.482-10(b)] Federally Enforceable Through Title V Permit

61. For closed vent systems and control devices, enclosed combustion devices shall be designed and operated to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816 degrees C. [40 CFR 60.482-10(c)] Federally Enforceable Through Title V Permit

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62. Except as provided in 40 CFR 60.482-10(i) through (k), each closed vent system used to comply with the provisions of Subpart GGG shall be inspected according to the procedures and schedule specified in 40 CFR 60.482-10(f)(1) and (f)(2). Leaks, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, shall be repaired as soon as practicable except as provided in 40 CFR 60.482-10(h). A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. Repair shall be completed no later than 15 calendar days after the leak is detected. [40 CFR 60.482-10(f) and (g)] Federally Enforceable Through Title V Permit

63. Delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown. [40 CFR 60.482-10(h)] Federally Enforceable Through Title V Permit

64. If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2). [40 CFR 60.482-10(i)] Federally Enforceable Through Title V Permit

65. Any parts of the closed vent system that are designated, as described in 40 CFR 60.482-10(l)(1), as unsafe to inspect are exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR 60.482-10 (j)(1) and (j)(2). [40 CFR 60.482-10(j)] Federally Enforceable Through Title V Permit

66. Any parts of the closed vent system that are designated, as described in 40 CFR 60.482-10(l)(2), as difficult to inspect are exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR 60.482-10(k)(1) through (k)(3). [40 CFR 60.482-10(k)] Federally Enforceable Through Title V Permit

67. The owner or operator shall record the following information: 1) Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment; 2) Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment; 3) For each inspection during which a leak is detected, a record of the information specified in 40 CFR 60.486(c); 4) For each inspection conducted in accordance with 40 CFR 60.485(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected; and 5) For each visual inspection conducted in accordance with 40 CFR 60.482-10(f)(1)(ii) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected. [40 CFR 60.482-10(l)] Federally Enforceable Through Title V Permit

68. Closed vent systems and control devices used to comply with provisions Subpart GGG shall be operated at all times when emissions may be vented to them. [40 CFR 60.482-10(m)] Federally Enforceable Through Title V Permit

69. In conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in 40 CFR 60, Appendix A or other methods and procedures as specified in 40 CFR 60.485, except as provided in 40 CFR 60.8(b). [40 CFR 60.485(a)] Federally Enforceable Through Title V Permit

70. The owner or operator shall determine compliance with the standards in 40 CFR 60.482, 60.483, and 60.484 as follows: Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21. The following calibration gases shall be used: (i) Zero air (less than 10 ppm of hydrocarbon in air); and (ii) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [40 CFR 60.485(b)] Federally Enforceable Through Title V Permit

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71. The owner or operator shall determine compliance with the no detectable emission standards in 40 CFR 60.482-2(e), 60.482-3(i), 60.482-4, 60.482-7(f), and 60.482-10(e) as follows: 1) The requirements of 40 CFR 60.485(b) shall apply. 2) Method 21 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance. [40 CFR 60.485(c)] Federally Enforceable Through Title V Permit

72. The owner or operator shall test each piece of equipment unless demonstrated that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used: 1) Procedures that conform to the general methods in ASTM E260-73, 91, or 96, E168-67, 77, or 92, E169-63, 77, or 93 (incorporated by reference as seen in 40 CFR 60.17) shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment; 2) Organic compounds that are considered by the Administrator to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid; and 3) Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Administrator disagrees with the judgment, the previous two procedures as specified in 40 CFR 60.485(d)(1) and (2) shall be used to resolve the disagreement. [40 CFR 60.485(d)] Federally Enforceable Through Title V Permit

73. The owner or operator shall demonstrate that an equipment is in light liquid service by showing that all the following conditions apply: 1) The vapor pressure of one or more of the components is greater than 0.3 kPa at 20 øC (1.2 in. H2O at 68 degrees F). Standard reference texts or ASTM D2879-83, 96, or 97 (incorporated by reference as seen in 40 CFR 60.17) shall be used to determine the vapor pressures; 2) The total concentration of the pure components having a vapor pressure greater than 0.3 kPa at 20 degrees Celsius is equal to or greater than 20 percent by weight; and 3) The fluid is a liquid at operating conditions. [40 CFR 60.485(e)] Federally Enforceable Through Title V Permit

74. Samples used in conjunction with 40 CFR 60.485(d), (e), and (g) shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare. [40 CFR 60.485(f)] Federally Enforceable Through Title V Permit

75. An owner or operator of more than one affected facility subject to the provisions Subpart GGG may comply with the recordkeeping requirements for these facilities in one recordkeeping system if the system identifies each record by each facility. [40 CFR 60.486(a)] Federally Enforceable Through Title V Permit

76. When each leak is detected as specified in 40 CFR 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following requirements apply: 1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment; 2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR 60.482-7(c) and no leak has been detected during those 2 months; and 3) The identification on equipment except on a valve, may be removed after it has been repaired. [40 CFR 60.486(b)] Federally Enforceable Through Title V Permit

77. When each leak is detected as specified in 40 CFR 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following information shall be recorded in a log and shall be kept for 5 years in a readily accessible location: 1) The instrument and operator identification numbers and the equipment identification number; 2) The date the leak was detected and the dates of each attempt to repair the leak; 3) Repair methods applied in each attempt to repair the leak; 4) ``Above 10,000" if the maximum instrument reading measured by the methods specified in 40 CFR 60.485(a) after each repair attempt is equal to or greater than 10,000 ppm; 5) ``Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak; 6) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown; 7) The expected date of successful repair of the leak if a leak is not repaired within 15 days; 8) Dates of process unit shutdown that occur while the equipment is unrepaired; and 9) The date of successful repair of the leak. [40 CFR 60.486(c) and District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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78. The following information pertaining to the design requirements for closed vent systems and control devices described in 40 CFR 60.482-10 shall be recorded and kept in a readily accessible location: 1) Detailed schematics, design specifications, and piping and instrumentation diagrams; 2) The dates and descriptions of any changes in the design specifications; 3) A description of the parameter or parameters monitored, as required in 40 CFR 60.482-10(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring; 4) Periods when the closed vent systems and control devices required in 40 CFR 60.482-2, 60.482-3, 60.482-4, and 60.482-5 are not operated as designed, including periods when a flare pilot light does not have a flame; and 5) Dates of startups and shutdowns of the closed vent systems and control devices required in 40 CFR 60.482-2, 60.482-3, 60.482-4, and 60.482-5. [40 CFR 60.486(d)] Federally Enforceable Through Title V Permit

79. The following information pertaining to all equipment subject to the requirements in 40 CFR 60.482-1 to 60.482-10 shall be recorded in a log that is kept in a readily accessible location: 1) A list of identification numbers for equipment subject to the requirements of Subpart GGG; 2) (i) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 40 CFR 60.482-2(e), 60.482-3(i) and 60.482-7(f). (ii) The designation of equipment as subject to the requirements of 40 CFR 60.482-2(e), 60.482-3(i) and 60.482-7(f) shall be signed by the owner or operator; 3) A list of equipment identification numbers for pressure relief devices required to comply with 60.482-4; 4) (i) The dates of each compliance test as required in 40 CFR 60.482-2(e), 60.482-3(i), 60.482-4, and 60.482-7(f). (ii) The background level measured during each compliance test. (iii) The maximum instrument reading measured at the equipment during each compliance test; and 5) A list of identification numbers for equipment in vacuum service. [40 CFR 60.486(e)] Federally Enforceable Through Title V Permit

80. The following information pertaining to all valves subject to the requirements of 40 CFR 60.482-7(g) and (h) and to all pumps subject to the requirements of 40 CFR 60.482-2(g) shall be recorded in a log that is kept in a readily accessible location: 1) A list of identification numbers for valves and pumps that are designated as unsafe-to-monitor, an explanation for each valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump; and 2) A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve. [40 CFR 60.486(f)] Federally Enforceable Through Title V Permit

81. The following information shall be recorded for valves complying with 40 CFR 60.483-2: 1) A schedule of monitoring; 2) The percent of valves found leaking during each monitoring period. [40 CFR 60.486(g)] Federally Enforceable Through Title V Permit

82. The following information shall be recorded in a log that is kept in a readily accessible location: 1) Design criterion required in 40 CFR 60.482-2(d)(5) and 60.482-3(e)(2) and explanation of the design criterion; and 2) Any changes to this criterion and the reasons for the changes. [40 CFR 60.486(h)] Federally Enforceable Through Title V Permit

83. The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in 40 CFR 60.480(d): 1) An analysis demonstrating the design capacity of the affected facility; 2) A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol; and 3) An analysis demonstrating that equipment is not in VOC service. [40 CFR 60.486(i)] Federally Enforceable Through Title V Permit

84. Information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location. [40 CFR 60.486(j)] Federally Enforceable Through Title V Permit

85. The provisions of 40 CFR 60.7 (b) and (d) do not apply to affected facilities subject to Subpart GGG. [40 CFR 60.486(k)] Federally Enforceable Through Title V Permit

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86. All semiannual reports to the Administrator shall include the following information, summarized from the information in 40 CFR 60.486: 1) Process unit identification; 2) For each month during the semiannual reporting period, i) Number of valves for which leaks were detected as described in 40 CFR 60.482-7(b) or 40 CFR 60.483-2, (ii) Number of valves for which leaks were not repaired as required in 40 CFR 60.482-7(d)(1), (iii) Number of pumps for which leaks were detected as described in 40 CFR 60.482-2(b) and (d)(6)(i), (iv) Number of pumps for which leaks were not repaired as required in 40 CFR 60.482-2(c)(1) and (d)(6)(ii), (v) Number of compressors for which leaks were detected as described in 40 CFR 60.482-3(f), (vi) Number of compressors for which leaks were not repaired as required in 40 CFR 60.482-3(g)(1), and (vii) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible; 3) Dates of process unit shutdowns which occurred within the semiannual reporting period; 4) Revisions to items reported in the semiannual report if changes have occurred since the initial report, as required in 40 CFR 60.487 (a) and (b), or subsequent revisions to the initial report. [40 CFR 60.487(c)] Federally Enforceable Through Title V Permit

87. An owner or operator electing to comply with the provisions of 40 CFR 60.483-1 and 60.483-2 shall notify the Administrator of the alternative standard selected 90 days before implementing either of the provisions. [40 CFR 60.487(d)] Federally Enforceable Through Title V Permit

88. An owner or operator shall report the results of all performance tests in accordance with 40 CFR 60.8 of the General Provisions. The provisions of 40 CFR 60.8(d) do not apply to affected facilities subject to the provisions of Subpart GGG except that an owner or operator must notify the Administrator of the schedule for the initial performance tests at least 30 days before the initial performance tests. [40 CFR 60.487(e)] Federally Enforceable Through Title V Permit

89. The semiannual reporting requirements of 40 CFR 60.487(a), (b), and (c) remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with the requirements of 40 CFR 60.487(a), (b), and (c), provided that they comply with the requirements established by the State. [40 CFR 60.487(f)] Federally Enforceable Through Title V Permit

90. Compressors are exempt from the standards of Subpart GGG if the owner or operator demonstrates that a compressor is in hydrogen service. Each compressor is presumed not to be in hydrogen service unless an owner or operator demonstrates that the piece of equipment is in hydrogen service. For a piece of equipment to be considered in hydrogen service, it must be determined that the percent hydrogen content can be reasonably expected always to exceed 50 percent by volume. For purposes of determining the percent hydrogen content in the process fluid that is contained in or contacts a compressor, procedures that conform to the general method described in ASTM E-260, E-168, or E-169 shall be used. An owner or operator may use engineering judgment to demonstrate that the percent content exceeds 50 percent by volume, provided the engineering judgment demonstrates that the content clearly exceeds 50 percent by volume. When an owner or operator and the Administrator do not agree on whether a piece of equipment is in hydrogen service, however, the procedures that conform to the general method described in ASTM E-260, E-168, or E-169 shall be used to resolve the disagreement. If an owner or operator determines that a piece of equipment is in hydrogen service, the determination can be revised only after following the procedures that conform to the general method described in ASTM E-260, E-168, or E-169. [40 CFR 60.593(b)] Federally Enforceable Through Title V Permit

91. An owner or operator may use the following provision in addition to 40 CFR 60.485(e): Equipment is in light liquid service if the percent evaporated is greater than 10 percent at 150 øC as determined by ASTM Method D86-78, 82, 90, 95, or 96. [40 CFR 60.593(d)] Federally Enforceable Through Title V Permit

92. Equipment that is in vacuum service is excluded from the requirements of 40 CFR 60.482-2 to 40 CFR 60.482-10 if it is identified as required in 40 CFR 60.486(e)(5). [40 CFR 60.482-1(d)] Federally Enforceable Through Title V Permit

93. Permittee shall comply with all applicable testing, recordkeeping, and reporting requirements specified in Rule 4001 - New Source Performance Standards, including but not limited to Subparts A, Dc and J. [District Rule 4001] Federally Enforceable Through Title V Permit

94. Heaters shall be fired only on purchased commercial natural gas, refinery fuel gas, or any combination thereof. [District Rule 2201, 4001] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

95. Operator shall not burn in any fuel gas combustion device any fuel gas that contains hydrogen sulfide (H2S) in excess of 100 ppmv@ 0% O2. [District Rules 2201 ,2520, 9.4.2 and 4301, 5.2.1, & 40 CFR Part 60, Subpart J, 60.104(a)(1)] Federally Enforceable Through Title V Permit

96. The combustion in the fuel gas combustion devices of gases released as a result of start-up, shutdown, upset, malfunction, or the result of relief valve leakage is exempt from the 100 ppmv@ 0% O2 requirement. [District Rules 2201, 4001, Subpart J, 60.104(a)(1)] Federally Enforceable Through Title V Permit

97. All refinery fuel gas combusted in the heaters shall be monitored for H2S content by a continuous emissions monitoring (CEM) system. CEM shall be installed, calibrated, operated, and reported according to EPA guidelines as specified under 40 CFR 60, Subpart J, Specification 7, and general requirements. CEM results shall be calculated on a rolling three (3) hour basis. [District Rules 2201, 4001, Subpart J, 60.105(a)(4) and 60.105(a)(4)iii] Federally Enforceable Through Title V Permit

98. Operator shall report all rolling 3-hour periods during which the average concentration of H2S as measured by the H2S continuous monitoring system exceeds 100 ppmv@ 0% O2. [District Rules 2201, 4001, Subpart J, 60.105(e)(3)(ii)] Federally Enforceable Through Title V Permit

99. Except for complying with the applicable requirements of Sections 6.1 and 7.3, the requirements of this rule shall not apply to 1) components subject to Rule 4623 (adopted 5/19/05), 2) pressure relief devices, pumps, and compressors equipped with a closed vent system as defined in Section 3.0, 3) components buried below ground, 4) components exclusively handling liquid streams which have less than 10 percent by weight (<10 wt%) evaporation at 150 C, 5) components exclusively handling liquid streams with a VOC content less than ten percent by weight (<10 wt%), 6) components exclusively handling gas/vapor streams with a VOC content of less than one percent by weight (<1wt%), 7) components incorporated in lines exclusively in vacuum service, 8) components exclusively handling commercial natural gas, and 9) one-half inch nominal or less stainless steel tube fittings which have been demonstrated to the Air Pollution Control Officer (APCO) to be leak-free based on initial inspection. [District Rule 4455, 4.1 & 4.2] Federally Enforceable Through Title V Permit

100. Except for components subject to Rule 4623 (Storage of Organic Liquids) or for components included in the inspection and maintenance (I&M) program implemented pursuant to Section 5.7 of Rule 4623, the operator shall not use any component that leaks in excess of the allowable leak standards of Rule 4455, or is found to be in violation of the provisions specified in Section 5.1.3. A component identified as leaking in excess of an allowable leak standard may be used provided it has been identified with a tag for repair, has been repaired, or is awaiting re-inspection after repair, within the applicable time period specified within the rule. [District Rule 4455, 5.1.1] Federally Enforceable Through Title V Permit

101. Each hatch shall be closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4455, 5.1.2] Federally Enforceable Through Title V Permit

102. The operator shall be in violation of Rule 4455 if any District inspection demonstrates that one or more of the conditions in Section 5.1.4 (Leak Standards) exist at the facility. [District Rule 4455, 5.1.3.1] Federally Enforceable Through Title V Permit

103. Except for annual operator inspection described in Section 5.1.3.2.3, any operator inspection that demonstrates that one or more of the conditions in Section 5.1.4 exist at the facility shall not constitute a violation of Rule 4455 if the leaking components are repaired as soon as practicable but not later than the time frame specified in Rule 4455. Such components shall not be counted towards determination of compliance with the provisions of Section 5.1.4. [District Rule 4455, 5.1.3.2.1] Federally Enforceable Through Title V Permit

104. Leaking components detected during operator inspection pursuant Section 5.1.3.2.1 that are not repaired, replaced, or removed from operation as soon as practicable but not later than the time frame specified in Rule 4455 shall be counted toward determination of compliance with the provisions of Section 5.1.4. [District Rule 4455, 5.1.3.2.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

105. Any operator inspection conducted annually for a component type (including operator annual inspections pursuant to Section 5.2.5, 5.2.6, 5.2.7, or 5.2.8) that demonstrates one or more of the conditions in Section 5.1.4 exist at the facility shall constitute a violation of Rule 4455 regardless of whether or not the leaking components are repaired, replaced, or removed from operation within the allowable repair time frame specified in Rule 4455. [District Rule 4455, 5.1.3.2.3] Federally Enforceable Through Title V Permit

106. A component shall be considered leaking if one or more of the conditions specified in Sections 5.1.4.1 through 5.1.4.4 of Rule 4455 exist at the facility. Readings shall be taken as methane using a portable hydrocarbon detection instrument and shall be made in accordance with the methods specified in Section 6.4.1 of Rule 4455. [District Rule 4455, 5.1.4] Federally Enforceable Through Title V Permit

107. The operator shall audio-visually inspect for leaks all accessible operating pumps, compressors and Pressure Relief Devices (PRDs) in service at least once every 24 hours, except when operators do not report to the facility for that given 24 hours. Any identified leak that cannot be immediately repaired shall be reinspected within 24 hours using a portable analyzer. If a leak is found, it shall be repaired as soon as practical but not later than the time frame specified in Table 3. [District Rule 4455, 5.2.1 & 5.2.2] Federally Enforceable Through Title V Permit

108. The operator shall inspect all components at least once every calendar quarter, except for inaccessible components, unsafe-to-monitor components and pipes. Inaccessible components, unsafe-to-monitor components and pipes shall be inspected in accordance with the requirements set forth in Sections 5.2.5, 5.2.6, and 5.2.7. New, replaced, or repaired fittings, flanges and threaded connections shall be inspected immediately after being placed into service. Components shall be inspected using EPA Method 21. [District Rule 4455, 5.2.3, 5.2.4, 5.2.5, 5.2.6 & 5.2.7] Federally Enforceable Through Title V Permit

109. The operator may apply for a written approval from the APCO to change the inspection frequency from quarterly to annually for a component type, provided the operator meets all the criteria specified in Sections 5.2.8.1 through 5.2.8.3. This approval shall apply to accessible component types, specifically designated by the APCO, except pumps, compressors, and PRDs which shall continue to be inspected on a quarterly basis. [District Rule 4455, 5.2.8] Federally Enforceable Through Title V Permit

110. An annual inspection frequency approved by the APCO shall revert to quarterly inspection frequency for a component type if either the operator inspection or District inspection demonstrates that a violation of the provisions of Sections 5.1, 5.2 and 5.3 of the rule exists for that component type, or the APCO issued a Notice of Violation for violating any of the provisions of Rule 4455 during the annual inspection period for that component type. When the inspection frequency changes from annual to quarterly inspections, the operator shall notify the APCO in writing within five (5) calendar days after changing the inspection frequency, giving the reason(s) and date of change to quarterly inspection frequency. [District Rule 4455, 5.2.9 & 5.2.10] Federally Enforceable Through Title V Permit

111. The operator shall initially inspect a process PRD that releases to the atmosphere as soon as practicable but not later than 24 hours after the time of the release. To insure that the process PRD is operating properly, and is leak-free, the operator shall re-inspect the process PRD not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the date of the release using EPA Method 21. If the process PRD is found to be leaking at either inspection, the PRD leak shall be treated as if the leak was found during quarterly operator inspections. [District Rule 4455, 5.2.11] Federally Enforceable Through Title V Permit

112. Except for process PRD, a component shall be inspected within 15 calendar days after repairing the leak or replacing the component using EPA Method 21. [District Rule 4455, 5.2.12] Federally Enforceable Through Title V Permit

113. A District inspection in no way fulfills any of the mandatory inspection requirements that are placed upon operators and cannot be used or counted as an inspection required of an operator. Any attempt by an operator to count such District inspections as part of the mandatory operator's inspections is considered to be willful circumvention and is a violation of this rule. [District Rule 4455, 5.2.13] Federally Enforceable Through Title V Permit

114. Upon detection of a leaking component, the operator shall affix to that component a weatherproof readily visible tag that contains the information specified in Section 5.3.3. The tag shall remain affixed to the component until the leaking component has been repaired or replaced; has been re-inspected using EPA Method 21; and is found to be in compliance with the requirements of Rule 4455. [District Rule 4455, 5.3.1 5.3.2 and 5.3.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

115. An operator shall minimize all component leaks immediately to the extent possible, but not later than one (1) hour after detection of leaks in order to stop or reduce leakage to the atmosphere. [District Rule 4455, 5.3.4] Federally Enforceable Through Title V Permit

116. If the leak has been minimized but the leak still exceeds the applicable leak standards of Rule 4455, an operator shall repair or replace the leaking component, vent the leaking component to a closed vent system, or remove the leaking component from operation as soon as practicable but not later than the time period specified in Table 3. For each calendar quarter, the operator may be allowed to extend the repair period as specified in Table 3, for a total number of leaking components, not to exceed 0.05 percent of the number of components inspected, by type, rounded upward to the nearest integer where required. [District Rule 4455, 5.3.5] Federally Enforceable Through Title V Permit

117. If the leaking component is an essential component or a critical component and which cannot be immediately shut down for repairs, the operator shall minimize the leak within one hour after detection of the leak. If the leak has been minimized, but the leak still exceeds any of the applicable leak standards of Rule 4455, the essential component or critical component shall be repaired or replaced to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection, whichever comes earlier. [District Rule 4455 5.3.6] Federally Enforceable Through Title V Permit

118. For any component that has incurred five repair actions for major gas leaks or major liquid leaks, or any combination of major gas leaks and major liquid leaks within a continuous 12-month period, the operator shall comply with at least one of the requirements specified in Sections 5.3.7.1, 5.3.7.2, 5.3.7.3, or 5.3.7.4 by the applicable deadlines specified in Sections 5.3.7.5 and 5.3.7.6. If the original leaking component is replaced with a new like-in-kind component before incurring five repair actions for major leaks within 12-consecutive months, the repair count shall start over for the new component. An entire compressor or pump need not be replaced provided the compressor part(s) or pump part(s) that have incurred five repair actions as described in Section 5.3.7 are brought into compliance with at least one of the requirements of Sections 5.3.7.1 through 5.3.7.6. [District Rule 4455, 5.3.7] Federally Enforceable Through Title V Permit

119. The operator shall monitor process PRD by using electronic process control instrumentation that allows for real time continuous parameter monitoring or by using telltale indicators for the process PRD where parameter monitoring is not feasible. [District Rule 4455, 5.4.1] Federally Enforceable Through Title V Permit

120. After a release from a process PRD in excess of 500 pounds of VOC in a continuous 24-hour period, the operator shall immediately conduct a failure analysis and implement corrective actions as soon as practicable but not later than 30 days to prevent the reoccurrence of similar release. For refineries processing greater than 20,000 barrels of crude oil per day, any subsequent release in excess of 500 pounds of VOC within a continuous 24-hour period shall be subject to the requirements of Section 5.4.5. [District Rule 4455, 5.4.3 & 5.4.4] Federally Enforceable Through Title V Permit

121. The operator of a refinery processing greater than 20,000 barrels of crude oil per day shall connect all process PRDs serving that process equipment to an APCO-approved closed vent system as defined in Section 3.0 if any of the conditions specified in Sections 5.4.5.1 and 5.4.5.2 occurs. Process PRDs subject to the provisions of Section 5.4.5 shall be connected to an APCO-approved closed-vent system as soon as practicable, but no later than the first turnaround after the requirement to connect becomes effective. [District Rule 4455, 5.4.5] Federally Enforceable Through Title V Permit

122. All major components and critical components shall be physically identified clearly and visibly for inspection, repair, and recordkeeping purposes. The physical identification shall consist of labels, tags, manufacturer's nameplate identifier, serial number, or model number, or other system approved by the APCO that enables an operator or District personnel to locate each individual component. The operator shall replace tags or labels that become missing or unreadable as soon as practicable but not later than 24 hours after discovery. The operator shall comply with the requirements of Sections 6.1.4 if there is any change in the description of major components or critical components. [District Rule 4455, 5.5.1 & 5.5.2] Federally Enforceable Through Title V Permit

123. The operator shall keep a copy of the operator management plan at the facility and make it available to the APCO, ARB and US EPA upon request. By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved operator management plan. [District Rule 4455, 6.1.2 & 6.1.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

124. The operator shall maintain an inspection log containing, at a minimum, 1) total number of components inspected, and total number and percentage of leaking components found by component types, 2) location, type, name or description of each leaking component, and description of any unit where the leaking component is found, 3) date of leak detection and method of leak detection, 4) for gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak, 5) date of repair, replacement, or removal from operation of leaking components, 6) identification and location of essential component and critical components found leaking that cannot be repaired until the next process unit turnaround or not later one year after leak detection, whichever comes earlier, 7) methods used to minimize the leak from essential components and critical components that cannot be repaired until the next process unit turnaround or not later one year after leak detection, whichever comes earlier, 8) after the component is repaired or is replaced, the date of reinspection and the leak concentration in ppmv, 9) inspector's name, business mailing address, and business telephone number, and 10) the facility operator responsible for the inspection and repair program shall sign and date the inspection log certifying the accuracy of the information recorded in the log. [District Rule 4455, 6.2.1] Federally Enforceable Through Title V Permit

125. Records of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components, including a copy of current calibration gas certification from the vendor of said calibration gas cylinder, the date of calibration, concentration of calibration gas, analyzer reading of calibration gas before adjustment, instrument reading of calibration gas after adjustment, calibration gas expiration date, and calibration gas cylinder pressure at the time of calibration. [District Rule 4455, 6.2.3] Federally Enforceable Through Title V Permit

126. The operator shall notify the APCO, by telephone or other methods approved by the APCO, of any process PRD release described in Sections 5.4.4 and 5.4.5, and any release in excess of the reportable quantity limits as stipulated in 40 CFR, Part 117, Part 302 and Part 355, including any release in excess of 100 pounds of VOC, within one hour of such occurrence or within one hour of the time said person knew or reasonably should have known of its occurrence. [District Rule 4455, 6.3.1] Federally Enforceable Through Title V Permit

127. The operator shall submit a written report to the APCO within thirty (30) calendar days following a PRD release subject to 6.3.1. The written report shall include 1) process PRD type, size, and location, 2) date, time and duration of the process PRD release, 3) types of VOC released and individual amounts, in pounds, including supporting calculations, 4) cause of the process PRD release, and 5) corrective actions taken to prevent a subsequent process PRD release. [District Rule 4455 6.3.2] Federally Enforceable Through Title V Permit

128. Copies of all records shall be retained for a minimum of five (5) years after the date of an entry. Such records shall be made available to the APCO, ARB, or US EPA upon request. [District Rule 4455, 6.2.2, 6.2.3 & 6.2.4] Federally Enforceable Through Title V Permit

129. Measurements of gaseous leak concentrations shall be conducted according to US EPA Method 21 using an appropriate portable hydrocarbon detection instrument calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in US EPA Method 21 or the manufacturer's instruction, as appropriate, not more than 30 days prior to its use. The operator shall record the calibration date of the instrument. [District Rule 4455, 6.4.1] Federally Enforceable Through Title V Permit

130. The VOC content of exempt streams shall be determined using American Society of Testing and Materials (ASTM) D 1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 for liquids. [District Rule 4455, 6.4.2] Federally Enforceable Through Title V Permit

131. For exempt streams, the percent by volume liquid evaporated at 150 deg C shall be determined using ASTM D 86. [District Rule 4455, 6.4.3] Federally Enforceable Through Title V Permit

132. Equivalent test methods other than specified in Sections 6.4.1 through 6.4.5 may be used provided such test methods have received prior approval from the US EPA, ARB, and APCO. [District Rule 4455, 6.4] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-120-2 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
AMINE SYSTEM WITH ABSORBER VESSELS, KNOCKOUTS, HEAT EXCHANGERS, AND ASSOCIATED PIPING AND COMPONENTS. TREATED VAPOR RECOVERY GAS USED AS FUEL GAS FOR PROCESS HEATERS OR FLARED IN S-37-7

PERMIT UNIT REQUIREMENTS

1. VOC emission rate from fugitive components associated with this emissions unit shall not exceed 2.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. Permit holder shall update such records when new components are approved and installed. Components shall be screened and leak rate shall be measured in accordance with the frequency of inspection specified in Rules 4451, 4452, and 4455 as applicable. [District Rule 2201] Federally Enforceable Through Title V Permit
3. As referenced in this permit, a fugitive component leak shall be defined as the lower of the level specified in applicable rules, permit conditions, or the following: pumps in light liquid service - 1,000 ppmv; compressors - 500 ppmv; pressure relief devices in gas/vapor service - 500 ppmv; valves in gas/vapor and light liquid service - 500 ppmv; agitators - 10,000 ppmv; pumps in heavy liquid service - 2,000 ppmv; valves, and connectors in heavy liquid service, instrumentation systems, and pressure relief devices in liquid service - 500 ppmv; connectors in gas/vapor service and in light liquid service - 500 ppmv. Component type and service referenced in this condition shall be as defined in 40 CFR 63 Subpart H. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Permit unit shall comply with applicable District Rule 4001 (NSPS, Subpart GGG) requirements. [District Rule 4001] Federally Enforceable Through Title V Permit
5. The owner or operator may apply to the Administrator for a determination of equivalency for any means of emission limitation that achieves a reduction in emissions of VOC at least equivalent to the reduction in emissions of VOC achieved by the controls required in Subpart GGG. In doing so, the owner or operator shall comply with the requirements of 40 CFR 60.484. [40 CFR 60.592(c)] Federally Enforceable Through Title V Permit
6. Each pump in light liquid service (PLLS) shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485(b), except as provided in 40 CFR 60.482-1(c) and 40 CFR 60.482-2(d), (e), and (f). Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. A leak is detected if an instrument reading of 10,000 ppm or greater is measured or if there are indications of liquids dripping from the pump seal. [40 CFR 60.482-2(a) and (b)] Federally Enforceable Through Title V Permit
7. When a leak is detected for each PLLS, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. [40 CFR 60.482-2(c)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

8. Any PLLS equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of 40 CFR 60.482-2(a) provided the requirements specified in 40 CFR 60.482-2(d)(1) through (6) are met. [40 CFR 60.482(d)] Federally Enforceable Through Title V Permit

9. Any PLLS that is designated, as described in 40 CFR 60.486(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 60.482-2(a), (c), and (d) if the pump meets the requirements specified in 40 CFR 60.482-2(e)(1), (2), and (3). [40 CFR 60.482-2(e)] Federally Enforceable Through Title V Permit

10. If any PLLS is equipped with a closed vent system capable of capturing and transporting leakage from the seal or seals to a control device that complies with the requirements of 40 CFR 60.482-10, it is exempt from the requirements of 40 CFR 60.482-2(a) through (e). [40 CFR 60.482-2(f)] Federally Enforceable Through Title V Permit

11. Any pump in PLLS that is designated, as described in 40 CFR 60.486(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of 40 CFR 60.482-2(a) and 40 CFR 60.482-2(d)(4) through (6) if: 1). The owner or operator of the pump demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-2(a); and 2) The owner or operator of the pump has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in 40 CFR 60.482-2(c) if a leak is detected. [40 CFR 60.482-2(g)] Federally Enforceable Through Title V Permit

12. Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in 40 CFR 60.485(c). [40 CFR 60.482-4(a)] Federally Enforceable Through Title V Permit

13. After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in 40 CFR 60.482-9. No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in 40 CFR 60.485(c). [40 CFR 60.482-4(b)] Federally Enforceable Through Title V Permit

14. Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in 40 CFR 60.482-10 is exempted from the requirements of 40 CFR 60.482-4(a) and (b). [40 CFR 60.482-4(c)] Federally Enforceable Through Title V Permit

15. Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the 40 CFR 60.482-4(a) and (b), provided the owner or operator complies with the requirements in 40 CFR 60.482-4(d)(2) of this section. After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 60.482-9. [40 CFR 60.482-4(d)] Federally Enforceable Through Title V Permit

16. Except for in-situ sampling systems and sampling systems without purges, each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR 60.482-1(c). Each closed-purge, closed-loop, or closed-vent system shall comply with the requirements specified in 40 CFR 60.482-5(b)(1), (2), (3), and (4). [40 CFR 60.482-5(a), (b), and (c)] Federally Enforceable Through Title V Permit

17. Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR 60.482-1(c). The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line. When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with this condition at all other times. [40 CFR 60.482-6(a) and (c)] Federally Enforceable Through Title V Permit

18. Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed. [40 CFR 60.482-6(b)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

19. Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of 40 CFR 60.482-6(a), (b) and (c). [40 CFR 60.482-6(d)] Federally Enforceable Through Title V Permit

20. Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in 40 CFR 60.482-6(a) through (c) are exempt from the requirements of 40 CFR 60.482-6(a) through (c). [40 CFR 60.482-6(e)] Federally Enforceable Through Title V Permit

21. Each valve in gas/vapor service and in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485(b) and shall comply with 40 CFR 60.482-7(b) through (e), except as provided in 40 CFR 60.482-7(f), (g), and (h), 40 CFR 60.483-1, 40 CFR 60.483-2, and 40 CFR 60.482-1(c). A leak is detected if an instrument reading of 10,000 ppm or greater is measured. [40 CFR 60.482-7(a) and (b)] Federally Enforceable Through Title V Permit

22. Any valve in gas/vapor service or in light liquid service for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected. If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months. [40 CFR 60.482-7(c)] Federally Enforceable Through Title V Permit

23. When a leak is detected for any valve in gas/vapor service or in light liquid service, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices specified in 40 CFR 60.482-7(e)(1), (2), (3), and (4), where practicable. [40 CFR 60.482-7(d) and (e)] Federally Enforceable Through Title V Permit

24. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 60.482-7(a) if the valve meets the requirements specified in 40 CFR 60.482-7(f)(1), (2), and (3). [40 CFR 60.482-7(f)] Federally Enforceable Through Title V Permit

25. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7(a) if: 1) The owner or operator of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-7(a); and 2) The owner or operator of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times. [40 CFR 60.482-7(g)] Federally Enforceable Through Title V Permit

26. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(f)(2), as a difficult-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7(a) if: 1) The owner or operator of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface; 2) The process unit within which the valve is located either becomes an affected facility through 40 CFR 60.14 or 40 CFR 60.15 or the owner or operator designates less than 3.0 percent of the total number of valves as difficult-to-monitor; and 3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year. [40 CFR 60.482-7(h)] Federally Enforceable Through Title V Permit

27. The owner or operator may elect to comply with the applicable provisions for valves in gas/vapor service and in light liquid service as specified in 40 CFR 60.483-1 and 60.483-2. [40 CFR 60.592(b)] Federally Enforceable Through Title V Permit

28. If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, the owner or operator shall follow either one of the following procedures: 1) The owner or operator shall monitor the equipment within 5 days by the method specified in 40 CFR 60.485(b) and shall comply with the requirements of 40 CFR 60.482-8(b) through (d); or 2) The owner or operator shall eliminate the visual, audible, olfactory, or other indication of a potential leak. A leak is detected if an instrument reading of 10,000 ppm or greater is measured. [40 CFR 60.482-8(a) and (b)] Federally Enforceable Through Title V Permit

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29. When a leak is detected in pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices described under 40 CFR 60.482-7(e). [40 CFR 60.482-8(c) and (d)] Federally Enforceable Through Title V Permit

30. Delay of leak repair will be allowed if the repair is technologically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown. Delay of repair is allowed for equipment which is isolated from the process and which does not remain in VOC service. Delay of repair beyond a process unit shutdown will be allowed for a valve, if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown. [40 CFR 60.482-9(a)(b)(e)] Federally Enforceable Through Title V Permit

31. Delay of leak repair for valves will be allowed if the owner or operator demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair and when repair procedures are effected and when repair procedures ar effected, the purged material is collected and destroyed or recovered in a control device complying with 40 CFR 60.482-10. Delay of leak repair for pumps will be allowed if the repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and repair is completed as soon as practicable, but no later than 6 months after the leak was detected. [40 cfr 60.482-9(c)(d)] Federally Enforceable Through Title V Permit

32. For closed vent systems and control devices, vapor recovery systems shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, whichever is less stringent. [40 CFR 60.482-10(b)] Federally Enforceable Through Title V Permit

33. For closed vent systems and control devices, enclosed combustion devices shall be designed and operated to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816 degrees C. [40 CFR 60.482-10(c)] Federally Enforceable Through Title V Permit

34. Except as provided in 40 CFR 60.482-10(i) through (k), each closed vent system used to comply with the provisions of Subpart GGG shall be inspected according to the procedures and schedule specified in 40 CFR 60.482-10(f)(1) and (f)(2). Leaks, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, shall be repaired as soon as practicable except as provided in 40 CFR 60.482-10(h). A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. Repair shall be completed no later than 15 calendar days after the leak is detected. [40 CFR 60.482-10(f) and (g)] Federally Enforceable Through Title V Permit

35. Delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown. [40 CFR 60.482-10(h)] Federally Enforceable Through Title V Permit

36. If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2). [40 CFR 60.482-10(i)] Federally Enforceable Through Title V Permit

37. Any parts of the closed vent system that are designated, as described in 40 CFR 60.482-10(l)(1), as unsafe to inspect are exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR 60.482-10 (j)(1) and (j)(2). [40 CFR 60.482-10(j)] Federally Enforceable Through Title V Permit

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38. Any parts of the closed vent system that are designated, as described in 40 CFR 60.482-10(l)(2), as difficult to inspect are exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR 60.482-10(k)(1) through (k)(3). [40 CFR 60.482-10(k)] Federally Enforceable Through Title V Permit

39. The owner or operator shall record the following information: 1) Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment; 2) Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment; 3) For each inspection during which a leak is detected, a record of the information specified in 40 CFR 60.486(c); 4) For each inspection conducted in accordance with 40 CFR 60.485(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected; and 5) For each visual inspection conducted in accordance with 40 CFR 60.482-10(f)(1)(ii) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected. [40 CFR 60.482-10(l)] Federally Enforceable Through Title V Permit

40. Closed vent systems and control devices used to comply with provisions Subpart GGG shall be operated at all times when emissions may be vented to them. [40 CFR 60.482-10(m)] Federally Enforceable Through Title V Permit

41. In conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in 40 CFR 60, Appendix A or other methods and procedures as specified in 40 CFR 60.485, except as provided in 40 CFR 60.8(b). [40 CFR 60.485(a)] Federally Enforceable Through Title V Permit

42. The owner or operator shall determine compliance with the standards in 40 CFR 60.482, 60.483, and 60.484 as follows: Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21. The following calibration gases shall be used: (i) Zero air (less than 10 ppm of hydrocarbon in air); and (ii) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [40 CFR 60.485(b)] Federally Enforceable Through Title V Permit

43. The owner or operator shall determine compliance with the no detectable emission standards in 40 CFR 60.482-2(e), 60.482-3(i), 60.482-4, 60.482-7(f), and 60.482-10(e) as follows: 1) The requirements of 40 CFR 60.485(b) shall apply. 2) Method 21 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance. [40 CFR 60.485(c)] Federally Enforceable Through Title V Permit

44. The owner or operator shall test each piece of equipment unless demonstrated that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used: 1) Procedures that conform to the general methods in ASTM E260-73, 91, or 96, E168-67, 77, or 92, E169-63, 77, or 93 (incorporated by reference as seen in 40 CFR 60.17) shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment; 2) Organic compounds that are considered by the Administrator to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid; and 3) Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Administrator disagrees with the judgment, the previous two procedures as specified in 40 CFR 60.485(d)(1) and (2) shall be used to resolve the disagreement. [40 CFR 60.485(d)] Federally Enforceable Through Title V Permit

45. The owner or operator shall demonstrate that an equipment is in light liquid service by showing that all the following conditions apply: 1) The vapor pressure of one or more of the components is greater than 0.3 kPa at 20 øC (1.2 in. H2O at 68 degrees F). Standard reference texts or ASTM D2879-83, 96, or 97 (incorporated by reference as seen in 40 CFR 60.17) shall be used to determine the vapor pressures; 2) The total concentration of the pure components having a vapor pressure greater than 0.3 kPa at 20 degrees Celsius is equal to or greater than 20 percent by weight; and 3) The fluid is a liquid at operating conditions. [40 CFR 60.485(e)] Federally Enforceable Through Title V Permit

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46. Samples used in conjunction with 40 CFR 60.485(d), (e), and (g) shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare. [40 CFR 60.485(f)] Federally Enforceable Through Title V Permit

47. An owner or operator of more than one affected facility subject to the provisions Subpart GGG may comply with the recordkeeping requirements for these facilities in one recordkeeping system if the system identifies each record by each facility. [40 CFR 60.486(a)] Federally Enforceable Through Title V Permit

48. When each leak is detected as specified in 40 CFR 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following requirements apply: 1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment; 2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR 60.482-7(c) and no leak has been detected during those 2 months; and 3) The identification on equipment except on a valve, may be removed after it has been repaired. [40 CFR 60.486(b)] Federally Enforceable Through Title V Permit

49. When each leak is detected as specified in 40 CFR 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following information shall be recorded in a log and shall be kept for 5 years in a readily accessible location: 1) The instrument and operator identification numbers and the equipment identification number; 2) The date the leak was detected and the dates of each attempt to repair the leak; 3) Repair methods applied in each attempt to repair the leak; 4) ``Above 10,000" if the maximum instrument reading measured by the methods specified in 40 CFR 60.485(a) after each repair attempt is equal to or greater than 10,000 ppm; 5) ``Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak; 6) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown; 7) The expected date of successful repair of the leak if a leak is not repaired within 15 days; 8) Dates of process unit shutdown that occur while the equipment is unrepaired; and 9) The date of successful repair of the leak. [40 CFR 60.486(c) and District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

50. The following information pertaining to the design requirements for closed vent systems and control devices described in 40 CFR 60.482-10 shall be recorded and kept in a readily accessible location: 1) Detailed schematics, design specifications, and piping and instrumentation diagrams; 2) The dates and descriptions of any changes in the design specifications; 3) A description of the parameter or parameters monitored, as required in 40 CFR 60.482-10(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring; 4) Periods when the closed vent systems and control devices required in 40 CFR 60.482-2, 60.482-3, 60.482-4, and 60.482-5 are not operated as designed, including periods when a flare pilot light does not have a flame; and 5) Dates of startups and shutdowns of the closed vent systems and control devices required in 40 CFR 60.482-2, 60.482-3, 60.482-4, and 60.482-5. [40 CFR 60.486(d)] Federally Enforceable Through Title V Permit

51. The following information pertaining to all equipment subject to the requirements in 40 CFR 60.482-1 to 60.482-10 shall be recorded in a log that is kept in a readily accessible location: 1) A list of identification numbers for equipment subject to the requirements of Subpart GGG; 2) (i) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 40 CFR 60.482-2(e), 60.482-3(i) and 60.482-7(f). (ii) The designation of equipment as subject to the requirements of 40 CFR 60.482-2(e), 60.482-3(i) and 60.482-7(f) shall be signed by the owner or operator; 3) A list of equipment identification numbers for pressure relief devices required to comply with 60.482-4; 4) (i) The dates of each compliance test as required in 40 CFR 60.482-2(e), 60.482-3(i), 60.482-4, and 60.482-7(f). (ii) The background level measured during each compliance test. (iii) The maximum instrument reading measured at the equipment during each compliance test; and 5) A list of identification numbers for equipment in vacuum service. [40 CFR 60.486(e)] Federally Enforceable Through Title V Permit

52. The following information pertaining to all valves subject to the requirements of 40 CFR 60.482-7(g) and (h) and to all pumps subject to the requirements of 40 CFR 60.482-2(g) shall be recorded in a log that is kept in a readily accessible location: 1) A list of identification numbers for valves and pumps that are designated as unsafe-to-monitor, an explanation for each valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump; and 2) A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve. [40 CFR 60.486(f)] Federally Enforceable Through Title V Permit

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53. The following information shall be recorded for valves complying with 40 CFR 60.483-2: 1) A schedule of monitoring; 2) The percent of valves found leaking during each monitoring period. [40 CFR 60.486(g)] Federally Enforceable Through Title V Permit

54. The following information shall be recorded in a log that is kept in a readily accessible location: 1) Design criterion required in 40 CFR 60.482-2(d)(5) and 60.482-3(e)(2) and explanation of the design criterion; and 2) Any changes to this criterion and the reasons for the changes. [40 CFR 60.486(h)] Federally Enforceable Through Title V Permit

55. The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in 40 CFR 60.480(d): 1) An analysis demonstrating the design capacity of the affected facility; 2) A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol; and 3) An analysis demonstrating that equipment is not in VOC service. [40 CFR 60.486(i)] Federally Enforceable Through Title V Permit

56. Information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location. [40 CFR 60.486(j)] Federally Enforceable Through Title V Permit

57. The provisions of 40 CFR 60.7 (b) and (d) do not apply to affected facilities subject to Subpart GGG. [40 CFR 60.486(k)] Federally Enforceable Through Title V Permit

58. All semiannual reports to the Administrator shall include the following information, summarized from the information in 40 CFR 60.486: 1) Process unit identification; 2) For each month during the semiannual reporting period, i) Number of valves for which leaks were detected as described in 40 CFR 60.482-7(b) or 40 CFR 60.483-2, (ii) Number of valves for which leaks were not repaired as required in 40 CFR 60.482-7(d)(1), (iii) Number of pumps for which leaks were detected as described in 40 CFR 60.482-2(b) and (d)(6)(i), (iv) Number of pumps for which leaks were not repaired as required in 40 CFR 60.482-2(c)(1) and (d)(6)(ii), (v) Number of compressors for which leaks were detected as described in 40 CFR 60.482-3(f), (vi) Number of compressors for which leaks were not repaired as required in 40 CFR 60.482-3(g)(1), and (vii) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible; 3) Dates of process unit shutdowns which occurred within the semiannual reporting period; 4) Revisions to items reported in the semiannual report if changes have occurred since the initial report, as required in 40 CFR 60.487 (a) and (b), or subsequent revisions to the initial report. [40 CFR 60.487(c)] Federally Enforceable Through Title V Permit

59. An owner or operator electing to comply with the provisions of 40 CFR 60.483-1 and 60.483-2 shall notify the Administrator of the alternative standard selected 90 days before implementing either of the provisions. [40 CFR 60.487(d)] Federally Enforceable Through Title V Permit

60. An owner or operator shall report the results of all performance tests in accordance with 40 CFR 60.8 of the General Provisions. The provisions of 40 CFR 60.8(d) do not apply to affected facilities subject to the provisions of Subpart GGG except that an owner or operator must notify the Administrator of the schedule for the initial performance tests at least 30 days before the initial performance tests. [40 CFR 60.487(e)] Federally Enforceable Through Title V Permit

61. The semiannual reporting requirements of 40 CFR 60.487(a), (b), and (c) remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with the requirements of 40 CFR 60.487(a), (b), and (c), provided that they comply with the requirements established by the State. [40 CFR 60.487(f)] Federally Enforceable Through Title V Permit

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62. Compressors are exempt from the standards of Subpart GGG if the owner or operator demonstrates that a compressor is in hydrogen service. Each compressor is presumed not to be in hydrogen service unless an owner or operator demonstrates that the piece of equipment is in hydrogen service. For a piece of equipment to be considered in hydrogen service, it must be determined that the percent hydrogen content can be reasonably expected always to exceed 50 percent by volume. For purposes of determining the percent hydrogen content in the process fluid that is contained in or contacts a compressor, procedures that conform to the general method described in ASTM E-260, E-168, or E-169 shall be used. An owner or operator may use engineering judgment to demonstrate that the percent content exceeds 50 percent by volume, provided the engineering judgment demonstrates that the content clearly exceeds 50 percent by volume. When an owner or operator and the Administrator do not agree on whether a piece of equipment is in hydrogen service, however, the procedures that conform to the general method described in ASTM E-260, E-168, or E-169 shall be used to resolve the disagreement. If an owner or operator determines that a piece of equipment is in hydrogen service, the determination can be revised only after following the procedures that conform to the general method described in ASTM E-260, E-168, or E-169. [40 CFR 60.593(b)] Federally Enforceable Through Title V Permit

63. An owner or operator may use the following provision in addition to 40 CFR 60.485(e): Equipment is in light liquid service if the percent evaporated is greater than 10 percent at 150 øC as determined by ASTM Method D86-78, 82, 90, 95, or 96. [40 CFR 60.593(d)] Federally Enforceable Through Title V Permit

64. Equipment that is in vacuum service is excluded from the requirements of 40 CFR 60.482-2 to 40 CFR 60.482-10 if it is identified as required in 40 CFR 60.486(e)(5). [40 CFR 60.482-1(d)] Federally Enforceable Through Title V Permit

65. Permittee shall comply with all applicable testing, recordkeeping, and reporting requirements specified in Rule 4001 - New Source Performance Standards, including but not limited to Subpart A. [District Rule 4001] Federally Enforceable Through Title V Permit

66. Operators shall not depressurize any vessel containing VOCs unless the process unit turnaround is accomplished by employing one of the following operating procedures: The organic vapors shall either be recovered, added to the refinery fuel gas system and combusted; or controlled and piped to an appropriate firebox or incinerated for combustion; or flared, until the pressure within the process vessel is as close to atmospheric pressure as is possible. All process vessels shall be depressurized into the control facilities to less than 1020 mm Hg (5 psig) before venting/opening to atmosphere. All organic compounds which emerge from a refinery process vessel during the purging of said vessel and which otherwise would be emitted to the atmosphere shall be either directed to a flare or incinerator or shall be used for fuel until such disposition of emissions is not technically feasible or is less safe than atmospheric venting. [District Rule 4454, 4.0] Federally Enforceable Through Title V Permit

67. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

68. Except for complying with the applicable requirements of Sections 6.1 and 7.3, the requirements of this rule shall not apply to 1) components subject to Rule 4623 (adopted 5/19/05), 2) pressure relief devices, pumps, and compressors equipped with a closed vent system as defined in Section 3.0, 3) components buried below ground, 4) components exclusively handling liquid streams which have less than 10 percent by weight (<10 wt%) evaporation at 150 C, 5) components exclusively handling liquid streams with a VOC content less than ten percent by weight (<10 wt%), 6) components exclusively handling gas/vapor streams with a VOC content of less than one percent by weight (<1wt%), 7) components incorporated in lines exclusively in vacuum service, 8) components exclusively handling commercial natural gas, and 9) one-half inch nominal or less stainless steel tube fittings which have been demonstrated to the Air Pollution Control Officer (APCO) to be leak-free based on initial inspection. [District Rule 4455, 4.1 & 4.2] Federally Enforceable Through Title V Permit

69. Except for components subject to Rule 4623 (Storage of Organic Liquids) or for components included in the inspection and maintenance (I&M) program implemented pursuant to Section 5.7 of Rule 4623, the operator shall not use any component that leaks in excess of the allowable leak standards of Rule 4455, or is found to be in violation of the provisions specified in Section 5.1.3. A component identified as leaking in excess of an allowable leak standard may be used provided it has been identified with a tag for repair, has been repaired, or is awaiting re-inspection after repair, within the applicable time period specified within the rule. [District Rule 4455, 5.1.1] Federally Enforceable Through Title V Permit

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70. Each hatch shall be closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4455, 5.1.2] Federally Enforceable Through Title V Permit

71. The operator shall be in violation of Rule 4455 if any District inspection demonstrates that one or more of the conditions in Section 5.1.4 (Leak Standards) exist at the facility. [District Rule 4455, 5.1.3.1] Federally Enforceable Through Title V Permit

72. Except for annual operator inspection described in Section 5.1.3.2.3, any operator inspection that demonstrates that one or more of the conditions in Section 5.1.4 exist at the facility shall not constitute a violation of Rule 4455 if the leaking components are repaired as soon as practicable but not later than the time frame specified in Rule 4455. Such components shall not be counted towards determination of compliance with the provisions of Section 5.1.4. [District Rule 4455, 5.1.3.2.1] Federally Enforceable Through Title V Permit

73. Leaking components detected during operator inspection pursuant Section 5.1.3.2.1 that are not repaired, replaced, or removed from operation as soon as practicable but not later than the time frame specified in Rule 4455 shall be counted toward determination of compliance with the provisions of Section 5.1.4. [District Rule 4455, 5.1.3.2.2] Federally Enforceable Through Title V Permit

74. Any operator inspection conducted annually for a component type (including operator annual inspections pursuant to Section 5.2.5, 5.2.6, 5.2.7, or 5.2.8) that demonstrates one or more of the conditions in Section 5.1.4 exist at the facility shall constitute a violation of Rule 4455 regardless of whether or not the leaking components are repaired, replaced, or removed from operation within the allowable repair time frame specified in Rule 4455. [District Rule 4455, 5.1.3.2.3] Federally Enforceable Through Title V Permit

75. A component shall be considered leaking if one or more of the conditions specified in Sections 5.1.4.1 through 5.1.4.4 of Rule 4455 exist at the facility. Readings shall be taken as methane using a portable hydrocarbon detection instrument and shall be made in accordance with the methods specified in Section 6.4.1 of Rule 4455. [District Rule 4455, 5.1.4] Federally Enforceable Through Title V Permit

76. The operator shall audio-visually inspect for leaks all accessible operating pumps, compressors and Pressure Relief Devices (PRDs) in service at least once every 24 hours, except when operators do not report to the facility for that given 24 hours. Any identified leak that cannot be immediately repaired shall be reinspected within 24 hours using a portable analyzer. If a leak is found, it shall be repaired as soon as practical but not later than the time frame specified in Table 3. [District Rule 4455, 5.2.1 & 5.2.2] Federally Enforceable Through Title V Permit

77. The operator shall inspect all components at least once every calendar quarter, except for inaccessible components, unsafe-to-monitor components and pipes. Inaccessible components, unsafe-to-monitor components and pipes shall be inspected in accordance with the requirements set forth in Sections 5.2.5, 5.2.6, and 5.2.7. New, replaced, or repaired fittings, flanges and threaded connections shall be inspected immediately after being placed into service. Components shall be inspected using EPA Method 21. [District Rule 4455, 5.2.3, 5.2.4, 5.2.5, 5.2.6 & 5.2.7] Federally Enforceable Through Title V Permit

78. The operator may apply for a written approval from the APCO to change the inspection frequency from quarterly to annually for a component type, provided the operator meets all the criteria specified in Sections 5.2.8.1 through 5.2.8.3. This approval shall apply to accessible component types, specifically designated by the APCO, except pumps, compressors, and PRDs which shall continue to be inspected on a quarterly basis. [District Rule 4455, 5.2.8] Federally Enforceable Through Title V Permit

79. An annual inspection frequency approved by the APCO shall revert to quarterly inspection frequency for a component type if either the operator inspection or District inspection demonstrates that a violation of the provisions of Sections 5.1, 5.2 and 5.3 of the rule exists for that component type, or the APCO issued a Notice of Violation for violating any of the provisions of Rule 4455 during the annual inspection period for that component type. When the inspection frequency changes from annual to quarterly inspections, the operator shall notify the APCO in writing within five (5) calendar days after changing the inspection frequency, giving the reason(s) and date of change to quarterly inspection frequency. [District Rule 4455, 5.2.9 & 5.2.10] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

80. The operator shall initially inspect a process PRD that releases to the atmosphere as soon as practicable but not later than 24 hours after the time of the release. To insure that the process PRD is operating properly, and is leak-free, the operator shall re-inspect the process PRD not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the date of the release using EPA Method 21. If the process PRD is found to be leaking at either inspection, the PRD leak shall be treated as if the leak was found during quarterly operator inspections. [District Rule 4455, 5.2.11] Federally Enforceable Through Title V Permit

81. Except for process PRD, a component shall be inspected within 15 calendar days after repairing the leak or replacing the component using EPA Method 21. [District Rule 4455, 5.2.12] Federally Enforceable Through Title V Permit

82. A District inspection in no way fulfills any of the mandatory inspection requirements that are placed upon operators and cannot be used or counted as an inspection required of an operator. Any attempt by an operator to count such District inspections as part of the mandatory operator's inspections is considered to be willful circumvention and is a violation of this rule. [District Rule 4455, 5.2.13] Federally Enforceable Through Title V Permit

83. Upon detection of a leaking component, the operator shall affix to that component a weatherproof readily visible tag that contains the information specified in Section 5.3.3. The tag shall remain affixed to the component until the leaking component has been repaired or replaced; has been re-inspected using EPA Method 21; and is found to be in compliance with the requirements of Rule 4455. [District Rule 4455, 5.3.1 5.3.2 and 5.3.3] Federally Enforceable Through Title V Permit

84. An operator shall minimize all component leaks immediately to the extent possible, but not later than one (1) hour after detection of leaks in order to stop or reduce leakage to the atmosphere. [District Rule 4455, 5.3.4] Federally Enforceable Through Title V Permit

85. If the leak has been minimized but the leak still exceeds the applicable leak standards of Rule 4455, an operator shall repair or replace the leaking component, vent the leaking component to a closed vent system, or remove the leaking component from operation as soon as practicable but not later than the time period specified in Table 3. For each calendar quarter, the operator may be allowed to extend the repair period as specified in Table 3, for a total number of leaking components, not to exceed 0.05 percent of the number of components inspected, by type, rounded upward to the nearest integer where required. [District Rule 4455, 5.3.5] Federally Enforceable Through Title V Permit

86. If the leaking component is an essential component or a critical component and which cannot be immediately shut down for repairs, the operator shall minimize the leak within one hour after detection of the leak. If the leak has been minimized, but the leak still exceeds any of the applicable leak standards of Rule 4455, the essential component or critical component shall be repaired or replaced to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection, whichever comes earlier. [District Rule 4455 5.3.6] Federally Enforceable Through Title V Permit

87. For any component that has incurred five repair actions for major gas leaks or major liquid leaks, or any combination of major gas leaks and major liquid leaks within a continuous 12-month period, the operator shall comply with at least one of the requirements specified in Sections 5.3.7.1, 5.3.7.2, 5.3.7.3, or 5.3.7.4 by the applicable deadlines specified in Sections 5.3.7.5 and 5.3.7.6. If the original leaking component is replaced with a new like-in-kind component before incurring five repair actions for major leaks within 12-consecutive months, the repair count shall start over for the new component. An entire compressor or pump need not be replaced provided the compressor part(s) or pump part(s) that have incurred five repair actions as described in Section 5.3.7 are brought into compliance with at least one of the requirements of Sections 5.3.7.1 through 5.3.7.6. [District Rule 4455, 5.3.7] Federally Enforceable Through Title V Permit

88. The operator shall monitor process PRD by using electronic process control instrumentation that allows for real time continuous parameter monitoring or by using telltale indicators for the process PRD where parameter monitoring is not feasible. [District Rule 4455, 5.4.1] Federally Enforceable Through Title V Permit

89. After a release from a process PRD in excess of 500 pounds of VOC in a continuous 24-hour period, the operator shall immediately conduct a failure analysis and implement corrective actions as soon as practicable but not later than 30 days to prevent the reoccurrence of similar release. For refineries processing greater than 20,000 barrels of crude oil per day, any subsequent release in excess of 500 pounds of VOC within a continuous 24-hour period shall be subject to the requirements of Section 5.4.5. [District Rule 4455, 5.4.3 & 5.4.4] Federally Enforceable Through Title V Permit

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90. The operator of a refinery processing greater than 20,000 barrels of crude oil per day shall connect all process PRDs serving that process equipment to an APCO-approved closed vent system as defined in Section 3.0 if any of the conditions specified in Sections 5.4.5.1 and 5.4.5.2 occurs. Process PRDs subject to the provisions of Section 5.4.5 shall be connected to an APCO-approved closed-vent system as soon as practicable, but no later than the first turnaround after the requirement to connect becomes effective. [District Rule 4455, 5.4.5] Federally Enforceable Through Title V Permit

91. All major components and critical components shall be physically identified clearly and visibly for inspection, repair, and recordkeeping purposes. The physical identification shall consist of labels, tags, manufacturer's nameplate identifier, serial number, or model number, or other system approved by the APCO that enables an operator or District personnel to locate each individual component. The operator shall replace tags or labels that become missing or unreadable as soon as practicable but not later than 24 hours after discovery. The operator shall comply with the requirements of Sections 6.1.4 if there is any change in the description of major components or critical components. [District Rule 4455, 5.5.1 & 5.5.2] Federally Enforceable Through Title V Permit

92. The operator shall keep a copy of the operator management plan at the facility and make it available to the APCO, ARB and US EPA upon request. By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved operator management plan. [District Rule 4455, 6.1.2 & 6.1.4] Federally Enforceable Through Title V Permit

93. The operator shall maintain an inspection log containing, at a minimum, 1) total number of components inspected, and total number and percentage of leaking components found by component types, 2) location, type, name or description of each leaking component, and description of any unit where the leaking component is found, 3) date of leak detection and method of leak detection, 4) for gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak, 5) date of repair, replacement, or removal from operation of leaking components, 6) identification and location of essential component and critical components found leaking that cannot be repaired until the next process unit turnaround or not later one year after leak detection, whichever comes earlier, 7) methods used to minimize the leak from essential components and critical components that cannot be repaired until the next process unit turnaround or not later one year after leak detection, whichever comes earlier, 8) after the component is repaired or is replaced, the date of reinspection and the leak concentration in ppmv, 9) inspector's name, business mailing address, and business telephone number, and 10) the facility operator responsible for the inspection and repair program shall sign and date the inspection log certifying the accuracy of the information recorded in the log. [District Rule 4455, 6.2.1] Federally Enforceable Through Title V Permit

94. Records of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components, including a copy of current calibration gas certification from the vendor of said calibration gas cylinder, the date of calibration, concentration of calibration gas, analyzer reading of calibration gas before adjustment, instrument reading of calibration gas after adjustment, calibration gas expiration date, and calibration gas cylinder pressure at the time of calibration. [District Rule 4455, 6.2.3] Federally Enforceable Through Title V Permit

95. The operator shall notify the APCO, by telephone or other methods approved by the APCO, of any process PRD release described in Sections 5.4.4 and 5.4.5, and any release in excess of the reportable quantity limits as stipulated in 40 CFR, Part 117, Part 302 and Part 355, including any release in excess of 100 pounds of VOC, within one hour of such occurrence or within one hour of the time said person knew or reasonably should have known of its occurrence. [District Rule 4455, 6.3.1] Federally Enforceable Through Title V Permit

96. The operator shall submit a written report to the APCO within thirty (30) calendar days following a PRD release subject to 6.3.1. The written report shall include 1) process PRD type, size, and location, 2) date, time and duration of the process PRD release, 3) types of VOC released and individual amounts, in pounds, including supporting calculations, 4) cause of the process PRD release, and 5) corrective actions taken to prevent a subsequent process PRD release. [District Rule 4455 6.3.2] Federally Enforceable Through Title V Permit

97. Copies of all records shall be retained for a minimum of five (5) years after the date of an entry. Such records shall be made available to the APCO, ARB, or US EPA upon request. [District Rule 4455, 6.2.2, 6.2.3 & 6.2.4] Federally Enforceable Through Title V Permit

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98. Measurements of gaseous leak concentrations shall be conducted according to US EPA Method 21 using an appropriate portable hydrocarbon detection instrument calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in US EPA Method 21 or the manufacturer's instruction, as appropriate, not more than 30 days prior to its use. The operator shall record the calibration date of the instrument. [District Rule 4455, 6.4.1] Federally Enforceable Through Title V Permit

99. The VOC content of exempt streams shall be determined using American Society of Testing and Materials (ASTM) D 1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 for liquids. [District Rule 4455, 6.4.2] Federally Enforceable Through Title V Permit

100. For exempt streams, the percent by volume liquid evaporated at 150 deg C shall be determined using ASTM D 86. [District Rule 4455, 6.4.3] Federally Enforceable Through Title V Permit

101. Equivalent test methods other than specified in Sections 6.4.1 through 6.4.5 may be used provided such test methods have received prior approval from the US EPA, ARB, and APCO. [District Rule 4455, 6.4] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-121-2 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
SOUR WATER SYSTEM WITH STRIPPER COLUMN, STEAM REBOILER, KNOCKOUTS, HEAT EXCHANGERS, AND ASSOCIATED PIPING AND COMPONENTS

PERMIT UNIT REQUIREMENTS

1. VOC emission rate from fugitive components associated with this emissions unit shall not exceed 2.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. Permit holder shall update such records when new components are approved and installed. Components shall be screened and leak rate shall be measured in accordance with the frequency of inspection specified in Rule 4455 as applicable. [District Rule 2201] Federally Enforceable Through Title V Permit
3. As referenced in this permit, a fugitive component leak shall be defined as the lower of the level specified in applicable rules, permit conditions, or the following: pumps in light liquid service - 1,000 ppmv; compressors - 500 ppmv; pressure relief devices in gas/vapor service - 500 ppmv; valves in gas/vapor and light liquid service - 500 ppmv; agitators - 10,000 ppmv; pumps in heavy liquid service - 2,000 ppmv; valves, and connectors in heavy liquid service, instrumentation systems, and pressure relief devices in liquid service - 500 ppmv; connectors in gas/vapor service and in light liquid service - 500 ppmv. Component type and service referenced in this condition shall be as defined in 40 CFR 63 Subpart H. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Permit unit shall comply with applicable District Rule 4001 (NSPS, Subpart GGG) requirements. [District Rule 4001] Federally Enforceable Through Title V Permit
5. The owner or operator may apply to the Administrator for a determination of equivalency for any means of emission limitation that achieves a reduction in emissions of VOC at least equivalent to the reduction in emissions of VOC achieved by the controls required in Subpart GGG. In doing so, the owner or operator shall comply with the requirements of 40 CFR 60.484. [40 CFR 60.592(c)] Federally Enforceable Through Title V Permit
6. Each pump in light liquid service (PLLS) shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485(b), except as provided in 40 CFR 60.482-1(c) and 40 CFR 60.482-2(d), (e), and (f). Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. A leak is detected if an instrument reading of 10,000 ppm or greater is measured or if there are indications of liquids dripping from the pump seal. [40 CFR 60.482-2(a) and (b)] Federally Enforceable Through Title V Permit
7. When a leak is detected for each PLLS, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. [40 CFR 60.482-2(c)] Federally Enforceable Through Title V Permit
8. Any PLLS equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of 40 CFR 60.482-2(a) provided the requirements specified in 40 CFR 60.482-2(d)(1) through (6) are met. [40 CFR 60.482(d)] Federally Enforceable Through Title V Permit

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9. Any PLLS that is designated, as described in 40 CFR 60.486(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 60.482-2(a), (c), and (d) if the pump meets the requirements specified in 40 CFR 60.482-2(e)(1), (2), and (3). [40 CFR 60.482-2(e)] Federally Enforceable Through Title V Permit

10. If any PLLS is equipped with a closed vent system capable of capturing and transporting leakage from the seal or seals to a control device that complies with the requirements of 40 CFR 60.482-10, it is exempt from the requirements of 40 CFR 60.482-2(a) through (e). [40 CFR 60.482-2(f)] Federally Enforceable Through Title V Permit

11. Any pump in PLLS that is designated, as described in 40 CFR 60.486(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of 40 CFR 60.482-2(a) and 40 CFR 60.482-2(d)(4) through (6) if: 1). The owner or operator of the pump demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-2(a); and 2) The owner or operator of the pump has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in 40 CFR 60.482-2(c) if a leak is detected. [40 CFR 60.482-2(g)] Federally Enforceable Through Title V Permit

12. Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in 40 CFR 60.485(c). [40 CFR 60.482-4(a)] Federally Enforceable Through Title V Permit

13. After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in 40 CFR 60.482-9. No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in 40 CFR 60.485(c). [40 CFR 60.482-4(b)] Federally Enforceable Through Title V Permit

14. Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in 40 CFR 60.482-10 is exempted from the requirements of 40 CFR 60.482-4(a) and (b). [40 CFR 60.482-4(c)] Federally Enforceable Through Title V Permit

15. Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the 40 CFR 60.482-4(a) and (b), provided the owner or operator complies with the requirements in 40 CFR 60.482-4(d)(2) of this section. After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 60.482-9. [40 CFR 60.482-4(d)] Federally Enforceable Through Title V Permit

16. Except for in-situ sampling systems and sampling systems without purges, each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR 60.482-1(c). Each closed-purge, closed-loop, or closed-vent system shall comply with the requirements specified in 40 CFR 60.482-5(b)(1), (2), (3), and (4). [40 CFR 60.482-5(a), (b), and (c)] Federally Enforceable Through Title V Permit

17. Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR 60.482-1(c). The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line. When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with this condition at all other times. [40 CFR 60.482-6(a) and (c)] Federally Enforceable Through Title V Permit

18. Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed. [40 CFR 60.482-6(b)] Federally Enforceable Through Title V Permit

19. Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of 40 CFR 60.482-6(a), (b) and (c). [40 CFR 60.482-6(d)] Federally Enforceable Through Title V Permit

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20. Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in 40 CFR 60.482-6(a) through (c) are exempt from the requirements of 40 CFR 60.482-6(a) through (c). [40 CFR 60.482-6(e)] Federally Enforceable Through Title V Permit

21. Each valve in gas/vapor service and in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485(b) and shall comply with 40 CFR 60.482-7(b) through (e), except as provided in 40 CFR 60.482-7(f), (g), and (h), 40 CFR 60.483-1, 40 CFR 60.483-2, and 40 CFR 60.482-1(c). A leak is detected if an instrument reading of 10,000 ppm or greater is measured. [40 CFR 60.482-7(a) and (b)] Federally Enforceable Through Title V Permit

22. Any valve in gas/vapor service or in light liquid service for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected. If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months. [40 CFR 60.482-7(c)] Federally Enforceable Through Title V Permit

23. When a leak is detected for any valve in gas/vapor service or in light liquid service, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices specified in 40 CFR 60.482-7(e)(1), (2), (3), and (4), where practicable. [40 CFR 60.482-7(d) and (e)] Federally Enforceable Through Title V Permit

24. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 60.482-7(a) if the valve meets the requirements specified in 40 CFR 60.482-7(f)(1), (2), and (3). [40 CFR 60.482-7(f)] Federally Enforceable Through Title V Permit

25. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7(a) if: 1) The owner or operator of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-7(a); and 2) The owner or operator of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times. [40 CFR 60.482-7(g)] Federally Enforceable Through Title V Permit

26. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(f)(2), as a difficult-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7(a) if: 1) The owner or operator of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface; 2) The process unit within which the valve is located either becomes an affected facility through 40 CFR 60.14 or 40 CFR 60.15 or the owner or operator designates less than 3.0 percent of the total number of valves as difficult-to-monitor; and 3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year. [40 CFR 60.482-7(h)] Federally Enforceable Through Title V Permit

27. The owner or operator may elect to comply with the applicable provisions for valves in gas/vapor service and in light liquid service as specified in 40 CFR 60.483-1 and 60.483-2. [40 CFR 60.592(b)] Federally Enforceable Through Title V Permit

28. If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, the owner or operator shall follow either one of the following procedures: 1) The owner or operator shall monitor the equipment within 5 days by the method specified in 40 CFR 60.485(b) and shall comply with the requirements of 40 CFR 60.482-8(b) through (d); or 2) The owner or operator shall eliminate the visual, audible, olfactory, or other indication of a potential leak. A leak is detected if an instrument reading of 10,000 ppm or greater is measured. [40 CFR 60.482-8(a) and (b)] Federally Enforceable Through Title V Permit

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29. When a leak is detected in pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices described under 40 CFR 60.482-7(e). [40 CFR 60.482-8(c) and (d)] Federally Enforceable Through Title V Permit

30. Delay of leak repair will be allowed if the repair is technologically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown. Delay of repair is allowed for equipment which is isolated from the process and which does not remain in VOC service. Delay of repair beyond a process unit shutdown will be allowed for a valve, if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown. [40 CFR 60.482-9(a)(b)(e)] Federally Enforceable Through Title V Permit

31. Delay of leak repair for valves will be allowed if the owner or operator demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair and when repair procedures are effected and when repair procedures ar effected, the purged material is collected and destroyed or recovered in a control device complying with 40 CFR 60.482-10. Delay of leak repair for pumps will be allowed if the repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and repair is completed as soon as practicable, but no later than 6 months after the leak was detected. [40 cfr 60.482-9(c)(d)] Federally Enforceable Through Title V Permit

32. For closed vent systems and control devices, vapor recovery systems shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, whichever is less stringent. [40 CFR 60.482-10(b)] Federally Enforceable Through Title V Permit

33. For closed vent systems and control devices, enclosed combustion devices shall be designed and operated to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816 degrees C. [40 CFR 60.482-10(c)] Federally Enforceable Through Title V Permit

34. Except as provided in 40 CFR 60.482-10(i) through (k), each closed vent system used to comply with the provisions of Subpart GGG shall be inspected according to the procedures and schedule specified in 40 CFR 60.482-10(f)(1) and (f)(2). Leaks, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, shall be repaired as soon as practicable except as provided in 40 CFR 60.482-10(h). A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. Repair shall be completed no later than 15 calendar days after the leak is detected. [40 CFR 60.482-10(f) and (g)] Federally Enforceable Through Title V Permit

35. Delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown. [40 CFR 60.482-10(h)] Federally Enforceable Through Title V Permit

36. If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2). [40 CFR 60.482-10(i)] Federally Enforceable Through Title V Permit

37. Any parts of the closed vent system that are designated, as described in 40 CFR 60.482-10(l)(1), as unsafe to inspect are exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR 60.482-10 (j)(1) and (j)(2). [40 CFR 60.482-10(j)] Federally Enforceable Through Title V Permit

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38. Any parts of the closed vent system that are designated, as described in 40 CFR 60.482-10(l)(2), as difficult to inspect are exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR 60.482-10(k)(1) through (k)(3). [40 CFR 60.482-10(k)] Federally Enforceable Through Title V Permit

39. The owner or operator shall record the following information: 1) Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment; 2) Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment; 3) For each inspection during which a leak is detected, a record of the information specified in 40 CFR 60.486(c); 4) For each inspection conducted in accordance with 40 CFR 60.485(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected; and 5) For each visual inspection conducted in accordance with 40 CFR 60.482-10(f)(1)(ii) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected. [40 CFR 60.482-10(l)] Federally Enforceable Through Title V Permit

40. Closed vent systems and control devices used to comply with provisions Subpart GGG shall be operated at all times when emissions may be vented to them. [40 CFR 60.482-10(m)] Federally Enforceable Through Title V Permit

41. In conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in 40 CFR 60, Appendix A or other methods and procedures as specified in 40 CFR 60.485, except as provided in 40 CFR 60.8(b). [40 CFR 60.485(a)] Federally Enforceable Through Title V Permit

42. The owner or operator shall determine compliance with the standards in 40 CFR 60.482, 60.483, and 60.484 as follows: Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21. The following calibration gases shall be used: (i) Zero air (less than 10 ppm of hydrocarbon in air); and (ii) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [40 CFR 60.485(b)] Federally Enforceable Through Title V Permit

43. The owner or operator shall determine compliance with the no detectable emission standards in 40 CFR 60.482-2(e), 60.482-3(i), 60.482-4, 60.482-7(f), and 60.482-10(e) as follows: 1) The requirements of 40 CFR 60.485(b) shall apply. 2) Method 21 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance. [40 CFR 60.485(c)] Federally Enforceable Through Title V Permit

44. The owner or operator shall test each piece of equipment unless demonstrated that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used: 1) Procedures that conform to the general methods in ASTM E260-73, 91, or 96, E168-67, 77, or 92, E169-63, 77, or 93 (incorporated by reference as seen in 40 CFR 60.17) shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment; 2) Organic compounds that are considered by the Administrator to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid; and 3) Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Administrator disagrees with the judgment, the previous two procedures as specified in 40 CFR 60.485(d)(1) and (2) shall be used to resolve the disagreement. [40 CFR 60.485(d)] Federally Enforceable Through Title V Permit

45. The owner or operator shall demonstrate that an equipment is in light liquid service by showing that all the following conditions apply: 1) The vapor pressure of one or more of the components is greater than 0.3 kPa at 20 øC (1.2 in. H2O at 68 degrees F). Standard reference texts or ASTM D2879-83, 96, or 97 (incorporated by reference as seen in 40 CFR 60.17) shall be used to determine the vapor pressures; 2) The total concentration of the pure components having a vapor pressure greater than 0.3 kPa at 20 degrees Celsius is equal to or greater than 20 percent by weight; and 3) The fluid is a liquid at operating conditions. [40 CFR 60.485(e)] Federally Enforceable Through Title V Permit

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46. Samples used in conjunction with 40 CFR 60.485(d), (e), and (g) shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare. [40 CFR 60.485(f)] Federally Enforceable Through Title V Permit

47. An owner or operator of more than one affected facility subject to the provisions Subpart GGG may comply with the recordkeeping requirements for these facilities in one recordkeeping system if the system identifies each record by each facility. [40 CFR 60.486(a)] Federally Enforceable Through Title V Permit

48. When each leak is detected as specified in 40 CFR 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following requirements apply: 1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment; 2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR 60.482-7(c) and no leak has been detected during those 2 months; and 3) The identification on equipment except on a valve, may be removed after it has been repaired. [40 CFR 60.486(b)] Federally Enforceable Through Title V Permit

49. When each leak is detected as specified in 40 CFR 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following information shall be recorded in a log and shall be kept for 5 years in a readily accessible location: 1) The instrument and operator identification numbers and the equipment identification number; 2) The date the leak was detected and the dates of each attempt to repair the leak; 3) Repair methods applied in each attempt to repair the leak; 4) ``Above 10,000" if the maximum instrument reading measured by the methods specified in 40 CFR 60.485(a) after each repair attempt is equal to or greater than 10,000 ppm; 5) ``Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak; 6) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown; 7) The expected date of successful repair of the leak if a leak is not repaired within 15 days; 8) Dates of process unit shutdown that occur while the equipment is unrepaired; and 9) The date of successful repair of the leak. [40 CFR 60.486(c) and District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

50. The following information pertaining to the design requirements for closed vent systems and control devices described in 40 CFR 60.482-10 shall be recorded and kept in a readily accessible location: 1) Detailed schematics, design specifications, and piping and instrumentation diagrams; 2) The dates and descriptions of any changes in the design specifications; 3) A description of the parameter or parameters monitored, as required in 40 CFR 60.482-10(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring; 4) Periods when the closed vent systems and control devices required in 40 CFR 60.482-2, 60.482-3, 60.482-4, and 60.482-5 are not operated as designed, including periods when a flare pilot light does not have a flame; and 5) Dates of startups and shutdowns of the closed vent systems and control devices required in 40 CFR 60.482-2, 60.482-3, 60.482-4, and 60.482-5. [40 CFR 60.486(d)] Federally Enforceable Through Title V Permit

51. The following information pertaining to all equipment subject to the requirements in 40 CFR 60.482-1 to 60.482-10 shall be recorded in a log that is kept in a readily accessible location: 1) A list of identification numbers for equipment subject to the requirements of Subpart GGG; 2) (i) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 40 CFR 60.482-2(e), 60.482-3(i) and 60.482-7(f). (ii) The designation of equipment as subject to the requirements of 40 CFR 60.482-2(e), 60.482-3(i) and 60.482-7(f) shall be signed by the owner or operator; 3) A list of equipment identification numbers for pressure relief devices required to comply with 60.482-4; 4) (i) The dates of each compliance test as required in 40 CFR 60.482-2(e), 60.482-3(i), 60.482-4, and 60.482-7(f). (ii) The background level measured during each compliance test. (iii) The maximum instrument reading measured at the equipment during each compliance test; and 5) A list of identification numbers for equipment in vacuum service. [40 CFR 60.486(e)] Federally Enforceable Through Title V Permit

52. The following information pertaining to all valves subject to the requirements of 40 CFR 60.482-7(g) and (h) and to all pumps subject to the requirements of 40 CFR 60.482-2(g) shall be recorded in a log that is kept in a readily accessible location: 1) A list of identification numbers for valves and pumps that are designated as unsafe-to-monitor, an explanation for each valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump; and 2) A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve. [40 CFR 60.486(f)] Federally Enforceable Through Title V Permit

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53. The following information shall be recorded for valves complying with 40 CFR 60.483-2: 1) A schedule of monitoring; 2) The percent of valves found leaking during each monitoring period. [40 CFR 60.486(g)] Federally Enforceable Through Title V Permit

54. The following information shall be recorded in a log that is kept in a readily accessible location: 1) Design criterion required in 40 CFR 60.482-2(d)(5) and 60.482-3(e)(2) and explanation of the design criterion; and 2) Any changes to this criterion and the reasons for the changes. [40 CFR 60.486(h)] Federally Enforceable Through Title V Permit

55. The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in 40 CFR 60.480(d): 1) An analysis demonstrating the design capacity of the affected facility; 2) A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol; and 3) An analysis demonstrating that equipment is not in VOC service. [40 CFR 60.486(i)] Federally Enforceable Through Title V Permit

56. Information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location. [40 CFR 60.486(j)] Federally Enforceable Through Title V Permit

57. The provisions of 40 CFR 60.7 (b) and (d) do not apply to affected facilities subject to Subpart GGG. [40 CFR 60.486(k)] Federally Enforceable Through Title V Permit

58. All semiannual reports to the Administrator shall include the following information, summarized from the information in 40 CFR 60.486: 1) Process unit identification; 2) For each month during the semiannual reporting period, i) Number of valves for which leaks were detected as described in 40 CFR 60.482-7(b) or 40 CFR 60.483-2, (ii) Number of valves for which leaks were not repaired as required in 40 CFR 60.482-7(d)(1), (iii) Number of pumps for which leaks were detected as described in 40 CFR 60.482-2(b) and (d)(6)(i), (iv) Number of pumps for which leaks were not repaired as required in 40 CFR 60.482-2(c)(1) and (d)(6)(ii), (v) Number of compressors for which leaks were detected as described in 40 CFR 60.482-3(f), (vi) Number of compressors for which leaks were not repaired as required in 40 CFR 60.482-3(g)(1), and (vii) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible; 3) Dates of process unit shutdowns which occurred within the semiannual reporting period; 4) Revisions to items reported in the semiannual report if changes have occurred since the initial report, as required in 40 CFR 60.487 (a) and (b), or subsequent revisions to the initial report. [40 CFR 60.487(c)] Federally Enforceable Through Title V Permit

59. An owner or operator electing to comply with the provisions of 40 CFR 60.483-1 and 60.483-2 shall notify the Administrator of the alternative standard selected 90 days before implementing either of the provisions. [40 CFR 60.487(d)] Federally Enforceable Through Title V Permit

60. An owner or operator shall report the results of all performance tests in accordance with 40 CFR 60.8 of the General Provisions. The provisions of 40 CFR 60.8(d) do not apply to affected facilities subject to the provisions of Subpart GGG except that an owner or operator must notify the Administrator of the schedule for the initial performance tests at least 30 days before the initial performance tests. [40 CFR 60.487(e)] Federally Enforceable Through Title V Permit

61. The semiannual reporting requirements of 40 CFR 60.487(a), (b), and (c) remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with the requirements of 40 CFR 60.487(a), (b), and (c), provided that they comply with the requirements established by the State. [40 CFR 60.487(f)] Federally Enforceable Through Title V Permit

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62. Compressors are exempt from the standards of Subpart GGG if the owner or operator demonstrates that a compressor is in hydrogen service. Each compressor is presumed not to be in hydrogen service unless an owner or operator demonstrates that the piece of equipment is in hydrogen service. For a piece of equipment to be considered in hydrogen service, it must be determined that the percent hydrogen content can be reasonably expected always to exceed 50 percent by volume. For purposes of determining the percent hydrogen content in the process fluid that is contained in or contacts a compressor, procedures that conform to the general method described in ASTM E-260, E-168, or E-169 shall be used. An owner or operator may use engineering judgment to demonstrate that the percent content exceeds 50 percent by volume, provided the engineering judgment demonstrates that the content clearly exceeds 50 percent by volume. When an owner or operator and the Administrator do not agree on whether a piece of equipment is in hydrogen service, however, the procedures that conform to the general method described in ASTM E-260, E-168, or E-169 shall be used to resolve the disagreement. If an owner or operator determines that a piece of equipment is in hydrogen service, the determination can be revised only after following the procedures that conform to the general method described in ASTM E-260, E-168, or E-169. [40 CFR 60.593(b)] Federally Enforceable Through Title V Permit
63. An owner or operator may use the following provision in addition to 40 CFR 60.485(e): Equipment is in light liquid service if the percent evaporated is greater than 10 percent at 150 øC as determined by ASTM Method D86-78, 82, 90, 95, or 96. [40 CFR 60.593(d)] Federally Enforceable Through Title V Permit
64. Equipment that is in vacuum service is excluded from the requirements of 40 CFR 60.482-2 to 40 CFR 60.482-10 if it is identified as required in 40 CFR 60.486(e)(5). [40 CFR 60.482-1(d)] Federally Enforceable Through Title V Permit
65. Permittee shall comply with all applicable testing, recordkeeping, and reporting requirements specified in Rule 4001 - New Source Performance Standards, including but not limited to Subpart A. [District Rule 4001] Federally Enforceable Through Title V Permit
66. Permit unit shall comply with applicable Rule 4001 (NSPS, Subpart QQQ) requirements. [District Rule 4001] Federally Enforceable Through Title V Permit
67. Each drain, receiving refinery wastewater from a process unit, shall be equipped with water seal controls. [40 CFR 60.692-2(a)(1)] Federally Enforceable Through Title V Permit
68. Each drain in active service, receiving refinery wastewater from a process unit, shall be checked by visual or physical inspection monthly for indications of low water levels or other conditions that would reduce the effectiveness of the water seal controls. [40 CFR 60.692-2(a)(2)] Federally Enforceable Through Title V Permit
69. Each drain out of active service shall be checked by visual or physical inspection weekly for indications of low water levels or other problems that could result in VOC emissions. As an alternative, the owner or operator may elect to install a tightly sealed cap or plug over a drain that is out of service, inspection shall be conducted initially and semiannually to ensure caps or plugs are in place and properly installed. Whenever low water levels or missing or improperly installed caps or plugs are identified, water shall be added or first efforts at repair shall be made as soon as practicable, but not later than 24 hours after detection, except if the repair is technically impossible without a complete or partial refinery or process unit shutdown. Repair of such equipment shall occur before the end of the next refinery or process unit shutdown [40 CFR 60.692-2(a) and 60.692-6] Federally Enforceable Through Title V Permit
70. Junction boxes in refinery wastewater systems shall be equipped with a cover and may have an open vent pipe. The vent pipe shall be at least 90 cm (3 ft) in length and shall not exceed 10.2 cm (4 in) in diameter. Junction box covers shall have a tight seal around the edge and shall be kept in place at all times, except during inspection and maintenance. [40 CFR 60.692-2(b)(1)] Federally Enforceable Through Title V Permit
71. Junction boxes in refinery wastewater systems shall be visually inspected semiannually to ensure that the cover is in place and to ensure that the cover has a tight seal around the edge. If a broken seal or gap is identified, first effort at repair shall be made as soon as practicable, but not later than 15 calendar days after the broken seal or gap is identified, except if the repair is technically impossible without a complete or partial refinery or process unit shutdown. Repair of such equipment shall occur before the end of the next refinery or process unit shutdown. [40 CFR 60.692-2(b)(3)(4) and 60.692-6] Federally Enforceable Through Title V Permit

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72. Sewer lines, conveying refinery wastewater to wastewater treatment system, shall not be open to the atmosphere and shall be covered or enclosed in a manner so as to have no visual gaps or cracks in joints, seals, or other emission interfaces. [40 CFR 60.692-2(c)(1)] Federally Enforceable Through Title V Permit

73. The portion of each unburied sewer line shall be visually inspected semiannually for indication of cracks, gaps, or other problems that could result in VOC emissions. Whenever cracks, gaps, or other problems are detected, repairs shall be made as soon as practicable, but not later than 15 calendar days after identification, except if the repair is technically impossible without a complete or partial refinery or process unit shutdown. Repair of such equipment shall occur before the end of the next refinery or process unit shutdown. [40 CFR 60.692-2(c)(2)(3) and 60.692-6] Federally Enforceable Through Title V Permit

74. Refinery wastewater routed through new process drains and a new first common downstream junction box, either as part of a new individual drain system or an existing individual drain system, shall not be routed through a downstream catch basin. [40 CFR 60.692-2(e)] Federally Enforceable Through Title V Permit

75. Vacuum system exhaust gas shall either be collected, compressed, and added to refinery gas; controlled and combusted in an appropriate firebox or incinerator with at least 90 percent VOC control efficiency; or controlled by an equivalent method approved by the APCO. [District Rule 4453] Federally Enforceable Through Title V Permit

76. Operators shall not depressurize any vessel containing VOCs unless the process unit turnaround is accomplished by employing one of the following operating procedures: The organic vapors shall either be recovered, added to the refinery fuel gas system and combusted; or controlled and piped to an appropriate firebox or incinerated for combustion; or flared, until the pressure within the process vessel is as close to atmospheric pressure as is possible. All process vessels shall be depressurized into the control facilities to less than 1020 mm Hg (5 psig) before venting/opening to atmosphere. All organic compounds which emerge from a refinery process vessel during the purging of said vessel and which otherwise would be emitted to the atmosphere shall be either directed to a flare or incinerator or shall be used for fuel until such disposition of emissions is not technically feasible or is less safe than atmospheric venting. [District Rule 4454, 4.0] Federally Enforceable Through Title V Permit

77. Except for complying with the applicable requirements of Sections 6.1 and 7.3, the requirements of this rule shall not apply to 1) components subject to Rule 4623 (adopted 5/19/05), 2) pressure relief devices, pumps, and compressors equipped with a closed vent system as defined in Section 3.0, 3) components buried below ground, 4) components exclusively handling liquid streams which have less than 10 percent by weight (<10 wt%) evaporation at 150 C, 5) components exclusively handling liquid streams with a VOC content less than ten percent by weight (<10 wt%), 6) components exclusively handling gas/vapor streams with a VOC content of less than one percent by weight (<1wt%), 7) components incorporated in lines exclusively in vacuum service, 8) components exclusively handling commercial natural gas, and 9) one-half inch nominal or less stainless steel tube fittings which have been demonstrated to the Air Pollution Control Officer (APCO) to be leak-free based on initial inspection. [District Rule 4455, 4.1 & 4.2] Federally Enforceable Through Title V Permit

78. Except for components subject to Rule 4623 (Storage of Organic Liquids) or for components included in the inspection and maintenance (I&M) program implemented pursuant to Section 5.7 of Rule 4623, the operator shall not use any component that leaks in excess of the allowable leak standards of Rule 4455, or is found to be in violation of the provisions specified in Section 5.1.3. A component identified as leaking in excess of an allowable leak standard may be used provided it has been identified with a tag for repair, has been repaired, or is awaiting re-inspection after repair, within the applicable time period specified within the rule. [District Rule 4455, 5.1.1] Federally Enforceable Through Title V Permit

79. Each hatch shall be closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4455, 5.1.2] Federally Enforceable Through Title V Permit

80. The operator shall be in violation of Rule 4455 if any District inspection demonstrates that one or more of the conditions in Section 5.1.4 (Leak Standards) exist at the facility. [District Rule 4455, 5.1.3.1] Federally Enforceable Through Title V Permit

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81. Except for annual operator inspection described in Section 5.1.3.2.3, any operator inspection that demonstrates that one or more of the conditions in Section 5.1.4 exist at the facility shall not constitute a violation of Rule 4455 if the leaking components are repaired as soon as practicable but not later than the time frame specified in Rule 4455. Such components shall not be counted towards determination of compliance with the provisions of Section 5.1.4. [District Rule 4455, 5.1.3.2.1] Federally Enforceable Through Title V Permit

82. Leaking components detected during operator inspection pursuant Section 5.1.3.2.1 that are not repaired, replaced, or removed from operation as soon as practicable but not later than the time frame specified in Rule 4455 shall be counted toward determination of compliance with the provisions of Section 5.1.4. [District Rule 4455, 5.1.3.2.2] Federally Enforceable Through Title V Permit

83. Any operator inspection conducted annually for a component type (including operator annual inspections pursuant to Section 5.2.5, 5.2.6, 5.2.7, or 5.2.8) that demonstrates one or more of the conditions in Section 5.1.4 exist at the facility shall constitute a violation of Rule 4455 regardless of whether or not the leaking components are repaired, replaced, or removed from operation within the allowable repair time frame specified in Rule 4455. [District Rule 4455, 5.1.3.2.3] Federally Enforceable Through Title V Permit

84. A component shall be considered leaking if one or more of the conditions specified in Sections 5.1.4.1 through 5.1.4.4 of Rule 4455 exist at the facility. Readings shall be taken as methane using a portable hydrocarbon detection instrument and shall be made in accordance with the methods specified in Section 6.4.1 of Rule 4455. [District Rule 4455, 5.1.4] Federally Enforceable Through Title V Permit

85. The operator shall audio-visually inspect for leaks all accessible operating pumps, compressors and Pressure Relief Devices (PRDs) in service at least once every 24 hours, except when operators do not report to the facility for that given 24 hours. Any identified leak that cannot be immediately repaired shall be reinspected within 24 hours using a portable analyzer. If a leak is found, it shall be repaired as soon as practical but not later than the time frame specified in Table 3. [District Rule 4455, 5.2.1 & 5.2.2] Federally Enforceable Through Title V Permit

86. The operator shall inspect all components at least once every calendar quarter, except for inaccessible components, unsafe-to-monitor components and pipes. Inaccessible components, unsafe-to-monitor components and pipes shall be inspected in accordance with the requirements set forth in Sections 5.2.5, 5.2.6, and 5.2.7. New, replaced, or repaired fittings, flanges and threaded connections shall be inspected immediately after being placed into service. Components shall be inspected using EPA Method 21. [District Rule 4455, 5.2.3, 5.2.4, 5.2.5, 5.2.6 & 5.2.7] Federally Enforceable Through Title V Permit

87. The operator may apply for a written approval from the APCO to change the inspection frequency from quarterly to annually for a component type, provided the operator meets all the criteria specified in Sections 5.2.8.1 through 5.2.8.3. This approval shall apply to accessible component types, specifically designated by the APCO, except pumps, compressors, and PRDs which shall continue to be inspected on a quarterly basis. [District Rule 4455, 5.2.8] Federally Enforceable Through Title V Permit

88. An annual inspection frequency approved by the APCO shall revert to quarterly inspection frequency for a component type if either the operator inspection or District inspection demonstrates that a violation of the provisions of Sections 5.1, 5.2 and 5.3 of the rule exists for that component type, or the APCO issued a Notice of Violation for violating any of the provisions of Rule 4455 during the annual inspection period for that component type. When the inspection frequency changes from annual to quarterly inspections, the operator shall notify the APCO in writing within five (5) calendar days after changing the inspection frequency, giving the reason(s) and date of change to quarterly inspection frequency. [District Rule 4455, 5.2.9 & 5.2.10] Federally Enforceable Through Title V Permit

89. The operator shall initially inspect a process PRD that releases to the atmosphere as soon as practicable but not later than 24 hours after the time of the release. To insure that the process PRD is operating properly, and is leak-free, the operator shall re-inspect the process PRD not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the date of the release using EPA Method 21. If the process PRD is found to be leaking at either inspection, the PRD leak shall be treated as if the leak was found during quarterly operator inspections. [District Rule 4455, 5.2.11] Federally Enforceable Through Title V Permit

90. Except for process PRD, a component shall be inspected within 15 calendar days after repairing the leak or replacing the component using EPA Method 21. [District Rule 4455, 5.2.12] Federally Enforceable Through Title V Permit

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91. A District inspection in no way fulfills any of the mandatory inspection requirements that are placed upon operators and cannot be used or counted as an inspection required of an operator. Any attempt by an operator to count such District inspections as part of the mandatory operator's inspections is considered to be willful circumvention and is a violation of this rule. [District Rule 4455, 5.2.13] Federally Enforceable Through Title V Permit

92. Upon detection of a leaking component, the operator shall affix to that component a weatherproof readily visible tag that contains the information specified in Section 5.3.3. The tag shall remain affixed to the component until the leaking component has been repaired or replaced; has been re-inspected using EPA Method 21; and is found to be in compliance with the requirements of Rule 4455. [District Rule 4455, 5.3.1 5.3.2 and 5.3.3] Federally Enforceable Through Title V Permit

93. An operator shall minimize all component leaks immediately to the extent possible, but not later than one (1) hour after detection of leaks in order to stop or reduce leakage to the atmosphere. [District Rule 4455, 5.3.4] Federally Enforceable Through Title V Permit

94. If the leak has been minimized but the leak still exceeds the applicable leak standards of Rule 4455, an operator shall repair or replace the leaking component, vent the leaking component to a closed vent system, or remove the leaking component from operation as soon as practicable but not later than the time period specified in Table 3. For each calendar quarter, the operator may be allowed to extend the repair period as specified in Table 3, for a total number of leaking components, not to exceed 0.05 percent of the number of components inspected, by type, rounded upward to the nearest integer where required. [District Rule 4455, 5.3.5] Federally Enforceable Through Title V Permit

95. If the leaking component is an essential component or a critical component and which cannot be immediately shut down for repairs, the operator shall minimize the leak within one hour after detection of the leak. If the leak has been minimized, but the leak still exceeds any of the applicable leak standards of Rule 4455, the essential component or critical component shall be repaired or replaced to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection, whichever comes earlier. [District Rule 4455 5.3.6] Federally Enforceable Through Title V Permit

96. For any component that has incurred five repair actions for major gas leaks or major liquid leaks, or any combination of major gas leaks and major liquid leaks within a continuous 12-month period, the operator shall comply with at least one of the requirements specified in Sections 5.3.7.1, 5.3.7.2, 5.3.7.3, or 5.3.7.4 by the applicable deadlines specified in Sections 5.3.7.5 and 5.3.7.6. If the original leaking component is replaced with a new like-in-kind component before incurring five repair actions for major leaks within 12-consecutive months, the repair count shall start over for the new component. An entire compressor or pump need not be replaced provided the compressor part(s) or pump part(s) that have incurred five repair actions as described in Section 5.3.7 are brought into compliance with at least one of the requirements of Sections 5.3.7.1 through 5.3.7.6. [District Rule 4455, 5.3.7] Federally Enforceable Through Title V Permit

97. The operator shall monitor process PRD by using electronic process control instrumentation that allows for real time continuous parameter monitoring or by using telltale indicators for the process PRD where parameter monitoring is not feasible. [District Rule 4455, 5.4.1] Federally Enforceable Through Title V Permit

98. After a release from a process PRD in excess of 500 pounds of VOC in a continuous 24-hour period, the operator shall immediately conduct a failure analysis and implement corrective actions as soon as practicable but not later than 30 days to prevent the reoccurrence of similar release. For refineries processing greater than 20,000 barrels of crude oil per day, any subsequent release in excess of 500 pounds of VOC within a continuous 24-hour period shall be subject to the requirements of Section 5.4.5. [District Rule 4455, 5.4.3 & 5.4.4] Federally Enforceable Through Title V Permit

99. The operator of a refinery processing greater than 20,000 barrels of crude oil per day shall connect all process PRDs serving that process equipment to an APCO-approved closed vent system as defined in Section 3.0 if any of the conditions specified in Sections 5.4.5.1 and 5.4.5.2 occurs. Process PRDs subject to the provisions of Section 5.4.5 shall be connected to an APCO-approved closed-vent system as soon as practicable, but no later than the first turnaround after the requirement to connect becomes effective. [District Rule 4455, 5.4.5] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

100. All major components and critical components shall be physically identified clearly and visibly for inspection, repair, and recordkeeping purposes. The physical identification shall consist of labels, tags, manufacturer's nameplate identifier, serial number, or model number, or other system approved by the APCO that enables an operator or District personnel to locate each individual component. The operator shall replace tags or labels that become missing or unreadable as soon as practicable but not later than 24 hours after discovery. The operator shall comply with the requirements of Sections 6.1.4 if there is any change in the description of major components or critical components. [District Rule 4455, 5.5.1 & 5.5.2] Federally Enforceable Through Title V Permit

101. The operator shall keep a copy of the operator management plan at the facility and make it available to the APCO, ARB and US EPA upon request. By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved operator management plan. [District Rule 4455, 6.1.2 & 6.1.4] Federally Enforceable Through Title V Permit

102. The operator shall maintain an inspection log containing, at a minimum, 1) total number of components inspected, and total number and percentage of leaking components found by component types, 2) location, type, name or description of each leaking component, and description of any unit where the leaking component is found, 3) date of leak detection and method of leak detection, 4) for gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak, 5) date of repair, replacement, or removal from operation of leaking components, 6) identification and location of essential component and critical components found leaking that cannot be repaired until the next process unit turnaround or not later one year after leak detection, whichever comes earlier, 7) methods used to minimize the leak from essential components and critical components that cannot be repaired until the next process unit turnaround or not later one year after leak detection, whichever comes earlier, 8) after the component is repaired or is replaced, the date of reinspection and the leak concentration in ppmv, 9) inspector's name, business mailing address, and business telephone number, and 10) the facility operator responsible for the inspection and repair program shall sign and date the inspection log certifying the accuracy of the information recorded in the log. [District Rule 4455, 6.2.1] Federally Enforceable Through Title V Permit

103. Records of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components, including a copy of current calibration gas certification from the vendor of said calibration gas cylinder, the date of calibration, concentration of calibration gas, analyzer reading of calibration gas before adjustment, instrument reading of calibration gas after adjustment, calibration gas expiration date, and calibration gas cylinder pressure at the time of calibration. [District Rule 4455, 6.2.3] Federally Enforceable Through Title V Permit

104. The operator shall notify the APCO, by telephone or other methods approved by the APCO, of any process PRD release described in Sections 5.4.4 and 5.4.5, and any release in excess of the reportable quantity limits as stipulated in 40 CFR, Part 117, Part 302 and Part 355, including any release in excess of 100 pounds of VOC, within one hour of such occurrence or within one hour of the time said person knew or reasonably should have known of its occurrence. [District Rule 4455, 6.3.1] Federally Enforceable Through Title V Permit

105. The operator shall submit a written report to the APCO within thirty (30) calendar days following a PRD release subject to 6.3.1. The written report shall include 1) process PRD type, size, and location, 2) date, time and duration of the process PRD release, 3) types of VOC released and individual amounts, in pounds, including supporting calculations, 4) cause of the process PRD release, and 5) corrective actions taken to prevent a subsequent process PRD release. [District Rule 4455 6.3.2] Federally Enforceable Through Title V Permit

106. Copies of all records shall be retained for a minimum of five (5) years after the date of an entry. Such records shall be made available to the APCO, ARB, or US EPA upon request. [District Rule 4455, 6.2.2, 6.2.3 & 6.2.4] Federally Enforceable Through Title V Permit

107. Measurements of gaseous leak concentrations shall be conducted according to US EPA Method 21 using an appropriate portable hydrocarbon detection instrument calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in US EPA Method 21 or the manufacturer's instruction, as appropriate, not more than 30 days prior to its use. The operator shall record the calibration date of the instrument. [District Rule 4455, 6.4.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

108. The VOC content of exempt streams shall be determined using American Society of Testing and Materials (ASTM) D 1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 for liquids. [District Rule 4455, 6.4.2] Federally Enforceable Through Title V Permit

109. For exempt streams, the percent by volume liquid evaporated at 150 deg C shall be determined using ASTM D 86. [District Rule 4455, 6.4.3] Federally Enforceable Through Title V Permit

110. Equivalent test methods other than specified in Sections 6.4.1 through 6.4.5 may be used provided such test methods have received prior approval from the US EPA, ARB, and APCO. [District Rule 4455, 6.4] Federally Enforceable Through Title V Permit

111. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-122-5 **EXPIRATION DATE:** 08/31/2016

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
CLAUS PROCESS SULFUR RECOVERY UNIT WITH REACTION FURNACE, THREE CONVERTER VESSELS, HYDROGENATION REACTOR, ENCLOSED SULFUR PIT WITH EDUCTOR VENT TO SULFUR PLANT, TAIL GAS TREATMENT UNIT INCLUDING AMINE SCRUBBING SYSTEM AND 2.5 MMBTU/HR INCINERATOR WITH JOHN ZINK VYD BURNER OR EQUIVALENT, KNOCKOUTS, HEAT EXCHANGERS, AND ASSOCIATED PIPING AND COMPONENTS

PERMIT UNIT REQUIREMENTS

1. VOC emission rate from fugitive components associated with this emissions unit shall not exceed 2.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. Permit holder shall update such records when new components are approved and installed. Components shall be screened and leak rate shall be measured in accordance with the frequency of inspection specified in Rules 4451, 4452, and 4455 as applicable. [District Rule 2201] Federally Enforceable Through Title V Permit
3. As referenced in this permit, a fugitive component leak shall be defined as the lower of the level specified in applicable rules, permit conditions, or the following: pumps in light liquid service - 1,000 ppmv; compressors - 500 ppmv; pressure relief devices in gas/vapor service - 500 ppmv; valves in gas/vapor and light liquid service - 500 ppmv; agitators - 10,000 ppmv; pumps in heavy liquid service - 2,000 ppmv; valves, and connectors in heavy liquid service, instrumentation systems, and pressure relief devices in liquid service - 500 ppmv; connectors in gas/vapor service and in light liquid service - 500 ppmv. Component type and service referenced in this condition shall be as defined in 40 CFR 63 Subpart H. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Permit unit shall comply with applicable District Rule 4001 (NSPS, Subpart GGG) requirements. [District Rule 4001] Federally Enforceable Through Title V Permit
5. The owner or operator may apply to the Administrator for a determination of equivalency for any means of emission limitation that achieves a reduction in emissions of VOC at least equivalent to the reduction in emissions of VOC achieved by the controls required in Subpart GGG. In doing so, the owner or operator shall comply with the requirements of 40 CFR 60.484. [40 CFR 60.592(c)] Federally Enforceable Through Title V Permit
6. Each pump in light liquid service (PLLS) shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485(b), except as provided in 40 CFR 60.482-1(c) and 40 CFR 60.482-2(d), (e), and (f). Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. A leak is detected if an instrument reading of 10,000 ppm or greater is measured or if there are indications of liquids dripping from the pump seal. [40 CFR 60.482-2(a) and (b)] Federally Enforceable Through Title V Permit
7. When a leak is detected for each PLLS, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. [40 CFR 60.482-2(c)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

8. Any PLLS equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of 40 CFR 60.482-2(a) provided the requirements specified in 40 CFR 60.482-2(d)(1) through (6) are met. [40 CFR 60.482(d)] Federally Enforceable Through Title V Permit

9. Any PLLS that is designated, as described in 40 CFR 60.486(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 60.482-2(a), (c), and (d) if the pump meets the requirements specified in 40 CFR 60.482-2(e)(1), (2), and (3). [40 CFR 60.482-2(e)] Federally Enforceable Through Title V Permit

10. If any PLLS is equipped with a closed vent system capable of capturing and transporting leakage from the seal or seals to a control device that complies with the requirements of 40 CFR 60.482-10, it is exempt from the requirements of 40 CFR 60.482-2(a) through (e). [40 CFR 60.482-2(f)] Federally Enforceable Through Title V Permit

11. Any pump in PLLS that is designated, as described in 40 CFR 60.486(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of 40 CFR 60.482-2(a) and 40 CFR 60.482-2(d)(4) through (6) if: 1). The owner or operator of the pump demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-2(a); and 2) The owner or operator of the pump has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in 40 CFR 60.482-2(c) if a leak is detected. [40 CFR 60.482-2(g)] Federally Enforceable Through Title V Permit

12. Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in 40 CFR 60.485(c). [40 CFR 60.482-4(a)] Federally Enforceable Through Title V Permit

13. After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in 40 CFR 60.482-9. No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in 40 CFR 60.485(c). [40 CFR 60.482-4(b)] Federally Enforceable Through Title V Permit

14. Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in 40 CFR 60.482-10 is exempted from the requirements of 40 CFR 60.482-4(a) and (b). [40 CFR 60.482-4(c)] Federally Enforceable Through Title V Permit

15. Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the 40 CFR 60.482-4(a) and (b), provided the owner or operator complies with the requirements in 40 CFR 60.482-4(d)(2) of this section. After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 60.482-9. [40 CFR 60.482-4(d)] Federally Enforceable Through Title V Permit

16. Except for in-situ sampling systems and sampling systems without purges, each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR 60.482-1(c). Each closed-purge, closed-loop, or closed-vent system shall comply with the requirements specified in 40 CFR 60.482-5(b)(1), (2), (3), and (4). [40 CFR 60.482-5(a), (b), and (c)] Federally Enforceable Through Title V Permit

17. Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR 60.482-1(c). The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line. When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with this condition at all other times. [40 CFR 60.482-6(a) and (c)] Federally Enforceable Through Title V Permit

18. Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed. [40 CFR 60.482-6(b)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

19. Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of 40 CFR 60.482-6(a), (b) and (c). [40 CFR 60.482-6(d)] Federally Enforceable Through Title V Permit

20. Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in 40 CFR 60.482-6(a) through (c) are exempt from the requirements of 40 CFR 60.482-6(a) through (c). [40 CFR 60.482-6(e)] Federally Enforceable Through Title V Permit

21. Each valve in gas/vapor service and in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485(b) and shall comply with 40 CFR 60.482-7(b) through (e), except as provided in 40 CFR 60.482-7(f), (g), and (h), 40 CFR 60.483-1, 40 CFR 60.483-2, and 40 CFR 60.482-1(c). A leak is detected if an instrument reading of 10,000 ppm or greater is measured. [40 CFR 60.482-7(a) and (b)] Federally Enforceable Through Title V Permit

22. Any valve in gas/vapor service or in light liquid service for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected. If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months. [40 CFR 60.482-7(c)] Federally Enforceable Through Title V Permit

23. When a leak is detected for any valve in gas/vapor service or in light liquid service, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices specified in 40 CFR 60.482-7(e)(1), (2), (3), and (4), where practicable. [40 CFR 60.482-7(d) and (e)] Federally Enforceable Through Title V Permit

24. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 60.482-7(a) if the valve meets the requirements specified in 40 CFR 60.482-7(f)(1), (2), and (3). [40 CFR 60.482-7(f)] Federally Enforceable Through Title V Permit

25. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7(a) if: 1) The owner or operator of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-7(a); and 2) The owner or operator of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times. [40 CFR 60.482-7(g)] Federally Enforceable Through Title V Permit

26. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(f)(2), as a difficult-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7(a) if: 1) The owner or operator of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface; 2) The process unit within which the valve is located either becomes an affected facility through 40 CFR 60.14 or 40 CFR 60.15 or the owner or operator designates less than 3.0 percent of the total number of valves as difficult-to-monitor; and 3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year. [40 CFR 60.482-7(h)] Federally Enforceable Through Title V Permit

27. The owner or operator may elect to comply with the applicable provisions for valves in gas/vapor service and in light liquid service as specified in 40 CFR 60.483-1 and 60.483-2. [40 CFR 60.592(b)] Federally Enforceable Through Title V Permit

28. If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, the owner or operator shall follow either one of the following procedures: 1) The owner or operator shall monitor the equipment within 5 days by the method specified in 40 CFR 60.485(b) and shall comply with the requirements of 40 CFR 60.482-8(b) through (d); or 2) The owner or operator shall eliminate the visual, audible, olfactory, or other indication of a potential leak. A leak is detected if an instrument reading of 10,000 ppm or greater is measured. [40 CFR 60.482-8(a) and (b)] Federally Enforceable Through Title V Permit

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29. When a leak is detected in pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices described under 40 CFR 60.482-7(e). [40 CFR 60.482-8(c) and (d)] Federally Enforceable Through Title V Permit

30. Delay of leak repair will be allowed if the repair is technologically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown. Delay of repair is allowed for equipment which is isolated from the process and which does not remain in VOC service. Delay of repair beyond a process unit shutdown will be allowed for a valve, if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown. [40 CFR 60.482-9(a)(b)(e)] Federally Enforceable Through Title V Permit

31. Delay of leak repair for valves will be allowed if the owner or operator demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair and when repair procedures are effected and when repair procedures ar effected, the purged material is collected and destroyed or recovered in a control device complying with 40 CFR 60.482-10. Delay of leak repair for pumps will be allowed if the repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and repair is completed as soon as practicable, but no later than 6 months after the leak was detected. [40 cfr 60.482-9(c)(d)] Federally Enforceable Through Title V Permit

32. For closed vent systems and control devices, vapor recovery systems shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, whichever is less stringent. [40 CFR 60.482-10(b)] Federally Enforceable Through Title V Permit

33. For closed vent systems and control devices, enclosed combustion devices shall be designed and operated to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816 degrees C. [40 CFR 60.482-10(c)] Federally Enforceable Through Title V Permit

34. Except as provided in 40 CFR 60.482-10(i) through (k), each closed vent system used to comply with the provisions of Subpart GGG shall be inspected according to the procedures and schedule specified in 40 CFR 60.482-10(f)(1) and (f)(2). Leaks, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, shall be repaired as soon as practicable except as provided in 40 CFR 60.482-10(h). A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. Repair shall be completed no later than 15 calendar days after the leak is detected. [40 CFR 60.482-10(f) and (g)] Federally Enforceable Through Title V Permit

35. Delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown. [40 CFR 60.482-10(h)] Federally Enforceable Through Title V Permit

36. If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2). [40 CFR 60.482-10(i)] Federally Enforceable Through Title V Permit

37. Any parts of the closed vent system that are designated, as described in 40 CFR 60.482-10(l)(1), as unsafe to inspect are exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR 60.482-10 (j)(1) and (j)(2). [40 CFR 60.482-10(j)] Federally Enforceable Through Title V Permit

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38. Any parts of the closed vent system that are designated, as described in 40 CFR 60.482-10(l)(2), as difficult to inspect are exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR 60.482-10(k)(1) through (k)(3). [40 CFR 60.482-10(k)] Federally Enforceable Through Title V Permit

39. The owner or operator shall record the following information: 1) Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment; 2) Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment; 3) For each inspection during which a leak is detected, a record of the information specified in 40 CFR 60.486(c); 4) For each inspection conducted in accordance with 40 CFR 60.485(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected; and 5) For each visual inspection conducted in accordance with 40 CFR 60.482-10(f)(1)(ii) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected. [40 CFR 60.482-10(l)] Federally Enforceable Through Title V Permit

40. Closed vent systems and control devices used to comply with provisions Subpart GGG shall be operated at all times when emissions may be vented to them. [40 CFR 60.482-10(m)] Federally Enforceable Through Title V Permit

41. In conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in 40 CFR 60, Appendix A or other methods and procedures as specified in 40 CFR 60.485, except as provided in 40 CFR 60.8(b). [40 CFR 60.485(a)] Federally Enforceable Through Title V Permit

42. The owner or operator shall determine compliance with the standards in 40 CFR 60.482, 60.483, and 60.484 as follows: Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21. The following calibration gases shall be used: (i) Zero air (less than 10 ppm of hydrocarbon in air); and (ii) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [40 CFR 60.485(b)] Federally Enforceable Through Title V Permit

43. The owner or operator shall determine compliance with the no detectable emission standards in 40 CFR 60.482-2(e), 60.482-3(i), 60.482-4, 60.482-7(f), and 60.482-10(e) as follows: 1) The requirements of 40 CFR 60.485(b) shall apply. 2) Method 21 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance. [40 CFR 60.485(c)] Federally Enforceable Through Title V Permit

44. The owner or operator shall test each piece of equipment unless demonstrated that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used: 1) Procedures that conform to the general methods in ASTM E260-73, 91, or 96, E168-67, 77, or 92, E169-63, 77, or 93 (incorporated by reference as seen in 40 CFR 60.17) shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment; 2) Organic compounds that are considered by the Administrator to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid; and 3) Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Administrator disagrees with the judgment, the previous two procedures as specified in 40 CFR 60.485(d)(1) and (2) shall be used to resolve the disagreement. [40 CFR 60.485(d)] Federally Enforceable Through Title V Permit

45. The owner or operator shall demonstrate that an equipment is in light liquid service by showing that all the following conditions apply: 1) The vapor pressure of one or more of the components is greater than 0.3 kPa at 20 øC (1.2 in. H2O at 68 degrees F). Standard reference texts or ASTM D2879-83, 96, or 97 (incorporated by reference as seen in 40 CFR 60.17) shall be used to determine the vapor pressures; 2) The total concentration of the pure components having a vapor pressure greater than 0.3 kPa at 20 degrees Celsius is equal to or greater than 20 percent by weight; and 3) The fluid is a liquid at operating conditions. [40 CFR 60.485(e)] Federally Enforceable Through Title V Permit

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46. Samples used in conjunction with 40 CFR 60.485(d), (e), and (g) shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare. [40 CFR 60.485(f)] Federally Enforceable Through Title V Permit

47. An owner or operator of more than one affected facility subject to the provisions Subpart GGG may comply with the recordkeeping requirements for these facilities in one recordkeeping system if the system identifies each record by each facility. [40 CFR 60.486(a)] Federally Enforceable Through Title V Permit

48. When each leak is detected as specified in 40 CFR 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following requirements apply: 1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment; 2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR 60.482-7(c) and no leak has been detected during those 2 months; and 3) The identification on equipment except on a valve, may be removed after it has been repaired. [40 CFR 60.486(b)] Federally Enforceable Through Title V Permit

49. When each leak is detected as specified in 40 CFR 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following information shall be recorded in a log and shall be kept for 5 years in a readily accessible location: 1) The instrument and operator identification numbers and the equipment identification number; 2) The date the leak was detected and the dates of each attempt to repair the leak; 3) Repair methods applied in each attempt to repair the leak; 4) ``Above 10,000" if the maximum instrument reading measured by the methods specified in 40 CFR 60.485(a) after each repair attempt is equal to or greater than 10,000 ppm; 5) ``Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak; 6) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown; 7) The expected date of successful repair of the leak if a leak is not repaired within 15 days; 8) Dates of process unit shutdown that occur while the equipment is unrepaired; and 9) The date of successful repair of the leak. [40 CFR 60.486(c) and District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

50. The following information pertaining to the design requirements for closed vent systems and control devices described in 40 CFR 60.482-10 shall be recorded and kept in a readily accessible location: 1) Detailed schematics, design specifications, and piping and instrumentation diagrams; 2) The dates and descriptions of any changes in the design specifications; 3) A description of the parameter or parameters monitored, as required in 40 CFR 60.482-10(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring; 4) Periods when the closed vent systems and control devices required in 40 CFR 60.482-2, 60.482-3, 60.482-4, and 60.482-5 are not operated as designed, including periods when a flare pilot light does not have a flame; and 5) Dates of startups and shutdowns of the closed vent systems and control devices required in 40 CFR 60.482-2, 60.482-3, 60.482-4, and 60.482-5. [40 CFR 60.486(d)] Federally Enforceable Through Title V Permit

51. The following information pertaining to all equipment subject to the requirements in 40 CFR 60.482-1 to 60.482-10 shall be recorded in a log that is kept in a readily accessible location: 1) A list of identification numbers for equipment subject to the requirements of Subpart GGG; 2) (i) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 40 CFR 60.482-2(e), 60.482-3(i) and 60.482-7(f). (ii) The designation of equipment as subject to the requirements of 40 CFR 60.482-2(e), 60.482-3(i) and 60.482-7(f) shall be signed by the owner or operator; 3) A list of equipment identification numbers for pressure relief devices required to comply with 60.482-4; 4) (i) The dates of each compliance test as required in 40 CFR 60.482-2(e), 60.482-3(i), 60.482-4, and 60.482-7(f). (ii) The background level measured during each compliance test. (iii) The maximum instrument reading measured at the equipment during each compliance test; and 5) A list of identification numbers for equipment in vacuum service. [40 CFR 60.486(e)] Federally Enforceable Through Title V Permit

52. The following information pertaining to all valves subject to the requirements of 40 CFR 60.482-7(g) and (h) and to all pumps subject to the requirements of 40 CFR 60.482-2(g) shall be recorded in a log that is kept in a readily accessible location: 1) A list of identification numbers for valves and pumps that are designated as unsafe-to-monitor, an explanation for each valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump; and 2) A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve. [40 CFR 60.486(f)] Federally Enforceable Through Title V Permit

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53. The following information shall be recorded for valves complying with 40 CFR 60.483-2: 1) A schedule of monitoring; 2) The percent of valves found leaking during each monitoring period. [40 CFR 60.486(g)] Federally Enforceable Through Title V Permit

54. The following information shall be recorded in a log that is kept in a readily accessible location: 1) Design criterion required in 40 CFR 60.482-2(d)(5) and 60.482-3(e)(2) and explanation of the design criterion; and 2) Any changes to this criterion and the reasons for the changes. [40 CFR 60.486(h)] Federally Enforceable Through Title V Permit

55. The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in 40 CFR 60.480(d): 1) An analysis demonstrating the design capacity of the affected facility; 2) A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol; and 3) An analysis demonstrating that equipment is not in VOC service. [40 CFR 60.486(i)] Federally Enforceable Through Title V Permit

56. Information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location. [40 CFR 60.486(j)] Federally Enforceable Through Title V Permit

57. The provisions of 40 CFR 60.7 (b) and (d) do not apply to affected facilities subject to Subpart GGG. [40 CFR 60.486(k)] Federally Enforceable Through Title V Permit

58. All semiannual reports to the Administrator shall include the following information, summarized from the information in 40 CFR 60.486: 1) Process unit identification; 2) For each month during the semiannual reporting period, i) Number of valves for which leaks were detected as described in 40 CFR 60.482-7(b) or 40 CFR 60.483-2, (ii) Number of valves for which leaks were not repaired as required in 40 CFR 60.482-7(d)(1), (iii) Number of pumps for which leaks were detected as described in 40 CFR 60.482-2(b) and (d)(6)(i), (iv) Number of pumps for which leaks were not repaired as required in 40 CFR 60.482-2(c)(1) and (d)(6)(ii), (v) Number of compressors for which leaks were detected as described in 40 CFR 60.482-3(f), (vi) Number of compressors for which leaks were not repaired as required in 40 CFR 60.482-3(g)(1), and (vii) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible; 3) Dates of process unit shutdowns which occurred within the semiannual reporting period; 4) Revisions to items reported in the semiannual report if changes have occurred since the initial report, as required in 40 CFR 60.487 (a) and (b), or subsequent revisions to the initial report. [40 CFR 60.487(c)] Federally Enforceable Through Title V Permit

59. An owner or operator electing to comply with the provisions of 40 CFR 60.483-1 and 60.483-2 shall notify the Administrator of the alternative standard selected 90 days before implementing either of the provisions. [40 CFR 60.487(d)] Federally Enforceable Through Title V Permit

60. An owner or operator shall report the results of all performance tests in accordance with 40 CFR 60.8 of the General Provisions. The provisions of 40 CFR 60.8(d) do not apply to affected facilities subject to the provisions of Subpart GGG except that an owner or operator must notify the Administrator of the schedule for the initial performance tests at least 30 days before the initial performance tests. [40 CFR 60.487(e)] Federally Enforceable Through Title V Permit

61. The semiannual reporting requirements of 40 CFR 60.487(a), (b), and (c) remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with the requirements of 40 CFR 60.487(a), (b), and (c), provided that they comply with the requirements established by the State. [40 CFR 60.487(f)] Federally Enforceable Through Title V Permit

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62. Compressors are exempt from the standards of Subpart GGG if the owner or operator demonstrates that a compressor is in hydrogen service. Each compressor is presumed not to be in hydrogen service unless an owner or operator demonstrates that the piece of equipment is in hydrogen service. For a piece of equipment to be considered in hydrogen service, it must be determined that the percent hydrogen content can be reasonably expected always to exceed 50 percent by volume. For purposes of determining the percent hydrogen content in the process fluid that is contained in or contacts a compressor, procedures that conform to the general method described in ASTM E-260, E-168, or E-169 shall be used. An owner or operator may use engineering judgment to demonstrate that the percent content exceeds 50 percent by volume, provided the engineering judgment demonstrates that the content clearly exceeds 50 percent by volume. When an owner or operator and the Administrator do not agree on whether a piece of equipment is in hydrogen service, however, the procedures that conform to the general method described in ASTM E-260, E-168, or E-169 shall be used to resolve the disagreement. If an owner or operator determines that a piece of equipment is in hydrogen service, the determination can be revised only after following the procedures that conform to the general method described in ASTM E-260, E-168, or E-169. [40 CFR 60.593(b)] Federally Enforceable Through Title V Permit

63. An owner or operator may use the following provision in addition to 40 CFR 60.485(e): Equipment is in light liquid service if the percent evaporated is greater than 10 percent at 150 øC as determined by ASTM Method D86-78, 82, 90, 95, or 96. [40 CFR 60.593(d)] Federally Enforceable Through Title V Permit

64. Equipment that is in vacuum service is excluded from the requirements of 40 CFR 60.482-2 to 40 CFR 60.482-10 if it is identified as required in 40 CFR 60.486(e)(5). [40 CFR 60.482-1(d)] Federally Enforceable Through Title V Permit

65. Permittee shall comply with all applicable testing, recordkeeping, and reporting requirements specified in Rule 4001 - New Source Performance Standards, including but not limited to Subparts A, Dc and J. [District Rule 4001] Federally Enforceable Through Title V Permit

66. Vacuum system exhaust gas shall either be collected, compressed, and added to refinery gas; controlled and combusted in an appropriate firebox or incinerator with at least 90 percent VOC control efficiency; or controlled by an equivalent method approved by the APCO. [District Rule 4453] Federally Enforceable Through Title V Permit

67. Operators shall not depressurize any vessel containing VOCs unless the process unit turnaround is accomplished by employing one of the following operating procedures: The organic vapors shall either be recovered, added to the refinery fuel gas system and combusted; or controlled and piped to an appropriate firebox or incinerated for combustion; or flared, until the pressure within the process vessel is as close to atmospheric pressure as is possible. All process vessels shall be depressurized into the control facilities to less than 1020 mm Hg (5 psig) before venting/opening to atmosphere. All organic compounds which emerge from a refinery process vessel during the purging of said vessel and which otherwise would be emitted to the atmosphere shall be either directed to a flare or incinerator or shall be used for fuel until such disposition of emissions is not technically feasible or is less safe than atmospheric venting. [District Rule 4454, 4.0] Federally Enforceable Through Title V Permit

68. Except for complying with the applicable requirements of Sections 6.1 and 7.3, the requirements of this rule shall not apply to 1) components subject to Rule 4623 (adopted 5/19/05), 2) pressure relief devices, pumps, and compressors equipped with a closed vent system as defined in Section 3.0, 3) components buried below ground, 4) components exclusively handling liquid streams which have less than 10 percent by weight (<10 wt%) evaporation at 150 C, 5) components exclusively handling liquid streams with a VOC content less than ten percent by weight (<10 wt%), 6) components exclusively handling gas/vapor streams with a VOC content of less than one percent by weight (<1wt%), 7) components incorporated in lines exclusively in vacuum service, 8) components exclusively handling commercial natural gas, and 9) one-half inch nominal or less stainless steel tube fittings which have been demonstrated to the Air Pollution Control Officer (APCO) to be leak-free based on initial inspection. [District Rule 4455, 4.1 & 4.2] Federally Enforceable Through Title V Permit

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69. Except for components subject to Rule 4623 (Storage of Organic Liquids) or for components included in the inspection and maintenance (I&M) program implemented pursuant to Section 5.7 of Rule 4623, the operator shall not use any component that leaks in excess of the allowable leak standards of Rule 4455, or is found to be in violation of the provisions specified in Section 5.1.3. A component identified as leaking in excess of an allowable leak standard may be used provided it has been identified with a tag for repair, has been repaired, or is awaiting re-inspection after repair, within the applicable time period specified within the rule. [District Rule 4455, 5.1.1] Federally Enforceable Through Title V Permit

70. Each hatch shall be closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4455, 5.1.2] Federally Enforceable Through Title V Permit

71. The operator shall be in violation of Rule 4455 if any District inspection demonstrates that one or more of the conditions in Section 5.1.4 (Leak Standards) exist at the facility. [District Rule 4455, 5.1.3.1] Federally Enforceable Through Title V Permit

72. Except for annual operator inspection described in Section 5.1.3.2.3, any operator inspection that demonstrates that one or more of the conditions in Section 5.1.4 exist at the facility shall not constitute a violation of Rule 4455 if the leaking components are repaired as soon as practicable but not later than the time frame specified in Rule 4455. Such components shall not be counted towards determination of compliance with the provisions of Section 5.1.4. [District Rule 4455, 5.1.3.2.1] Federally Enforceable Through Title V Permit

73. Leaking components detected during operator inspection pursuant Section 5.1.3.2.1 that are not repaired, replaced, or removed from operation as soon as practicable but not later than the time frame specified in Rule 4455 shall be counted toward determination of compliance with the provisions of Section 5.1.4. [District Rule 4455, 5.1.3.2.2] Federally Enforceable Through Title V Permit

74. Any operator inspection conducted annually for a component type (including operator annual inspections pursuant to Section 5.2.5, 5.2.6, 5.2.7, or 5.2.8) that demonstrates one or more of the conditions in Section 5.1.4 exist at the facility shall constitute a violation of Rule 4455 regardless of whether or not the leaking components are repaired, replaced, or removed from operation within the allowable repair time frame specified in Rule 4455. [District Rule 4455, 5.1.3.2.3] Federally Enforceable Through Title V Permit

75. A component shall be considered leaking if one or more of the conditions specified in Sections 5.1.4.1 through 5.1.4.4 of Rule 4455 exist at the facility. Readings shall be taken as methane using a portable hydrocarbon detection instrument and shall be made in accordance with the methods specified in Section 6.4.1 of Rule 4455. [District Rule 4455, 5.1.4] Federally Enforceable Through Title V Permit

76. The operator shall audio-visually inspect for leaks all accessible operating pumps, compressors and Pressure Relief Devices (PRDs) in service at least once every 24 hours, except when operators do not report to the facility for that given 24 hours. Any identified leak that cannot be immediately repaired shall be reinspected within 24 hours using a portable analyzer. If a leak is found, it shall be repaired as soon as practical but not later than the time frame specified in Table 3. [District Rule 4455, 5.2.1 & 5.2.2] Federally Enforceable Through Title V Permit

77. The operator shall inspect all components at least once every calendar quarter, except for inaccessible components, unsafe-to-monitor components and pipes. Inaccessible components, unsafe-to-monitor components and pipes shall be inspected in accordance with the requirements set forth in Sections 5.2.5, 5.2.6, and 5.2.7. New, replaced, or repaired fittings, flanges and threaded connections shall be inspected immediately after being placed into service. Components shall be inspected using EPA Method 21. [District Rule 4455, 5.2.3, 5.2.4, 5.2.5, 5.2.6 & 5.2.7] Federally Enforceable Through Title V Permit

78. The operator may apply for a written approval from the APCO to change the inspection frequency from quarterly to annually for a component type, provided the operator meets all the criteria specified in Sections 5.2.8.1 through 5.2.8.3. This approval shall apply to accessible component types, specifically designated by the APCO, except pumps, compressors, and PRDs which shall continue to be inspected on a quarterly basis. [District Rule 4455, 5.2.8] Federally Enforceable Through Title V Permit

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79. An annual inspection frequency approved by the APCO shall revert to quarterly inspection frequency for a component type if either the operator inspection or District inspection demonstrates that a violation of the provisions of Sections 5.1, 5.2 and 5.3 of the rule exists for that component type, or the APCO issued a Notice of Violation for violating any of the provisions of Rule 4455 during the annual inspection period for that component type. When the inspection frequency changes from annual to quarterly inspections, the operator shall notify the APCO in writing within five (5) calendar days after changing the inspection frequency, giving the reason(s) and date of change to quarterly inspection frequency. [District Rule 4455, 5.2.9 & 5.2.10] Federally Enforceable Through Title V Permit

80. The operator shall initially inspect a process PRD that releases to the atmosphere as soon as practicable but not later than 24 hours after the time of the release. To insure that the process PRD is operating properly, and is leak-free, the operator shall re-inspect the process PRD not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the date of the release using EPA Method 21. If the process PRD is found to be leaking at either inspection, the PRD leak shall be treated as if the leak was found during quarterly operator inspections. [District Rule 4455, 5.2.11] Federally Enforceable Through Title V Permit

81. Except for process PRD, a component shall be inspected within 15 calendar days after repairing the leak or replacing the component using EPA Method 21. [District Rule 4455, 5.2.12] Federally Enforceable Through Title V Permit

82. A District inspection in no way fulfills any of the mandatory inspection requirements that are placed upon operators and cannot be used or counted as an inspection required of an operator. Any attempt by an operator to count such District inspections as part of the mandatory operator's inspections is considered to be willful circumvention and is a violation of this rule. [District Rule 4455, 5.2.13] Federally Enforceable Through Title V Permit

83. Upon detection of a leaking component, the operator shall affix to that component a weatherproof readily visible tag that contains the information specified in Section 5.3.3. The tag shall remain affixed to the component until the leaking component has been repaired or replaced; has been re-inspected using EPA Method 21; and is found to be in compliance with the requirements of Rule 4455. [District Rule 4455, 5.3.1 5.3.2 and 5.3.3] Federally Enforceable Through Title V Permit

84. An operator shall minimize all component leaks immediately to the extent possible, but not later than one (1) hour after detection of leaks in order to stop or reduce leakage to the atmosphere. [District Rule 4455, 5.3.4] Federally Enforceable Through Title V Permit

85. If the leak has been minimized but the leak still exceeds the applicable leak standards of Rule 4455, an operator shall repair or replace the leaking component, vent the leaking component to a closed vent system, or remove the leaking component from operation as soon as practicable but not later than the time period specified in Table 3. For each calendar quarter, the operator may be allowed to extend the repair period as specified in Table 3, for a total number of leaking components, not to exceed 0.05 percent of the number of components inspected, by type, rounded upward to the nearest integer where required. [District Rule 4455, 5.3.5] Federally Enforceable Through Title V Permit

86. If the leaking component is an essential component or a critical component and which cannot be immediately shut down for repairs, the operator shall minimize the leak within one hour after detection of the leak. If the leak has been minimized, but the leak still exceeds any of the applicable leak standards of Rule 4455, the essential component or critical component shall be repaired or replaced to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection, whichever comes earlier. [District Rule 4455 5.3.6] Federally Enforceable Through Title V Permit

87. For any component that has incurred five repair actions for major gas leaks or major liquid leaks, or any combination of major gas leaks and major liquid leaks within a continuous 12-month period, the operator shall comply with at least one of the requirements specified in Sections 5.3.7.1, 5.3.7.2, 5.3.7.3, or 5.3.7.4 by the applicable deadlines specified in Sections 5.3.7.5 and 5.3.7.6. If the original leaking component is replaced with a new like-in-kind component before incurring five repair actions for major leaks within 12-consecutive months, the repair count shall start over for the new component. An entire compressor or pump need not be replaced provided the compressor part(s) or pump part(s) that have incurred five repair actions as described in Section 5.3.7 are brought into compliance with at least one of the requirements of Sections 5.3.7.1 through 5.3.7.6. [District Rule 4455, 5.3.7] Federally Enforceable Through Title V Permit

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88. The operator shall monitor process PRD by using electronic process control instrumentation that allows for real time continuous parameter monitoring or by using telltale indicators for the process PRD where parameter monitoring is not feasible. [District Rule 4455, 5.4.1] Federally Enforceable Through Title V Permit

89. After a release from a process PRD in excess of 500 pounds of VOC in a continuous 24-hour period, the operator shall immediately conduct a failure analysis and implement corrective actions as soon as practicable but not later than 30 days to prevent the reoccurrence of similar release. For refineries processing greater than 20,000 barrels of crude oil per day, any subsequent release in excess of 500 pounds of VOC within a continuous 24-hour period shall be subject to the requirements of Section 5.4.5. [District Rule 4455, 5.4.3 & 5.4.4] Federally Enforceable Through Title V Permit

90. The operator of a refinery processing greater than 20,000 barrels of crude oil per day shall connect all process PRDs serving that process equipment to an APCO-approved closed vent system as defined in Section 3.0 if any of the conditions specified in Sections 5.4.5.1 and 5.4.5.2 occurs. Process PRDs subject to the provisions of Section 5.4.5 shall be connected to an APCO-approved closed-vent system as soon as practicable, but no later than the first turnaround after the requirement to connect becomes effective. [District Rule 4455, 5.4.5] Federally Enforceable Through Title V Permit

91. All major components and critical components shall be physically identified clearly and visibly for inspection, repair, and recordkeeping purposes. The physical identification shall consist of labels, tags, manufacturer's nameplate identifier, serial number, or model number, or other system approved by the APCO that enables an operator or District personnel to locate each individual component. The operator shall replace tags or labels that become missing or unreadable as soon as practicable but not later than 24 hours after discovery. The operator shall comply with the requirements of Sections 6.1.4 if there is any change in the description of major components or critical components. [District Rule 4455, 5.5.1 & 5.5.2] Federally Enforceable Through Title V Permit

92. The operator shall keep a copy of the operator management plan at the facility and make it available to the APCO, ARB and US EPA upon request. By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved operator management plan. [District Rule 4455, 6.1.2 & 6.1.4] Federally Enforceable Through Title V Permit

93. The operator shall maintain an inspection log containing, at a minimum, 1) total number of components inspected, and total number and percentage of leaking components found by component types, 2) location, type, name or description of each leaking component, and description of any unit where the leaking component is found, 3) date of leak detection and method of leak detection, 4) for gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak, 5) date of repair, replacement, or removal from operation of leaking components, 6) identification and location of essential component and critical components found leaking that cannot be repaired until the next process unit turnaround or not later one year after leak detection, whichever comes earlier, 7) methods used to minimize the leak from essential components and critical components that cannot be repaired until the next process unit turnaround or not later one year after leak detection, whichever comes earlier, 8) after the component is repaired or is replaced, the date of reinspection and the leak concentration in ppmv, 9) inspector's name, business mailing address, and business telephone number, and 10) the facility operator responsible for the inspection and repair program shall sign and date the inspection log certifying the accuracy of the information recorded in the log. [District Rule 4455, 6.2.1] Federally Enforceable Through Title V Permit

94. Records of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components, including a copy of current calibration gas certification from the vendor of said calibration gas cylinder, the date of calibration, concentration of calibration gas, analyzer reading of calibration gas before adjustment, instrument reading of calibration gas after adjustment, calibration gas expiration date, and calibration gas cylinder pressure at the time of calibration. [District Rule 4455, 6.2.3] Federally Enforceable Through Title V Permit

95. The operator shall notify the APCO, by telephone or other methods approved by the APCO, of any process PRD release described in Sections 5.4.4 and 5.4.5, and any release in excess of the reportable quantity limits as stipulated in 40 CFR, Part 117, Part 302 and Part 355, including any release in excess of 100 pounds of VOC, within one hour of such occurrence or within one hour of the time said person knew or reasonably should have known of its occurrence. [District Rule 4455, 6.3.1] Federally Enforceable Through Title V Permit

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96. The operator shall submit a written report to the APCO within thirty (30) calendar days following a PRD release subject to 6.3.1. The written report shall include 1) process PRD type, size, and location, 2) date, time and duration of the process PRD release, 3) types of VOC released and individual amounts, in pounds, including supporting calculations, 4) cause of the process PRD release, and 5) corrective actions taken to prevent a subsequent process PRD release. [District Rule 4455 6.3.2] Federally Enforceable Through Title V Permit

97. Copies of all records shall be retained for a minimum of five (5) years after the date of an entry. Such records shall be made available to the APCO, ARB, or US EPA upon request. [District Rule 4455, 6.2.2, 6.2.3 & 6.2.4] Federally Enforceable Through Title V Permit

98. Measurements of gaseous leak concentrations shall be conducted according to US EPA Method 21 using an appropriate portable hydrocarbon detection instrument calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in US EPA Method 21 or the manufacturer's instruction, as appropriate, not more than 30 days prior to its use. The operator shall record the calibration date of the instrument. [District Rule 4455, 6.4.1] Federally Enforceable Through Title V Permit

99. The VOC content of exempt streams shall be determined using American Society of Testing and Materials (ASTM) D 1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 for liquids. [District Rule 4455, 6.4.2] Federally Enforceable Through Title V Permit

100. For exempt streams, the percent by volume liquid evaporated at 150 deg C shall be determined using ASTM D 86. [District Rule 4455, 6.4.3] Federally Enforceable Through Title V Permit

101. Equivalent test methods other than specified in Sections 6.4.1 through 6.4.5 may be used provided such test methods have received prior approval from the US EPA, ARB, and APCO. [District Rule 4455, 6.4] Federally Enforceable Through Title V Permit

102. Sulfur pit shall be enclosed and shall be vented to the sulfur plant for processing. [District Rule 2201] Federally Enforceable Through Title V Permit

103. Sulfur production from Claus sulfur recovery plant shall not exceed 20 long-tons per day. [40 CFR 60.100(a)] Federally Enforceable Through Title V Permit

104. Tail gas incinerator shall be fired only on purchased commercial natural gas, refinery fuel gas, or any combination thereof. [District Rule 2201, 4001] Federally Enforceable Through Title V Permit

105. Operator shall not burn in any fuel gas combustion device any fuel gas that contains hydrogen sulfide (H2S) in excess of 100 ppmv@ 0% O2. [District Rules 2201 ,2520, 9.4.2 and 4301, 5.2.1, & 40 CFR Part 60, Subpart J, 60.104(a)(1)] Federally Enforceable Through Title V Permit

106. The combustion in the fuel gas combustion devices of gases released as a result of start-up, shutdown, upset, malfunction, or the result of relief valve leakage is exempt from the 100 ppmv@ 0% O2 requirement. [District Rules 2201, 4001, Subpart J, 60.104(a)(1)] Federally Enforceable Through Title V Permit

107. All refinery fuel gas combusted in the heaters shall be monitored for H2S content by a continuous emissions monitoring (CEM) system. CEM shall be installed, calibrated, operated, and reported according to EPA guidelines as specified under 40 CFR 60, Subpart J, Specification 7, and general requirements. CEM results shall be calculated on a rolling three (3) hour basis. [District Rules 2201, 4001, Subpart J, 60.105(a)(4) and 60.105(a)(4)iii] Federally Enforceable Through Title V Permit

108. Operator shall report all rolling 3-hour periods during which the average concentration of H2S as measured by the H2S continuous monitoring system exceeds 100 ppmv@ 0% O2. [District Rules 2201, 4001, Subpart J, 60.105(e)(3)(ii)] Federally Enforceable Through Title V Permit

109. Except on days of startup or shutdown of the sulfur recovery unit, sulfur oxide emissions from incinerator exhaust shall not exceed 33.8 lb SOx (as SO2) per day. Permittee shall calculate emissions of SOx for each day based on measurements of exhaust gas flow rate and daily monitoring of SOx emission concentration. Exhaust gas flow rate shall be measured directly or calculated using a District-approved method. [District Rule 2201] Federally Enforceable Through Title V Permit

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110. On days of startup or shutdown of the sulfur recovery unit, sulfur oxide emissions from incinerator exhaust shall not exceed 224.0 lb SOx (as SO2) per day. Permittee shall calculate emissions of SOx for each day based on exhaust gas flow rate and daily monitoring of SOx emission concentration. Exhaust gas flow rate shall be measured directly or calculated using a District-approved method. [District Rule 2201] Federally Enforceable Through Title V Permit

111. Incinerator stack flow rate calculation method shall be verified for accuracy by annual source testing for stack gas flow rate using EPA Method 2 and 4. Should the annual source test not verify the calculated stack flow, the stack flow shall be modified by applying an equivalence factor equal to the ratio of the source test measured stack flow rate to the calculated stack flow rate corresponding to operating conditions at the date and time the source test was conducted, or other equivalence factor method approved by the District. [District Rule 2201] Federally Enforceable Through Title V Permit

112. SOx emissions shall be monitored using a District-approved portable analyzer system capable of measuring total SOx concentration as SO2 (ppmv) and which includes a water removal system that does not result in the entrainment of SOx or sulfur compounds in the collected condensate. Portable analyzer shall be operated and maintained in accordance with manufacturer's recommendations. [District Rule 2201] Federally Enforceable Through Title V Permit

113. Sulfur oxide emissions from incinerator exhaust shall not exceed 12,718 lb SOx (as SO2) per year. Annual emissions shall be calculated as the sum of the daily emissions calculated for each day as required in this permit. [District Rule 2201] Federally Enforceable Through Title V Permit

114. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [District Rule 2520, 9.3.2; Kern County Rule 407; District Rule 4801] Federally Enforceable Through Title V Permit

115. Emission rates from incinerator exhaust, except during startup and shutdown, shall not exceed any of the following: NOx (as NO2): 95 ppmv @ 3% O2, VOC: 0.0055 lb/MMBtu, or CO: 150 ppmv @ 3% O2. [District Rules 2201, 2520, 4301] Federally Enforceable Through Title V Permit

116. PM10 emission rates from incinerator shall not exceed 0.0137 lb/MMBtu. [District Rules 2201, 2520, 4201, 4301] Federally Enforceable Through Title V Permit

117. The duration of each startup and shutdown period for the sulfur recovery unit shall not exceed 37.0 hours and 23.4 hours respectfully. [District Rule 2201] Federally Enforceable Through Title V Permit

118. Incinerator exhaust stack shall be equipped with adequate provisions facilitating the collection of gas samples consistent with EPA Test Methods. [District Rule 1081] Federally Enforceable Through Title V Permit

119. Source testing to demonstrate compliance with NOx, CO, and SOx emission limits shall be conducted within 60 days of startup and not less than once every 12 months thereafter. [District Rule 2201] Federally Enforceable Through Title V Permit

120. Compliance with lb/day SOx emission limit shall be demonstrated by source testing of hourly SOx emissions in accordance with approved methods, and multiplying the results by 24 hours per day. [District Rule 2201] Federally Enforceable Through Title V Permit

121. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit

122. Compliance source testing shall be conducted under conditions representative of normal operation. [District Rule 1081] Federally Enforceable Through Title V Permit

123. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

124. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

125. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, SOx (lb/hr) - EPA MEthod 6B or 8, and stack gas oxygen - EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

126. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(Amended December 16, 1993). [District Rule 1081, and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit

127. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results used to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel. [District Rule 2520, 9.4.2 and 40 CFR 60.48c(g)] Federally Enforceable Through Title V Permit

128. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit

129. Particulate matter emissions shall not exceed 0.1 grain/dscf at dry standard conditions. [District Rule 4201] Federally Enforceable Through Title V Permit

130. Draeger tubes shall be used as an alternative method for measuring fuel gas H2S during scheduled maintenance or unscheduled interruptions of CEMs. Draeger tube use shall be limited to no more than 96 continuous hours and fuel gas H2S shall be checked a minimum of every two hours during scheduled maintenance or unscheduled interruptions of CEMs. Alternate method of measuring fuel gas H2S shall occur no more than 192 hours in any calendar year. [40CFR60.13(i)] Federally Enforceable Through Title V Permit

131. Operator shall maintain all records of the reason for alternative monitoring and required fuel gas H2S monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-123-2 **EXPIRATION DATE:** 08/31/2016

EQUIPMENT DESCRIPTION:
481 HP CATERPILLAR DIESEL-FIRED EMERGENCY IC ENGINE MODEL 3408DITA POWERING AN EMERGENCY FIREWATER PUMP

PERMIT UNIT REQUIREMENTS

1. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102]
2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
4. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rule 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
5. If the IC engine is not fired on CARB certified diesel fuel with a supplier certified sulfur content less than 0.0015% by weight, then the owner or operator shall determine the sulfur content of each delivery of diesel fuel being fired in the IC engine to demonstrate compliance with the 0.0015% sulfur by weight limit. The sulfur content shall be determined using ASTM Method D 2622 or other EPA or CARB approved method with prior written approval by the APCO. [District Rule 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
6. Emissions from this engine shall not exceed any of the following limits: 6.83 g-NOx/bhp-hr, 1.08 g-CO/bhp-hr, or 0.21 g-VOC/bhp-hr. [District NSR Rule] Federally Enforceable Through Title V Permit
7. The PM10 emissions rate shall not exceed 0.25 g/bhp-hr based on US EPA certification using ISO 8178 test procedure. [District NSR Rule] Federally Enforceable Through Title V Permit
8. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
9. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
10. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. For testing purposes, the engine shall only be operated the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 - "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems", 1998 edition. Total hours of operation for all maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rule 4702, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
12. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, and the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.). For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
13. The permittee shall maintain monthly records of the type and source of fuel used including its sulfur content. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
14. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
15. On and after May 3, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ]
16. On and after May 3, 2013, the permittee must 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. [40 CFR 63 Subpart ZZZZ]
17. On and after May 3, 2013, the engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first [40 CFR 63 Subpart ZZZZ]
18. On and after May 3, 2013, the engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ]
19. On and after May 3, 2013, the engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ]
20. On and after May 3, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation [District Rule 1070 and 40 CFR 63 Subpart ZZZZ]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-125-2 **EXPIRATION DATE:** 08/31/2016

EQUIPMENT DESCRIPTION:
3,000 BBL (126,000 GALLON) FIXED ROOF ORGANIC LIQUID STORAGE TANK, #3013, SERVED BY THE VAPOR CONTROL SYSTEM OPERATING UNDER PERMIT S-37-8

PERMIT UNIT REQUIREMENTS

1. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in gas-tight condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in District Rule 4623. [District NSR Rule, District Rule 4623] Federally Enforceable Through Title V Permit
2. The closed vent system shall be operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections. Emissions from the closed vent system in excess of this limit shall be considered a leak. [40 CFR 60.112b(a)(3)(i) and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
3. Storage vessel shall be equipped with a control device designed and operated to reduce inlet VOC emissions by 95% or greater. If a flare is used as the control device, it shall meet the specifications described in the general control device requirements of 40 CFR 60.18. The operator of each source that is equipped with a closed vent system and a flare to meet the requirements of 40 CFR 60.112b(a)(3) shall meet the requirements as specified in the general control device requirements of 40 CFR 60.18(e) and (f). [40 CFR 60.112b(a)(3)(ii), 40 CFR 60.113b(d)] Federally Enforceable Through Title V Permit
4. All gauge hatches, sampling hatches, piping, flanges, valves and all other openings and fittings shall be leak-free (as defined in Rule 4623). [District Rule 4623] Federally Enforceable Through Title V Permit
5. A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District NSR Rule and District Rule 4623] Federally Enforceable Through Title V Permit
6. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

7. Operator shall determine the presence of VOC leaks by EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases; 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit
8. Permittee shall comply with all applicable inspection, maintenance, repair, testing, and recordkeeping requirements of Rule 4455. [District Rule 4455] Federally Enforceable Through Title V Permit
9. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
13. VOC emissions from fugitive emissions sources in this permit unit shall not exceed 0.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. Leaks over 10,000 ppmv shall be reported as a deviation. [40 CFR 60.112b(a)(3)(ii) and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
15. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. Maximum true vapor pressure, for crude oil or refined petroleum products, may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR 60.116b(e)(2)(i)] Federally Enforceable Through Title V Permit
17. Operator shall determine the true vapor pressure of each type of crude oil with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method from available data and record if the true vapor pressure is greater than 0.5 psia. [40 CFR 60.116b(e)(2)(ii)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

18. The operator of a tank with design capacity greater than or equal to 151 m3 (39,890 gallons) with a true vapor pressure greater than 3.5 kPa (0.5 psia) but less than 76.6 kPa (11 psia), or a tank with design capacity greater than or equal to 75 m3 (19,812 gallons) but less than 151 m3 with a maximum true vapor pressure that is greater than 27.6 kPa (4.0 psia) but less than 76.6 kPa (11 psia), storing a waste mixture of indeterminate or variable composition, shall perform an initial physical test for true vapor pressure and at least once every six months thereafter. [40 CFR 60, 60.116b(f)] Federally Enforceable Through Title V Permit
19. Operator shall determine the true vapor pressure of each VOL, other than crude oil or refined petroleum products, from standard reference texts, by ASTM Method D2879, or by using an appropriate method approved by EPA. [40 CFR 60.116b(e)(3)(iii)] Federally Enforceable Through Title V Permit
20. For storage vessels operated above or below ambient temperatures, the operator shall calculate the maximum true vapor pressure based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service. [40 CFR 60.116b(e)(1)] Federally Enforceable Through Title V Permit
21. Operator of a tank storing a waste mixture of indeterminate or variable composition shall determine the highest maximum true vapor pressure for the range of liquid compositions to be stored prior to the initial filling. [40 CFR 60.116b(f)(1)] Federally Enforceable Through Title V Permit
22. True vapor pressure of a waste mixture of indeterminate or variable composition shall be determined using ASTM Method D2879, ASTM Method D323, or by an appropriate method approved by the EPA. [40 CFR 60, 60.116b(f)] Federally Enforceable Through Title V Permit
23. If the control device used for this tank is a flare, operator shall submit a report to the APCO containing the measurements required by 40 CFR 60.18(f) (1), (2), (3), (4), (5), and (6) within 6 months of the initial start-up date. [40 CFR 60.115b(d)(1)] Federally Enforceable Through Title V Permit
24. If the control device used for this tank is a flare, operator shall record all periods of operation during which the flare pilot flame is absent. [40 CFR 60.115b(d)(2)] Federally Enforceable Through Title V Permit
25. If the control device used for this tank is a flare, operator shall submit semiannual reports to the APCO of all periods recorded in which the pilot flame was absent. [40 CFR 60.115b(d)(3)] Federally Enforceable Through Title V Permit
26. Permittee shall maintain accurate records of number of fugitive emissions components and calculated emissions using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-3a "1995 EPA Protocol Refinery Correlation Equations for Refineries and Marketing Terminals". [District NSR Rule and District Rule 1070] Federally Enforceable Through Title V Permit
27. The control efficiency of any VOC destruction device, measured and calculated as carbon, shall be determined by US EPA Method 25, except when the outlet concentration must be below 50 ppm in order to meet the standard, in which case US EPA Method 25A may be used. US EPA Method 18 may be used in lieu of US EPA Method 25 or US EPA Method 25A provided the identity and approximate concentrations of the analytes/compounds in the sample gas stream are known before analysis with the gas chromatograph and the gas chromatograph is calibrated for each of the known analytes/compounds to ensure that the VOC concentrations are neither under- or over-reported. [District Rule 4623, 6.4.6] Federally Enforceable Through Title V Permit
28. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b. [District Rule 4623, 6.2.5] Federally Enforceable Through Title V Permit
29. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-126-2 **EXPIRATION DATE:** 08/31/2016

EQUIPMENT DESCRIPTION:
55,000 BBL ORGANIC LIQUID STORAGE TANK #55002 WITH VAPOR BALANCE RETURN LINE FROM ORGANIC LIQUID LOADING RACK VAPOR RETURN PIPING AND VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-37-8

PERMIT UNIT REQUIREMENTS

1. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. Collected vapors shall be directed to approved control devices having a destruction efficiency of at least 95% by weight as determined by the test method specified in District Rule 4623. [District NSR Rule, District Rule 4623] Federally Enforceable Through Title V Permit
2. Permittee shall maintain an accurate fugitive component count and resultant emissions from components within 5 ft of the tank calculated using emission factors from California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-1a "1995 EPA Protocol Refinery Average Emission Factors". [District NSR Rule] Federally Enforceable Through Title V Permit
3. Fugitive VOC emission rate from gas and light oil service fugitive component counts within 5 ft of the tank, calculated using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-1a "1995 EPA Protocol Refinery Average Emission Factors", shall not exceed 10.1 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Permittee shall maintain accurate records of number of fugitive emissions components greater than 5 ft from the tank on the vapor piping from the tank up to the tie-in point of the vapor control system header and calculated emissions using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2a "1995 EPA Protocol Refinery Screening Value Range Emission Factors". [District NSR Rule and District Rule 1070] Federally Enforceable Through Title V Permit
5. Fugitive VOC emission rate from gas and light oil service fugitive component counts greater than 5 ft from the tank on the vapor piping from the tank up to the tie-in point of the vapor control system header, calculated using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2a "1995 EPA Protocol Refinery Screening Value Ranges Emission Factors", shall not exceed 2.4 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Except as otherwise provided on this permit, this tank shall be maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
7. Except as otherwise provided in this permit, all tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
8. Except as otherwise provided in this permit, all piping, valves, and fittings shall be constructed and maintained in a leak- free condition. [District Rule 4623, 5.6.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
10. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
14. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
15. Any component found to be leaking on two consecutive annual inspections is in violation of Rule 4623, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
16. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit
17. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-127-3 **EXPIRATION DATE:** 08/31/2016

EQUIPMENT DESCRIPTION:
GASOLINE DISPENSING OPERATION WITH ONE 12,000 SPLIT (9,000 GALLONS GASOLINE/3,000 GALLONS DIESEL) STEEL TANK INSTITUTE FIREGUARD ABOVEGROUND STORAGE TANK SERVED BY OPW PHASE I ENHANCED VAPOR RECOVERY (EVR) SYSTEM (VR-401-C), STANDING LOSS CONTROL (VR-301-E), AND 1 FUELING POINT WITH 1 GASOLINE DISPENSING NOZZLE SERVED BY BALANCE PHASE II VAPOR RECOVERY SYSTEM (G-70-162-A)

PERMIT UNIT REQUIREMENTS

1. The volume of gasoline dispensed from this unit shall not exceed 518,344 gal/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The VOC emissions rate from this unit shall not exceed either of the following limits: 0.001063 lb-VOC/gal or 1.91 lb-VOC/fueling point-day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The Phase I, Phase II, and Standing Loss Control Vapor recovery systems shall be installed and maintained in accordance with the manufacturer specifications and the ARB Executive Orders specified in this permit, including applicable rules and regulations of the Division of Measurement Standards of the Department of Food and Agriculture, the Office of the State Fire Marshal of the Department of Forestry and Fire Protection, the Division of Occupational Safety and Health of the Department of Industrial Relations, and the Division of Water Quality of the State Water Resources Control Board that have been made conditions of the certification. [District Rules 4621 and 4622 and CH&SC 41950] Federally Enforceable Through Title V Permit
4. This gasoline storage and dispensing equipment shall not be used in retail sales, where gasoline dispensed by the unit is subject to payment of California sales tax on gasoline sales. [District Rule 4622] Federally Enforceable Through Title V Permit
5. The storage container(s) shall be installed, maintained, and operated such that they are leak-free. [District Rule 4621] Federally Enforceable Through Title V Permit
6. The Phase I and Phase II vapor recovery systems and gasoline dispensing equipment shall be maintained without leaks as determined in accordance with the test method specified in this permit. [District Rules 4621 and 4622] Federally Enforceable Through Title V Permit
7. A leak is defined as the dripping of VOC-containing liquid at a rate of more than three (3) drops per minute, or the detection of any gaseous or vapor emissions with a concentration of total organic compound greater than 10,000 ppmv, as methane, above background when measured in accordance with EPA Test Method 21. [District Rules 4621 and 4622] Federally Enforceable Through Title V Permit
8. No gasoline delivery vessel shall be operated or be allowed to operate unless valid State of California decals are displayed on the cargo container, which attest to the vapor integrity of the container. [District Rule 4621] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. No person shall operate any ARB certified Phase II vapor recovery system or any portion thereof that has a major defect or an equipment defect that is identified in any applicable ARB Executive Order until the following conditions have been met: 1) the defect has been repaired, replaced, or adjusted as necessary to correct the defect; 2) the District has been notified, and the District has reinspected the system or authorized the system for use (such authorization shall not include the authority to operate the equipment prior to the correction of the defective components); and 3) all major defects, after repair, are duly entered into the Operations and Maintenance (O&M) manual. [District Rule 4622] Federally Enforceable Through Title V Permit

10. Upon identification of any major defects, the permittee shall tag "Out-of-Order" all dispensing equipment for which vapor recovery has been impaired. Tagged equipment shall be rendered inoperable and the tag(s) shall not be removed until the defective equipment has been repaired, replaced, or adjusted, as necessary. In the case of defects identified by the District, tagged equipment shall be rendered inoperable, and the tag shall not be removed until the District has been notified of the repairs, and the District has either reinspected the system or authorized the tagged equipment for use. [District Rule 4622] Federally Enforceable Through Title V Permit

11. The permittee shall implement a periodic maintenance inspection program for the certified Phase II vapor recovery system consistent with the requirements of this permit. The program shall be documented in an operation and maintenance (O&M) manual and shall at a minimum contain the following information: 1) copies of all vapor recovery performance tests; 2) all applicable ARB Executive Orders, Approval Letters, and District Permits; 3) the manufacturer's specifications and instructions for installation, operation, repair, and maintenance required pursuant to ARB Certification Procedure CP-201, and any additional instruction provided by the manufacturer; 4) system and/or component testing requirements, including test schedules and passing criteria for each of the standard tests required by this permit (the owner/operator may include any non-ARB required diagnostic and other tests as part of the testing requirements), and 5) additional O&M instructions, if any, that are designed to ensure compliance with the applicable rules, regulations, ARB Executive Orders, and District permit conditions, including replacement schedules for failure or wear prone components. [District Rule 4622] Federally Enforceable Through Title V Permit

12. The permittee shall conduct periodic maintenance inspections based on the greatest monthly throughput of gasoline dispensed by the facility in the previous year as follows: A) less than 2,500 gallons - one day per month; B) 2,500 to less than 25,000 gallons - one day per week; or C) 25,000 gallons or greater - five days per week. All inspections shall be documented within the O & M Manual. [District Rules 4621 and 4622] Federally Enforceable Through Title V Permit

13. Periodic maintenance inspections of the Phase I vapor recovery system shall include, at a minimum, verification that 1) the fill caps and vapor caps are not missing, damaged, or loose; 2) the fill cap gasket and vapor cap gaskets are not missing or damaged; 3) the fill adapter and vapor adapter are securely attached to the risers; 4) where applicable, the spring-loaded submerged fill tube seals properly against the coaxial tubing; 5) the dry break (poppet-valve) is not missing or damaged; and 6) the submerged fill tube is not missing or damaged. [District Rule 4621] Federally Enforceable Through Title V Permit

14. Periodic maintenance inspections of the Phase II vapor recovery system shall include, at a minimum, verification that 1) the following nozzle components are in place and in good condition as specified in ARB Executive Order as applicable: faceplate/facecone, bellows, latching device spring, vapor check valve, spout (proper diameter/vapor collection holes), insertion interlock mechanism, automatic shut-off mechanism, and hold open latch (unless prohibited by law or the local fire control authority); 2) the hoses are not torn, flattened or crimped; 3) the vapor path of the coaxial hoses associated with bellows equipped nozzles does not contain more than 100 ml of liquid if applicable; and 4) the vapor processing unit is functioning properly, for operations that are required to have or possess such a unit. [District Rule 4622] Federally Enforceable Through Title V Permit

15. In the event of a separation due to a drive off, the permittee shall, unless otherwise specified in the applicable ARB Executive Order, conduct a visual inspection of the affected equipment and either 1) perform qualified repairs on any damaged components and conduct applicable re-verification tests pursuant to the requirements of this permit, or 2) replace the affected nozzles, coaxial hoses, breakaway couplings, and any other damaged components with new or certified rebuilt components that are ARB certified. The activities shall be documented in accordance with the requirements of this permit before placing the affected equipment back in service. [District Rule 4622] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

16. The permittee shall conduct all periodic vapor recovery system performance tests specified in this permit, no more than 30 days before or after the required compliance testing date, unless otherwise required under the applicable ARB Executive Order. [District Rules 4621 and 4622] Federally Enforceable Through Title V Permit
17. The permittee shall perform and pass a Static Leak Test "Determination of Static Pressure Performance of Vapor Recovery Systems at Gasoline Dispensing Facilities with Aboveground Tanks" in accordance with the Executive Order specified in this permit for the Phase I Vapor Recovery System at least once every 12 months thereafter. [District Rules 4621 and 4622] Federally Enforceable Through Title V Permit
18. If a rotatable Phase I vapor adaptor is installed, the permittee shall perform and pass a Static Torque of Rotatable Phase I Adaptors test using ARB procedure TP-201.1B at least once every 36 months thereafter. [District Rule 4621] Federally Enforceable Through Title V Permit
19. For certified Phase II vapor recovery systems with liquid removal devices, the permittee shall perform and pass an ARB TP-201.6C Liquid Removal Test whenever the liquid in the vapor path exceeds 100 ml of liquid, or as required by the applicable ARB Executive Order. The amount of liquid in the vapor path shall be measured by lowering the gasoline dispensing nozzle into a container until such time that no more liquid drains from the nozzle. The amount of liquid drained into the container shall be measured using a graduated cylinder or graduated beaker. The vapor path shall be inspected according to the monitoring frequency as determined by monthly gasoline throughput. [District Rule 4622] Federally Enforceable Through Title V Permit
20. A person conducting testing of, or repairs to, a certified vapor recovery system shall be in compliance with District Rule 1177 (Gasoline Dispensing Facility Tester Certification). [District Rules 4621 and 4622] Federally Enforceable Through Title V Permit
21. A person performing installation of, or maintenance on, a certified Phase I or Phase II vapor recovery system shall be certified by the ICC for Vapor Recovery System Installation and Repair, or work under the direct and personal supervision of an individual physically present at the work site who is certified. The ICC certification shall be renewed every 24 months. [District Rules 4621 and 4622] Federally Enforceable Through Title V Permit
22. Proof of the ICC certification and all other certifications required by the Executive Order and installation and operation manual shall be made available onsite. [District Rules 4621 and 4622] Federally Enforceable Through Title V Permit
23. The permittee shall notify the District at least 7 days prior to each performance test. The test results shall be submitted to the District no later than 30 days after the completion of each test. [District Rule 4621] Federally Enforceable Through Title V Permit
24. The permittee shall maintain a copy of all test results. The test results shall be dated and shall contain the name, address, and telephone number of the company responsible for system installation and testing. [District Rule 4622] Federally Enforceable Through Title V Permit
25. The permittee shall maintain on the premises a log of any repairs made to the certified Phase I or Phase II vapor recovery system. The repair log shall include the following: 1) date and time of each repair; 2) the name and applicable certification numbers of the person(s) who performed the repair, and if applicable, the name, address and phone number of the person's employer; 3) description of service performed; 4) each component that was repaired, serviced, or removed; 5) each component that was installed as replacement, if applicable; and 6) receipts or other documents for parts used in the repair and, if applicable, work orders which shall include the name and signature of the person responsible for performing the repairs. [District Rule 4622] Federally Enforceable Through Title V Permit
26. The O&M manual shall be kept at the dispensing operation and made available to any person who operates, inspects, maintains, repairs, or tests the equipment at the operation as well as to District personnel upon request. [District Rule 4622] Federally Enforceable Through Title V Permit
27. The permittee shall maintain monthly and annual gasoline throughput records. [District Rules 4621 and 4622] Federally Enforceable Through Title V Permit
28. All records required by this permit shall be retained on-site for a period of at least five years and shall be made available for District inspection upon request. [District Rules 4621 and 4622] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-130-2 **EXPIRATION DATE:** 08/31/2016

EQUIPMENT DESCRIPTION:
74,000 BBL INTERNAL FLOATING ROOF ORGANIC LIQUID STORAGE TANK, WELDED CONSTRUCTION WITH METALLIC SHOE PRIMARY SEAL AND WIPER SECONDARY SEAL (TANK #74000)

PERMIT UNIT REQUIREMENTS

1. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623] Federally Enforceable Through Title V Permit
2. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
3. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
4. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623] Federally Enforceable Through Title V Permit
5. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623] Federally Enforceable Through Title V Permit
6. The cumulative length of all gaps between the tank shell and the secondary seal, greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623] Federally Enforceable Through Title V Permit
7. The metallic shoe-type seal shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 18 inches above the stored liquid surface. [District Rule 4623] Federally Enforceable Through Title V Permit
8. The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623] Federally Enforceable Through Title V Permit
9. There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
10. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
11. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
12. All openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10% of the maximum allowable working pressure of the roof, shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be leak-free, except when the device or appurtenance is in use. [District Rule 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use. [District Rule 4623] Federally Enforceable Through Title V Permit
14. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. [District Rule 4623] Federally Enforceable Through Title V Permit
15. Rim vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [District Rule 4623] Federally Enforceable Through Title V Permit
16. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The well shall have a slit fabric cover that covers at least 90% of the opening. The fabric cover must be impermeable. [District Rule 4623] Federally Enforceable Through Title V Permit
17. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover. The fabric sleeve must be impermeable. [District Rule 4623] Federally Enforceable Through Title V Permit
18. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. [District Rule 4623] Federally Enforceable Through Title V Permit
19. Permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
20. Permittee shall maintain the records of the internal floating roof landing activities that are performed pursuant to Rule 4623, Sections 5.3.1.3 and 5.4.3. The records shall include information on the true vapor pressure (TVP), API gravity, storage temperature, type of organic liquid stored in the tank, the purpose of landing the roof on its legs, the date of roof landing, duration the roof was on its legs, the level or height at which the tank roof was set to land on its legs, and the lowest liquid level in the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
21. This tank shall only store, place, or hold organic liquid with a tank vapor pressure (TVP) of less than, or equal to 7.96 psia under all storage conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
22. The total organic liquid throughput for tanks S-37-130 and '131 shall not exceed either of the following: 26,356 barrels per day or 9,620,000 barrels per year. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Combined VOC emission rate from tanks S-37-130 and '131 shall not exceed 20.5 lb/day and 7,466 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 2201] Federally Enforceable Through Title V Permit
25. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Vapor pressure of stored liquids shall be determined as described in section 6.4 of District Rule 4623. [District Rule 4623, 6.2] Federally Enforceable Through Title V Permit
27. Permittee shall submit the records of TVP testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP of the organic liquid, test methods used, and a copy of the test results. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

28. Permittee shall maintain monthly records of average daily crude oil throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, and TVP. [District Rule 2201] Federally Enforceable Through Title V Permit

29. Daily emissions will be determined based on using monthly throughput data and number of days per month. [District Rule 2520, 9.4] Federally Enforceable Through Title V Permit

30. The tank shall be equipped with a fixed roof with an internal floating type cover equipped with two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. [40 CFR 60.112b(a)(1)(ii)] Federally Enforceable Through Title V Permit

31. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal roof shall be floating on the liquid surface except during initial fill and when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. Whenever the permittee intends to land the roof on it's legs, the permittee shall notify the APCO in writing at least five days prior to performing the work. [District Rule 4623, and 40 CFR 60.112b(a)(i)] Federally Enforceable Through Title V Permit

32. Each opening in a non-contact internal floating roof, except for automatic bleeder vents (vacuum breaker vents) and rim space vents, shall provide a projection below the liquid surface. [District Rule 4623 and 40 CFR 60.112b(a)(1)(iii)] Federally Enforceable Through Title V Permit

33. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains shall be equipped with a cover, or a lid shall be maintained in a closed position at all times (i.e. no visible gaps) except when the device is in use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted in place except when they are in use. [District Rule 4623 and 40 CFR 60.112b(a)(1)(iv)] Federally Enforceable Through Title V Permit

34. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the leg roof supports. [District Rule 4623 and 40 CFR 60.112b(a)(1)(v)] Federally Enforceable Through Title V Permit

35. Rim vents shall be equipped with a gasket and shall be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [District Rule 4623 and 40 CFR 60.112b(a)(1)(vi)] Federally Enforceable Through Title V Permit

36. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The well shall have a slit fabric cover that covers at least 90 percent of the opening. The fabric cover must be impermeable. [District Rule 4623 and 40 CFR 60.112b(a)(1)(vii)] Federally Enforceable Through Title V Permit

37. Each penetration of the internal floating roof that allows for the passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover. The fabric sleeve must be impermeable. [District Rule 4623 and 40 CFR 60.112b(a)(1)(viii)] Federally Enforceable Through Title V Permit

38. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover. [40 CFR 60.112b(a)(1)(ix)] Federally Enforceable Through Title V Permit

39. The permittee shall visually inspect the internal floating roof, and its appurtenant parts, fittings, etc. and measure the gaps of the primary seal and/or secondary seal prior to filling the tank for newly constructed, repair, or rebuilt internal floating roof tanks. If holes, tears, or openings in the primary seal, the secondary seal, the seal fabric or defects in the internal floating roof or its appurtenant parts, components, fittings, etc., are found, they shall be repaired prior to filling the tank. [District Rule 4623 and 40 CFR 60.113b(a)(1)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

40. The permittee shall visually inspect, through the manholes, roof hatches, or other openings on the fixed roof, the internal floating roof and its appurtenant parts, fittings, etc., and the primary seal and/or secondary seal at least once every 12 months after the tank is initially filled with an organic liquid. There should be no visible organic liquid on the roof, tank walls, or anywhere. Other than the gap criteria specified by this rule, no holes, tears, or other openings are allowed that would permit the escape of vapors. Any defects found are violations of this rule. [District Rule 4623 and 40 CFR 60.113b(a)(2)] Federally Enforceable Through Title V Permit
41. The permittee shall maintain records of all visual inspections required by this permit. Each record shall identify the storage vessel on which the inspection was performed, the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings). [40 CFR 60.115b(a)(2)] Federally Enforceable Through Title V Permit
42. Operator shall maintain a record showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. The record shall be maintained for the life of the vessel. [40 CFR 60.116b(b)] Federally Enforceable Through Title V Permit
43. Operator shall keep a record of the liquids stored in this container, the period of storage, the storage temperature, the maximum true vapor pressure (TVP) of that liquid during the respective storage period and API gravity. [District Rule 4623 and 40 CFR 60.116b(c)] Federally Enforceable Through Title V Permit
44. Operator of each storage vessel, either with a design capacity greater than or equal to 151 m3 storing a liquid with a maximum true vapor pressure that is normally less than 0.75 psia or with a design capacity greater than or equal to 75 m3 but less than 151 m3 storing a liquid with a maximum true vapor pressure normally less than 4.0 psia, shall notify the APCO within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range. [40CFR 60.116b(d)] Federally Enforceable Through Title V Permit
45. For storage vessels operated above or below ambient temperatures, the operator shall calculate the maximum true vapor pressure based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service. [40 CFR 60.116b(e)(1)] Federally Enforceable Through Title V Permit
46. Maximum true vapor pressure, for crude oil or refined petroleum products, may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR 60.116b(e)(2)(i)] Federally Enforceable Through Title V Permit
47. Operator shall determine the true vapor pressure of each type of crude oil with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method from available data and record if the true vapor pressure is greater than 0.5 psia. [40 CFR 60.116b(e)(2)(ii)] Federally Enforceable Through Title V Permit
48. Operator shall determine the true vapor pressure of each VOL, other than crude oil or refined petroleum products, from standard reference texts, by ASTM Method D2879, or by using an appropriate method approved by EPA. [40 CFR 60.116b(e)(3)] Federally Enforceable Through Title V Permit
49. Operator of a tank storing a waste mixture of indeterminate or variable composition shall determine the highest maximum true vapor pressure for the range of liquid compositions to be stored prior to the initial filling, using methods specified for maximum true vapor pressure in this permit. [40 CFR 60.116b(f)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

50. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1) Date of inspection and names and titles of company personnel doing the inspection. 2) Tank identification number and Permit to Operate number. 3) Measurements of the gaps between the tank shell and primary and secondary seals. 4) Leak-free status of the tank and floating roof deck fittings. Records of the leak-free status shall include the vapor concentration values measured in parts per million by volume (ppmv). 5) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6) Any corrective actions or repairs performed on the tank in order to comply with rule 4623 and the date(s) such actions were taken. [District Rule 4623 and 40 CFR 60.115b(a)(3)] Federally Enforceable Through Title V Permit

51. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually inspect the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4326, Table 5] Federally Enforceable Through Title V Permit

52. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 5] Federally Enforceable Through Title V Permit

53. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 5] Federally Enforceable Through Title V Permit

54. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 5] Federally Enforceable Through Title V Permit

55. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 5 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 5 shall constitute a violation of this rule. [District Rule 4623, Table 5] Federally Enforceable Through Title V Permit

56. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623, Table 5] Federally Enforceable Through Title V Permit

57. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 5] Federally Enforceable Through Title V Permit

58. Records shall be kept of each inspection performed. Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings). [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

59. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 1070]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-131-2 **EXPIRATION DATE:** 08/31/2016

EQUIPMENT DESCRIPTION:
74,000 BBL INTERNAL FLOATING ROOF ORGANIC LIQUID STORAGE TANK, WELDED CONSTRUCTION WITH METALLIC SHOE PRIMARY SEAL AND WIPER SECONDARY SEAL (TANK #74001)

PERMIT UNIT REQUIREMENTS

1. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623] Federally Enforceable Through Title V Permit
2. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
3. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
4. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623] Federally Enforceable Through Title V Permit
5. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623] Federally Enforceable Through Title V Permit
6. The cumulative length of all gaps between the tank shell and the secondary seal, greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623] Federally Enforceable Through Title V Permit
7. The metallic shoe-type seal shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 18 inches above the stored liquid surface. [District Rule 4623] Federally Enforceable Through Title V Permit
8. The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623] Federally Enforceable Through Title V Permit
9. There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
10. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
11. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
12. All openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10% of the maximum allowable working pressure of the roof, shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be leak-free, except when the device or appurtenance is in use. [District Rule 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use. [District Rule 4623] Federally Enforceable Through Title V Permit
14. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. [District Rule 4623] Federally Enforceable Through Title V Permit
15. Rim vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [District Rule 4623] Federally Enforceable Through Title V Permit
16. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The well shall have a slit fabric cover that covers at least 90% of the opening. The fabric cover must be impermeable. [District Rule 4623] Federally Enforceable Through Title V Permit
17. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover. The fabric sleeve must be impermeable. [District Rule 4623] Federally Enforceable Through Title V Permit
18. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. [District Rule 4623] Federally Enforceable Through Title V Permit
19. Permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
20. Permittee shall maintain the records of the internal floating roof landing activities that are performed pursuant to Rule 4623, Sections 5.3.1.3 and 5.4.3. The records shall include information on the true vapor pressure (TVP), API gravity, storage temperature, type of organic liquid stored in the tank, the purpose of landing the roof on its legs, the date of roof landing, duration the roof was on its legs, the level or height at which the tank roof was set to land on its legs, and the lowest liquid level in the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
21. This tank shall only store, place, or hold organic liquid with a tank vapor pressure (TVP) of less than, or equal to 7.96 psia under all storage conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
22. The total organic liquid throughput for tanks S-37-130 and '131 shall not exceed either of the following: 26,356 barrels per day or 9,620,000 barrels per year. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Combined VOC emission rate from tanks S-37-130 and '131 shall not exceed 20.5 lb/day and 7,466 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 2201] Federally Enforceable Through Title V Permit
25. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Vapor pressure of stored liquids shall be determined as described in section 6.4 of District Rule 4623. [District Rule 4623, 6.2] Federally Enforceable Through Title V Permit
27. Permittee shall submit the records of TVP testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP of the organic liquid, test methods used, and a copy of the test results. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

28. Permittee shall maintain monthly records of average daily crude oil throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, and TVP. [District Rule 2201] Federally Enforceable Through Title V Permit

29. Daily emissions will be determined based on using monthly throughput data and number of days per month. [District Rule 2520, 9.4] Federally Enforceable Through Title V Permit

30. The tank shall be equipped with a fixed roof with an internal floating type cover equipped with two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. [40 CFR 60.112b(a)(1)(ii)] Federally Enforceable Through Title V Permit

31. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal roof shall be floating on the liquid surface except during initial fill and when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. Whenever the permittee intends to land the roof on it's legs, the permittee shall notify the APCO in writing at least five days prior to performing the work. [District Rule 4623, and 40 CFR 60.112b(a)(i)] Federally Enforceable Through Title V Permit

32. Each opening in a non-contact internal floating roof, except for automatic bleeder vents (vacuum breaker vents) and rim space vents, shall provide a projection below the liquid surface. [District Rule 4623 and 40 CFR 60.112b(a)(1)(iii)] Federally Enforceable Through Title V Permit

33. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains shall be equipped with a cover, or a lid shall be maintained in a closed position at all times (i.e. no visible gaps) except when the device is in use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted in place except when they are in use. [District Rule 4623 and 40 CFR 60.112b(a)(1)(iv)] Federally Enforceable Through Title V Permit

34. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the leg roof supports. [District Rule 4623 and 40 CFR 60.112b(a)(1)(v)] Federally Enforceable Through Title V Permit

35. Rim vents shall be equipped with a gasket and shall be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [District Rule 4623 and 40 CFR 60.112b(a)(1)(vi)] Federally Enforceable Through Title V Permit

36. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The well shall have a slit fabric cover that covers at least 90 percent of the opening. The fabric cover must be impermeable. [District Rule 4623 and 40 CFR 60.112b(a)(1)(vii)] Federally Enforceable Through Title V Permit

37. Each penetration of the internal floating roof that allows for the passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover. The fabric sleeve must be impermeable. [District Rule 4623 and 40 CFR 60.112b(a)(1)(viii)] Federally Enforceable Through Title V Permit

38. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover. [40 CFR 60.112b(a)(1)(ix)] Federally Enforceable Through Title V Permit

39. The permittee shall visually inspect the internal floating roof, and its appurtenant parts, fittings, etc. and measure the gaps of the primary seal and/or secondary seal prior to filling the tank for newly constructed, repair, or rebuilt internal floating roof tanks. If holes, tears, or openings in the primary seal, the secondary seal, the seal fabric or defects in the internal floating roof or its appurtenant parts, components, fittings, etc., are found, they shall be repaired prior to filling the tank. [District Rule 4623 and 40 CFR 60.113b(a)(1)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

40. The permittee shall visually inspect, through the manholes, roof hatches, or other openings on the fixed roof, the internal floating roof and its appurtenant parts, fittings, etc., and the primary seal and/or secondary seal at least once every 12 months after the tank is initially filled with an organic liquid. There should be no visible organic liquid on the roof, tank walls, or anywhere. Other than the gap criteria specified by this rule, no holes, tears, or other openings are allowed that would permit the escape of vapors. Any defects found are violations of this rule. [District Rule 4623 and 40 CFR 60.113b(a)(2)] Federally Enforceable Through Title V Permit
41. The permittee shall maintain records of all visual inspections required by this permit. Each record shall identify the storage vessel on which the inspection was performed, the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings). [40 CFR 60.115b(a)(2)] Federally Enforceable Through Title V Permit
42. Operator shall maintain a record showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. The record shall be maintained for the life of the vessel. [40 CFR 60.116b(b)] Federally Enforceable Through Title V Permit
43. Operator shall keep a record of the liquids stored in this container, the period of storage, the storage temperature, the maximum true vapor pressure (TVP) of that liquid during the respective storage period and API gravity. [District Rule 4623 and 40 CFR 60.116b(c)] Federally Enforceable Through Title V Permit
44. Operator of each storage vessel, either with a design capacity greater than or equal to 151 m3 storing a liquid with a maximum true vapor pressure that is normally less than 0.75 psia or with a design capacity greater than or equal to 75 m3 but less than 151 m3 storing a liquid with a maximum true vapor pressure normally less than 4.0 psia, shall notify the APCO within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range. [40CFR 60.116b(d)] Federally Enforceable Through Title V Permit
45. For storage vessels operated above or below ambient temperatures, the operator shall calculate the maximum true vapor pressure based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service. [40 CFR 60.116b(e)(1)] Federally Enforceable Through Title V Permit
46. Maximum true vapor pressure, for crude oil or refined petroleum products, may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR 60.116b(e)(2)(i)] Federally Enforceable Through Title V Permit
47. Operator shall determine the true vapor pressure of each type of crude oil with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method from available data and record if the true vapor pressure is greater than 0.5 psia. [40 CFR 60.116b(e)(2)(ii)] Federally Enforceable Through Title V Permit
48. Operator shall determine the true vapor pressure of each VOL, other than crude oil or refined petroleum products, from standard reference texts, by ASTM Method D2879, or by using an appropriate method approved by EPA. [40 CFR 60.116b(e)(3)] Federally Enforceable Through Title V Permit
49. Operator of a tank storing a waste mixture of indeterminate or variable composition shall determine the highest maximum true vapor pressure for the range of liquid compositions to be stored prior to the initial filling, using methods specified for maximum true vapor pressure in this permit. [40 CFR 60.116b(f)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

50. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1) Date of inspection and names and titles of company personnel doing the inspection. 2) Tank identification number and Permit to Operate number. 3) Measurements of the gaps between the tank shell and primary and secondary seals. 4) Leak-free status of the tank and floating roof deck fittings. Records of the leak-free status shall include the vapor concentration values measured in parts per million by volume (ppmv). 5) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6) Any corrective actions or repairs performed on the tank in order to comply with rule 4623 and the date(s) such actions were taken. [District Rule 4623 and 40 CFR 60.115b(a)(3)] Federally Enforceable Through Title V Permit

51. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually inspect the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4326, Table 5] Federally Enforceable Through Title V Permit

52. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 5] Federally Enforceable Through Title V Permit

53. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 5] Federally Enforceable Through Title V Permit

54. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 5] Federally Enforceable Through Title V Permit

55. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 5 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 5 shall constitute a violation of this rule. [District Rule 4623, Table 5] Federally Enforceable Through Title V Permit

56. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623, Table 5] Federally Enforceable Through Title V Permit

57. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 5] Federally Enforceable Through Title V Permit

58. Records shall be kept of each inspection performed. Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings). [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

59. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 1070]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-138-2 **EXPIRATION DATE:** 08/31/2016

EQUIPMENT DESCRIPTION:
ORGANIC LIQUID TRANSFER FACILITY WITH FOUR TRANSFER RACKS

PERMIT UNIT REQUIREMENTS

1. Permittee shall transfer no more than 23,016 gallons per day through this operation. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The true vapor pressure of liquids transferred shall not exceed 0.05 psi at transfer temperature. [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit
3. Loading losses shall not exceed 0.087 lb VOC/1,000 gallon transferred. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Permittee shall keep daily and annual records of the volume of organic liquids transferred, the true vapor pressure (TVP) and temperature of the liquids transferred, and the type of liquids transferred. Such records shall be maintained, retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit
5. The TVP shall be determined whenever there is a change in the type of liquid being transferred. Organic liquid TVP shall be determined using one of the following methods: (1) Rule 4624, Appendix A, for any of the listed liquids provided the storage temperature listed in Appendix A is not exceeded at any time; (2) A material safety data sheet (MSDS) in place of TVP testing if the transferred organic liquid is not crude oil or a petroleum distillate; (3) TVP test by measuring the Reid Vapor Pressure (RVP) using ASTM D 323 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the storage container's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in Rule 4624, Appendix B. Appendix B is an excerpt from the oil and gas section of "ARB Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588", dated August 1989. As an alternative to using ASTM D 323, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO and EPA. The latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA, shall be used to determine the TVP of crude oil with an API gravity of 26 degrees or less, or for any API gravity that is specified in this test method. The API gravity of crude oil or petroleum distillate shall be determined using ASTM Method D 287 (Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 (Standard Practices for Manual Sampling of Petroleum and Petroleum Products). [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-139-2 **EXPIRATION DATE:** 08/31/2016

EQUIPMENT DESCRIPTION:
CRUDE OIL UNLOADING RACK (NORTH OF TANK #80000) WITH TWO UNLOADING STATIONS, TRANSFER PUMP, AND ASSOCIATED HOSES, VALVES, FLANGES, AND THREADED CONNECTIONS - LANE 1 SOUTH

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Only crude oil shall be unloaded through this equipment without prior approval by the District through Authority to Construct. [District Rule 2020] Federally Enforceable Through Title V Permit
3. Crude oil unloaded through this equipment shall only be routed to a fixed roof or floating roof storage tank which meets the control requirements of Rule 4623, "Storage of Organic Liquids." [District Rule 4624] Federally Enforceable Through Title V Permit
4. The transfer rack shall be maintained and operated such that there are no leaks and no excess organic liquid drainage at disconnections. Excess organic liquid drainage is defined as more than ten (10) milliliters of liquid drainage as determined by computing the average drainage from three consecutive disconnects. [District Rule 4624] Federally Enforceable Through Title V Permit
5. A liquid leak is defined as the dripping of VOC-containing liquid at a rate of more than three (3) drops per minute. A gaseous leak is defined as the detection of any gaseous or vapor emissions with a concentration of VOC greater than 1,000 ppmv above a background when measured with a portable hydrocarbon detection instrument in accordance with EPA Method 21. Any liquid or gas coming from a component undergoing repair or replacement, or during sampling of process fluid from equipment into a container is not considered a leak provided such activities are accomplished as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4624] Federally Enforceable Through Title V Permit
6. At least once every calendar quarter, during transfer of organic liquids, the operator shall inspect the unloading rack components for leaks according to EPA Method 21. [District Rule 4624] Federally Enforceable Through Title V Permit
7. All equipment that are found leaking shall be repaired or replaced within 72 hours. If the leaking component cannot be repaired or replaced within 72 hours, the component shall be taken out of service until such time the component is repaired or replaced. The repaired or replacement equipment shall be reinspected the first time the equipment is in operation after the repair or replacement. [District Rule 4624] Federally Enforceable Through Title V Permit
8. The operator shall keep records of daily liquid throughput and the results of any required leak inspections. The record shall be maintained for a period of five years and be made available to the APCO, ARB, or EPA during normal business hours. [District Rule 4624] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-140-2 **EXPIRATION DATE:** 08/31/2016

EQUIPMENT DESCRIPTION:
CRUDE OIL UNLOADING RACK (NORTH OF TANK #80000) WITH TWO UNLOADING STATIONS, TRANSFER PUMP, AND ASSOCIATED HOSES, VALVES, FLANGES, AND THREADED CONNECTIONS - LANE 2 MIDDLE

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Only crude oil shall be unloaded through this equipment without prior approval by the District through Authority to Construct. [District Rule 2020] Federally Enforceable Through Title V Permit
3. Crude oil unloaded through this equipment shall only be routed to a fixed roof or floating roof storage tank which meets the control requirements of Rule 4623, "Storage of Organic Liquids." [District Rule 4624] Federally Enforceable Through Title V Permit
4. The transfer rack shall be maintained and operated such that there are no leaks and no excess organic liquid drainage at disconnections. Excess organic liquid drainage is defined as more than ten (10) milliliters of liquid drainage as determined by computing the average drainage from three consecutive disconnects. [District Rule 4624] Federally Enforceable Through Title V Permit
5. A liquid leak is defined as the dripping of VOC-containing liquid at a rate of more than three (3) drops per minute. A gaseous leak is defined as the detection of any gaseous or vapor emissions with a concentration of VOC greater than 1,000 ppmv above a background when measured with a portable hydrocarbon detection instrument in accordance with EPA Method 21. Any liquid or gas coming from a component undergoing repair or replacement, or during sampling of process fluid from equipment into a container is not considered a leak provided such activities are accomplished as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4624] Federally Enforceable Through Title V Permit
6. At least once every calendar quarter, during transfer of organic liquids, the operator shall inspect the unloading rack components for leaks according to EPA Method 21. [District Rule 4624] Federally Enforceable Through Title V Permit
7. All equipment that are found leaking shall be repaired or replaced within 72 hours. If the leaking component cannot be repaired or replaced within 72 hours, the component shall be taken out of service until such time the component is repaired or replaced. The repaired or replacement equipment shall be reinspected the first time the equipment is in operation after the repair or replacement. [District Rule 4624] Federally Enforceable Through Title V Permit
8. The operator shall keep records of daily liquid throughput and the results of any required leak inspections. The record shall be maintained for a period of five years and be made available to the APCO, ARB, or EPA during normal business hours. [District Rule 4624] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-141-2 **EXPIRATION DATE:** 08/31/2016

EQUIPMENT DESCRIPTION:
ORGANIC LIQUID UNLOADING RACK NORTH OF TANK #80000 WITH TWO UNLOADING HOSES, TRANSFER PUMP, AND ASSOCIATED VALVES, FLANGES, AND THREADED CONNECTIONS - LANE 3 NORTH

PERMIT UNIT REQUIREMENTS

1. Transfer rack shall be maintained and operated in accordance with the manufacturer's specifications, and operated such that there are no leaks or excess organic liquid drainage at disconnections as defined herein. [District Rule 4624, 5.6]
2. All liquids unloaded through this unloading rack shall be routed to tanks which meet the requirements of Rule 4623, "Storage of Organic Liquids." [District Rule 4624]
3. Total number of disconnects shall not exceed 48 per day. [District Rule 2201]
4. During hose disconnects the maximum liquid spillage for liquids shall not exceed 10 milliliters/disconnect based on an average from 3 consecutive disconnects. [District Rule 2201 and 4624]
5. Emissions from light liquid components shall not exceed 0.14 lb-VOC/day. [District Rule 2201]
6. Permittee shall maintain accurate component count and emissions calculated using CAPCOA Average Emission Factors for Marketing Terminals, from California Implementation Guidelines for Estimating Emissions of Fugitive Hydrocarbon Leaks at Marketing Terminals, Table IV-1b, February 1999. [District Rule 2201]
7. For this Class 1 organic liquid transfer operation, the emission of VOC from the transfer operation shall not exceed 0.08 pounds per 1,000 gallons of organic liquid transferred. [District Rule 4624, 5.1]
8. A leak is defined as the dripping of VOC-containing liquid at a rate of more than three (3) drops per minute; or for organic liquids other than gasoline, the detection of any gaseous or vapor emissions with a concentration of VOC greater than 1,000 ppmv above a background as methane when measured in accordance with the test method in Section 6.3.7. Any liquid or gas coming from a component undergoing repair or replacement, or during sampling of process fluid from equipment into a container is not considered a leak provided such activities are accomplished as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4624, 3.17]
9. The operator shall inspect the vapor collection system, the vapor disposal system, and each transfer rack handling organic liquids for leaks during transfer at least once every month. Leak inspections shall be conducted using sight, sound, smell and instrument methods to detect leaks. Instrument detection shall be conducted using EPA Method 21 and shall be measured at a distance of one centimeter from the potential source. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: A) Zero air (less than 10 ppm of hydrocarbon in air); and B) Mixture of methane or n-hexane and air at a concentration of about, but less than 1,000 ppm methane or n-hexane. [District Rules 2520 and 4624] Federally Enforceable Through Title V Permit
10. Corrective steps shall be taken at any time the operator observes a leak or excess drainage at disconnect. All equipment found leaking shall be repaired or replaced within 72 hours. If the leaking component cannot be repaired or replaced within 72 hours, the component shall be taken out of service until such time the component is repaired or replaced. The repaired or replaced equipment shall be reinspected the first time the equipment is in operation after the repair or replacement. [District Rule 4624, 5.9.3]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. All inspections shall be documented with an inspection log. Inspection records shall include, at a minimum, 1) date of inspection, 2) location and description of any missing, loose, leaking, or damaged equipment and any malfunction requiring repair, 3) corrective steps taken to repair or replace the equipment, 4) test method and results for leak and drainage inspections, 5) location and description of any equipment to be inspected upon commencing operation after repair or replacement and 6) inspector name and signature. [District Rule 4624, 6.1.3]
12. Permittee shall keep records of daily unloading rack throughput and the results of any required leak inspections. [District Rule 4624, 6.1.3]
13. Permittee shall keep records of daily number of truck unloading disconnects. [District Rules 1070 and 2201]
14. Records shall be retained for a minimum of five years and shall be made readily available to the APCO, ARB, or EPA during normal business hours and submitted upon request to the APCO, ARB, or EPA. [District Rules 1070 and 4624]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-142-2 **EXPIRATION DATE:** 08/31/2016

EQUIPMENT DESCRIPTION:
RESIDUAL OIL TRANSFER RACK (FROM TRUCKS TO REFINERY OR REVERSE) EAST OF TANK #10000, WITH TWO TRANSFER POINTS, TRANSFER PUMP, AND ASSOCIATED HOSES, VALVES, FLANGES, AND THREADED CONNECTIONS (RACK A)

PERMIT UNIT REQUIREMENTS

1. Only residual oil shall be loaded/unloaded through this equipment without prior approval by the District through Authority to Construct. [District Rule 2020] Federally Enforceable Through Title V Permit
2. Residual oil loaded/unloaded through this equipment shall have a true vapor pressure (TVP) less than 1.5 psia at maximum storage container temperature. [District Rule 4624] Federally Enforceable Through Title V Permit
3. The TVP shall be determined whenever there is a change in the type of liquid being transferred. Organic liquid TVP shall be determined using one of the following methods: (1) Rule 4624, Appendix A, for any of the listed liquids provided the storage temperature listed in Appendix A is not exceeded at any time; (2) A material safety data sheet (MSDS) in place of TVP testing if the transferred organic liquid is not crude oil or a petroleum distillate; (3) TVP test by measuring the Reid Vapor Pressure (RVP) using ASTM D 323 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the storage container's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in Rule 4624, Appendix B. Appendix B is an excerpt from the oil and gas section of "ARB Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588", dated August 1989. As an alternative to using ASTM D 323, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO and EPA. The latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA, shall be used to determine the TVP of crude oil with an API gravity of 26 degrees or less, or for any API gravity that is specified in this test method. The API gravity of crude oil or petroleum distillate shall be determined using ASTM Method D 287 (Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 (Standard Practices for Manual Sampling of Petroleum and Petroleum Products). [District Rule 4624] Federally Enforceable Through Title V Permit
4. Permittee shall maintain accurate daily records of the TVP of liquids transferred. [District Rule 4624] Federally Enforceable Through Title V Permit
5. Records required by this permit shall be retained for a minimum of five years and shall be made readily available to the APCO, ARB, or EPA during normal business hours and submitted upon request to the APCO, ARB, or EPA. [District Rule 4624] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-143-2 **EXPIRATION DATE:** 08/31/2016

EQUIPMENT DESCRIPTION:
RESIDUAL OIL TRANSFER RACK (FROM TRUCKS TO REFINERY OR REVERSE) NORTHWEST OF TANK #10006, WITH ONE TRANSFER POINT, TRANSFER PUMP, AND ASSOCIATED HOSES, VALVES, FLANGES, AND THREADED CONNECTIONS (RACK B)

PERMIT UNIT REQUIREMENTS

1. Only residual oil shall be loaded/unloaded through this equipment without prior approval by the District through Authority to Construct. [District Rule 2020] Federally Enforceable Through Title V Permit
2. Residual oil loaded/unloaded through this equipment shall have a true vapor pressure (TVP) less than 1.5 psia at maximum storage container temperature. [District Rule 4624] Federally Enforceable Through Title V Permit
3. The TVP shall be determined whenever there is a change in the type of liquid being transferred. Organic liquid TVP shall be determined using one of the following methods: (1) Rule 4624, Appendix A, for any of the listed liquids provided the storage temperature listed in Appendix A is not exceeded at any time; (2) A material safety data sheet (MSDS) in place of TVP testing if the transferred organic liquid is not crude oil or a petroleum distillate; (3) TVP test by measuring the Reid Vapor Pressure (RVP) using ASTM D 323 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the storage container's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in Rule 4624, Appendix B. Appendix B is an excerpt from the oil and gas section of "ARB Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588", dated August 1989. As an alternative to using ASTM D 323, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO and EPA. The latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA, shall be used to determine the TVP of crude oil with an API gravity of 26 degrees or less, or for any API gravity that is specified in this test method. The API gravity of crude oil or petroleum distillate shall be determined using ASTM Method D 287 (Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 (Standard Practices for Manual Sampling of Petroleum and Petroleum Products). [District Rule 4624] Federally Enforceable Through Title V Permit
4. Permittee shall maintain accurate daily records of the TVP of liquids transferred. [District Rule 4624] Federally Enforceable Through Title V Permit
5. Records required by this permit shall be retained for a minimum of five years and shall be made readily available to the APCO, ARB, or EPA during normal business hours and submitted upon request to the APCO, ARB, or EPA. [District Rule 4624] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-147-0 **EXPIRATION DATE:** 08/31/2016

EQUIPMENT DESCRIPTION:
ORGANIC LIQUID UNLOADING RACK (RACK S) - SOUTH OF DIESEL TANK FARM

PERMIT UNIT REQUIREMENTS

1. Transfer Rack S shall be used only for unloading. [District Rule 2201] Federally Enforceable Through Title V Permit
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. Transfer rack shall be maintained and operated in accordance with the manufacturer's specifications, and operated such that there are no leaks or excess organic liquid drainage at disconnections as defined herein. [District Rule 4624] Federally Enforceable Through Title V Permit
4. All liquids and gases from the transfer operation shall be routed to one of the following systems: a vapor collection and control system; a fixed roof container that meets the control requirements specified in Rule 4623 (Storage of Organic Liquids); a floating roof container that meets the control requirements specified in Rule 4623 (Storage of Organic Liquids); or a pressure vessel equipped with an APCO-approved vapor recovery system that meets the control requirements specified in Rule 4623 (Storage of Organic Liquids); or a closed VOC emission control system. [District Rules 4623 and 4624] Federally Enforceable Through Title V Permit
5. A floating roof container that meets the applicable control requirements of Section 5.0 of Rule 4623 (Storage of Organic Liquids) shall be considered not leaking when receiving unloaded liquids for compliance with Rule 4624. [District Rule 4624] Federally Enforceable Through Title V Permit
6. Total number of disconnects shall not exceed 20 per day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. During hose disconnects the maximum liquid spillage for liquids shall not exceed 10 milliliters/disconnect based on an average from 3 consecutive disconnects. [District Rule 2201 and 4624] Federally Enforceable Through Title V Permit
8. Emissions from light liquid components shall not exceed 3.1 lb-VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Permittee shall maintain accurate component count and emissions calculated using CAPCOA Average Emission Factors for Marketing Terminals, from California Implementation Guidelines for Estimating Emissions of Fugitive Hydrocarbon Leaks at Marketing Terminals, Table IV-2b, February 1999. [District Rule 2201] Federally Enforceable Through Title V Permit
10. For this Class 1 organic liquid transfer operation, the emission of VOC from the transfer operation shall not exceed 0.08 pounds per 1,000 gallons of organic liquid transferred. [District Rule 4624] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. A leak is defined as the dripping of VOC-containing liquid at a rate of more than three (3) drops per minute; or for organic liquids other than gasoline, the detection of any gaseous or vapor emissions with a concentration of VOC greater than 1,000 ppmv above a background as methane when measured in accordance with the test method in Section 6.3.8 or alternative method approved in writing by the APCO and EPA. Any liquid or gas coming from a component undergoing repair or replacement, or during sampling of process fluid from equipment into a container is not considered a leak provided such activities are accomplished as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4624] Federally Enforceable Through Title V Permit
12. Permittee shall inspect the loading rack for leaks during transfer at least once every calendar quarter using the test method prescribed in Section 6.3.8 of Rule 4624 or alternative method approved in writing by the APCO and EPA. [District Rule 4624] Federally Enforceable Through Title V Permit
13. An operator may apply for a written approval from the APCO to change the inspection frequency from quarterly to annually provided no leaks were found during the inspections required under provisions of Sections 5.9.1 and 5.9.2 of Rule 4624 during five consecutive quarterly inspections. Upon identification of any leak during an annual inspection the frequency shall revert back to quarterly and the operator shall contact the APCO in writing within 14 days. [District Rule 4624] Federally Enforceable Through Title V Permit
14. Corrective steps shall be taken at any time the operator observes a leak or excess drainage at disconnect. All equipment found leaking shall be repaired or replaced within 72 hours. If the leaking component cannot be repaired or replaced within 72 hours, the component shall be taken out of service until such time the component is repaired or replaced. The repaired or replaced equipment shall be reinspected the first time the equipment is in operation after the repair or replacement. [District Rule 4624] Federally Enforceable Through Title V Permit
15. All inspections shall be documented with an inspection log. Inspection records shall include, at a minimum, 1) date of inspection, 2) location and description of any missing, loose, leaking, or damaged equipment and any malfunction requiring repair, 3) corrective steps taken to repair or replace the equipment, 4) test method and results for leak and drainage inspections, 5) location and description of any equipment to be inspected upon commencing operation after repair or replacement and 6) inspector name and signature. [District Rule 4624] Federally Enforceable Through Title V Permit
16. Permittee shall keep records of daily unloading rack throughput and the results of any required leak inspections. [District Rule 4624] Federally Enforceable Through Title V Permit
17. Permittee shall keep records of daily number of truck unloading disconnects. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
18. Records shall be retained for a minimum of five years and shall be made readily available to the APCO, ARB, or EPA during normal business hours and submitted upon request to the APCO, ARB, or EPA. [District Rules 1070 and 4624] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-148-0 **EXPIRATION DATE:** 08/31/2016

EQUIPMENT DESCRIPTION:
54,000 BBL EXTERNAL FLOATING ROOF ORGANIC LIQUID STORAGE TANK WITH EITHER A DUAL WIPER SEAL WITH DRIP CURTAIN OR PRIMARY METAL SHOE SEAL WITH SECONDARY WIPER SEAL

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. Emissions from the components serving the tank shall not exceed 1.9 lb-VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Permittee shall maintain an accurate component count and resultant emissions according to California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2a, 1995 EPA Protocol, Refinery, using screening value ranges emission factors. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The True Vapor Pressure (TVP) of the organic liquid stored shall be less than 11 psia. [District Rules 2201 and 4623 and 40 CFR 60.110b(b)] Federally Enforceable Through Title V Permit
6. Organic liquid throughput shall not exceed 25,000 bbl/day based on a monthly average. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Maximum annual organic liquid throughput shall not exceed 3,125,860 bbl/year. [District Rule 2201] Federally Enforceable Through Title V Permit
8. This tank shall be equipped with a floating roof consisting of a pontoon-type or double-deck-type cover which rests upon the surface of the liquid being stored and is equipped with a closure device between the tank shell and roof edge consisting of a primary and a secondary seal. [District Rules 2201 and 4623, 5.3.1 and 40 CFR 60.112b(a)(2) & (i)] Federally Enforceable Through Title V Permit
9. The external floating roof shall float on the surface of the stored liquid at all times (i.e., off the roof leg supports) except during the initial fill until the roof is lifted off the leg supports and when the tank is completely emptied and subsequently refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. Whenever the permittee intends to land the roof on its legs, the permittee shall notify the APCO in writing at least five calendar days prior to performing the work. The tank must be in compliance with this rule before it may land on its legs. [District Rule 4623, 5.3.1.3 and 40CFR 60.112b(a)(2)(iii)] Federally Enforceable Through Title V Permit
10. Primary seal (lower seal) shall be either a mechanical shoe seal or a liquid-mounted seal. [40CFR 60.112b(a)(2)(i) and 60.112b(a)(2)(i)(A)] Federally Enforceable Through Title V Permit
11. This tank shall be maintained in a leak-free condition, except for the primary and secondary seals, roof deck fittings and floating roof automatic bleeder vents, and as allowed by Section 5.2 and applicable provisions of Table 3 through Table 5, and Section 5.7.5.4. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background, except for primary and secondary seals, floating roof deck fittings, and floating roof automatic bleeder vents is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
13. Accumulated area of gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal shall not exceed 212 sq cm per meter of tank diameter, and the width of any gap shall not exceed 3.81 cm. [40CFR 60.113b(b)(4)(i)] Federally Enforceable Through Title V Permit
14. Accumulated area of gaps between the tank wall and the secondary seal shall not exceed 21.2 sq cm per meter of tank diameter, and the width of any portion of any gap shall not exceed 1.27 cm (1/2 inch). [40 CFR 60.112b(b)(4)(ii)(C)] Federally Enforceable Through Title V Permit
15. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623, 5.3.2.1.1] Federally Enforceable Through Title V Permit
16. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1] Federally Enforceable Through Title V Permit
17. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1] Federally Enforceable Through Title V Permit
18. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623, 5.3.2.1.1] Federally Enforceable Through Title V Permit
19. The cumulative length of all gaps between the tank shell and the secondary seal, greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623, 5.3.2.1.2] Federally Enforceable Through Title V Permit
20. The metallic shoe-type seal shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 24 inches above the stored liquid surface. [District Rule 4623, 5.3.2.1.3] Federally Enforceable Through Title V Permit
21. The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623, 5.3.2.1.4] Federally Enforceable Through Title V Permit
22. There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623, 5.3.2.1.5 and 40 CFR 60.112b(b)(4)(ii)(C)] Federally Enforceable Through Title V Permit
23. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.3.2.1.6] Federally Enforceable Through Title V Permit
24. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623, 5.3.2.1.7] Federally Enforceable Through Title V Permit
25. Secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion. [40CFR 60.112b(a)(2)(i)(B)] Federally Enforceable Through Title V Permit
26. All openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10% of the maximum allowable working pressure of the roof, shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be gas tight, except when the device or appurtenance is in use [District Rule 4623, 5.5.1] Federally Enforceable Through Title V Permit
27. Except for automatic bleeder vents, rim vents, and pressure relief vents, each opening in a non-contact external floating roof shall provide a projection below the liquid surface. [District Rule 4623, 5.5.2.2.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

28. Except for automatic bleeder vents and rim vents, roof drains, and leg sleeves, each opening in the roof shall be equipped with a gasketed cover, seal, or lid that shall be maintained in a closed position at all times (i.e., no visible gap) except when in actual use. [District Rule 4623, 5.5.2.2.2] Federally Enforceable Through Title V Permit

29. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. [District Rule 4623, 5.5.2.2.3, 5.5.2.1.3 and 40CFR 60.112b(a)(2)(ii)]] Federally Enforceable Through Title V Permit

30. Rim vents shall be equipped with a gasket and shall be set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. [District Rule 4623, 5.5.2.2.4 and 40CFR 60.112b(a)(2)(ii)] Federally Enforceable Through Title V Permit

31. Each emergency roof drain shall be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening. The fabric cover must be impermeable if the liquid is drained into the contents of the tanks. [District Rule 4623, 5.5.2.2.5] Federally Enforceable Through Title V Permit

32. External floating roof legs shall be equipped with vapor socks or vapor barriers in order to maintain a gas-tight condition so as to prevent VOC emissions from escaping through the roof leg opening. [District Rule 4623, 5.5.2.2.6] Federally Enforceable Through Title V Permit

33. All wells and similar fixed projections through the floating roof shall provide a projection below the liquid surface. [District Rule 4623, 5.5.2.3.1] Federally Enforceable Through Title V Permit

34. The solid guidepole well shall be equipped with a pole wiper and a gasketed cover, seal or lid which shall be in a closed position at all times (i.e., no visible gap) except when the well is in use. [District Rule 4623, 5.5.2.3.2] Federally Enforceable Through Title V Permit

35. The gap between the pole wiper and the solid guidepole shall be added to the gaps measured to determine compliance with the secondary seal requirement, and in no case shall exceed 1/2 inch. [District Rule 4623, 5.5.2.3.3] Federally Enforceable Through Title V Permit

36. The permittee shall make the primary seal envelope available for unobstructed inspection by the APCO on an annual basis at locations selected along its circumference at random by the APCO. In the case of riveted tanks with toroid-type seals, a minimum of eight locations shall be made available; in all other cases, a minimum of four locations shall be made available. If the APCO suspects a violation may exist the APCO may require such further unobstructed inspection of the primary seal as may be necessary to determine the seal condition for its entire circumference. [District Rule 4623, 6.1.1] Federally Enforceable Through Title V Permit

37. Operator shall submit a tank inspection plan to the APCO for approval. The plan shall include an inventory of the tanks subject to this rule and a tank inspection schedule. A copy of the operator's tank safety procedures shall be made available to the APCO upon request. The tank inventory shall include tank's identification number, PTO number, maximum tank capacity, dimensions of tank (height and diameter), organic liquid stored, type of primary and secondary seal, type of floating roof (internal or external floating roof), construction date of tank, and location of tank. Any revision to a previously approved tank inspection schedule shall be submitted to the APCO for approval prior to conducting an inspection. [District Rule 4623, 6.1.2] Federally Enforceable Through Title V Permit

38. Operator shall inspect all floating tanks within 60 days of initial startup and at least once every 12 months to determine compliance with the requirements of this rule. The actual gap measurements of the floating roof primary and secondary seals shall be recorded. The inspection results shall be submitted to the APCO as specified in Section 6.3.5. [District Rule 4623, 6.1.3.1 and 40 CFR 60.113b(b)(1)(i) & (ii)] Federally Enforceable Through Title V Permit

39. Operator shall inspect the primary and secondary seals for compliance with the requirements of this rule every time a tank is emptied or degassed. Actual gap measurements shall be performed when the liquid level is static but not more than 48 hours after the tank roof is re-floated. [District Rule 4623, 6.1.3.2 and 40 CFR 60.113b(b)(6)] Federally Enforceable Through Title V Permit

40. Operator shall also perform gap measurements on primary seals during hydrostatic testing of the vessel. [40CFR 60.113b(b)(1)(i)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

41. If unit is out of service for a period of one year or more, subsequent refilling with volatile organic liquid shall be considered initial fill in accordance with the conditions of this permit. [40CFR60.113b(b)(1)(iii)] Federally Enforceable Through Title V Permit

42. Permittee shall maintain the records of the external floating roof landing activities that are performed pursuant to Rule 4623, Sections 5.3.1.3 and 5.4.3. The records shall include information on the maximum true vapor pressure (TVP), API gravity, storage temperature, type of organic liquid stored in the tank, the purpose of landing the roof on its legs, the date of roof landing, duration the roof was on its legs, the level or height at which the tank roof was set to land on its legs, and the lowest liquid level in the tank. [District Rule 4623, 6.3.7 and 40 CFR 60.116b(c)] Federally Enforceable Through Title V Permit

43. An operator shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1) Date of inspection and names and titles of company personnel doing the inspection. 2) Tank identification number and Permit to Operate number. 3) Measurements of the gaps between the tank shell and primary and secondary seals. 4) Leak-free status of the tank and floating roof deck fittings. Records of the leak-free status shall include the vapor concentration values measured in parts per million by volume (ppmv). 5) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6) Any corrective actions or repairs performed on the tank in order to comply with rule 4623 and the date(s) such actions were taken. [District Rule 4623, 6.3.5 and 40CFR 60.115b(b)(4)] Federally Enforceable Through Title V Permit

44. Operator shall notify the APCO 30 days in advance of any gap measurements required by this permit to afford the APCO opportunity to have an observer present. [40CFR 60.113b(b)(5)] Federally Enforceable Through Title V Permit

45. If the external floating roof has defects, or the primary seal or secondary seal has holes, tears, or other openings in the seal or seal fabric, the operator shall repair the items as necessary so that none of these conditions exist before filling or refilling the storage vessel with VOL. [40CFR 60.113b(b)(6)(i)] Federally Enforceable Through Title V Permit

46. For all visual inspections required by this permit, the operator shall notify the APCO in writing at least 30 days prior to the filling or refilling of each storage vessel to afford the APCO the opportunity to inspect the storage vessel prior to refilling, except when notification is specifically allowed otherwise by this permit. [40CFR 60.113b(b)(6)(ii)] Federally Enforceable Through Title V Permit

47. If a visual inspection required by this permit is not planned and the operator could not have known about the inspection 30 days in advance of refilling the tank, the operator shall notify the APCO at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so it is received by the APCO at least 7 days prior to the refilling. [40CFR 60.113b(b)(6)(ii)] Federally Enforceable Through Title V Permit

48. Operator shall record the vessel on which the measurement was performed, date of the seal gap measurement, raw data obtained in the measurement process in accordance with the conditions of this permit. [40CFR 60.115b(b)(3)] Federally Enforceable Through Title V Permit

49. Within 60 days of performing the seal gap measurements required by this permit, the operator shall furnish the APCO with a report containing the date of measurement, raw data obtained in the measurement process, and all such gap calculations as required by this permit. [40CFR 60.115b(b)(2)] Federally Enforceable Through Title V Permit

50. If the seals do not meet the required specifications of this permit, operator shall repair or empty the storage vessel within 45 days of identification. [40CFR 60.113b(b)(4)] Federally Enforceable Through Title V Permit

51. Operator shall maintain a record showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. The record shall be maintained for the life of the vessel. [40 CFR 60.116b(b)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

52. Operator shall determine the true vapor pressure of each type of crude oil with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method from available data and record if the true vapor pressure is greater than 0.5 psia. [40 CFR 60.116b(e)(2)(ii)] Federally Enforceable Through Title V Permit

53. Operator shall determine the true vapor pressure of each VOL, other than crude oil or refined petroleum products, from standard reference texts, by ASTM Method D2879, or by using an appropriate method approved by EPA. [40 CFR 60.116b(e)(3)(iii)] Federally Enforceable Through Title V Permit

54. For storage vessels operated above or below ambient temperatures, the operator shall calculate the maximum true vapor pressure based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service. [40 CFR 60.116b(e)(1)] Federally Enforceable Through Title V Permit

55. Maximum true vapor pressure, for crude oil or refined petroleum products, may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR 60.116b(e)(2)(i)] Federally Enforceable Through Title V Permit

56. Operator of a tank storing a waste mixture of indeterminate or variable composition shall determine the highest maximum true vapor pressure for the range of liquid compositions to be stored prior to the initial filling, using methods specified for maximum true vapor pressure in this permit. [40CFR 60.116b(f)] Federally Enforceable Through Title V Permit

57. Permittee shall determine the true vapor pressure (TVP) of the organic liquid, using methods specified for maximum true vapor pressure in this permit, upon initial filling, and whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 2201] Federally Enforceable Through Title V Permit

58. As used in this permit, the term "source or type" shall mean liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids stored in this unit to determine which are from common source. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

59. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287-92 (2000) e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057-95 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products". [District Rule 4623, 6.4.2] Federally Enforceable Through Title V Permit

60. The TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in Appendix B. Appendix B is an excerpt from the oil and gas section of "ARB Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588", dated August 1989. As an alternative to using ASTM D 323-94, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and US EPA. [District Rule 4623, 6.4.3] Federally Enforceable Through Title V Permit

61. The latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and US EPA, shall be used to determine the TVP of crude oil with an API gravity of 26 degrees or less, or for any API gravity that is specified in this test method. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit

62. Operator shall maintain monthly and annual records of the tank's throughput. [District Rule 2201] Federally Enforceable Through Title V Permit

63. All records shall be retained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 4623 and 1070] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

64. Operator of each storage vessel with a design capacity greater than or equal to 151 cu m storing a liquid with a maximum true vapor pressure that is normally less than 0.75 psia shall notify the APCO within 30 days when the maximum true vapor pressure of the liquid exceeds 0.75 psia. [40CFR 60.116b(d)] Federally Enforceable Through Title V Permit

65. This unit commenced construction, modification, or reconstruction after July 23, 1984. Therefore, the requirements of 40 CFR 60 Subpart K and Ka do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-149-0 **EXPIRATION DATE:** 08/31/2016

EQUIPMENT DESCRIPTION:
4 MMSCF/DAY LPG RECOVERY UNIT INCLUDING GAS COMPRESSION, MEMBRANE SEPARATION, REFRIGERATION, SOLID PHASE DRYING/ DEHYDRATION, AND FRACTIONATION

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. LPG and pentane liquid products shall be sent to existing storage facilities. [District Rule 2201]
4. Total fugitive emissions rate from valves, pumps, flanges, others, and connectors from components in this permit unit shall be periodically calculated as described below using the California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities (February 1999), Table IV-3a:CAPCOA-Revised 1995 EPA Correlation Equations and Factors for Refineries and Marketing Terminals (as described in the following conditions) and shall not exceed 27.7 lb/day. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
5. A leak shall be defined as a reading of methane, in excess of 100 ppmv for valves and connectors and in excess of 500 ppmv for pump and compressor seals above background when measured per EPA Method 21 and an Inspection and Maintenance Program pursuant to District Rule 4455. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Permit holder shall maintain accurate records of component counts and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), CAPCOA-Revised 1995 EPA Correlation Equations and Factors for Refineries and Marketing Terminals. Permit holder shall update such records when new components are installed. Components shall be screened and leak rate shall be measured at least once each quarter. If compliance with the daily emission limit is shown during each of five (5) consecutive quarterly inspections, the inspection frequency may be changed from quarterly to annual. If any annual inspection shows non-compliance with the daily emission limit, then quarterly inspections shall be resumed. [District Rule 2201] Federally Enforceable Through Title V Permit
7. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-37-150-0 **EXPIRATION DATE:** 08/31/2016

EQUIPMENT DESCRIPTION:
3000 BBL ORGANIC LIQUID STORAGE TANK VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-37-8

PERMIT UNIT REQUIREMENTS

1. All piping, valves, and fittings shall be constructed and maintained in a leak free condition. [District Rules 2201and 4623] Federally Enforceable Through Title V Permit
2. A leak free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
3. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rules 2201and 4623] Federally Enforceable Through Title V Permit
4. Permittee shall maintain with the permit accurate fugitive component counts for components affixed to the tank and on piping from the tank to the vapor control system trunk line and resulting emissions calculated using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2a (Feb 1999) 1995 EPA Protocol Refinery Screening Value Range Emissions Factors . [District Rules 2201 and 4455] Federally Enforceable Through Title V Permit
5. VOC fugitive emissions from the components affixed to the tank and on piping from tank to vapor control system trunk line shall not exceed 0.7 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
7. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
8. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take on of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rules 2201and 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
10. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
11. Except as otherwise provided in this permit, the operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The permittee shall maintain accurate records of exempt and non-exempt components and their associated function in the Operator Management Plan (OMP) as required in section 6.1 of Rule 4455. Permit holder shall update the Operator Management Plan when new components are installed. By January 30 of each year, an annual report indicating any changes to an existing Operator Management Plan shall be submitted to the APCO. [District Rule 4455] Federally Enforceable Through Title V Permit
13. All records required by this permit shall be retained for a minimum period of 5 years and shall be made available to the APCO, ARB and US EPA upon request. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

ATTACHMENT C

2014 Actual HAP Emissions

Table 1: 2014 Actual HAP Emissions
Kern Oil Refining

	Total HAPs (tpy)	Single Largest HAP (tpy)	Largest HAP Name
NG / RFG Ext. Combustion	0.20	0.11	Xylenes (isomers and mixture)
NG Turbine	0.90	0.71	Formaldehyde
IC Engines	0.09	0.06	Formaldehyde
Flare	0.02	0.01	Ethyl benzene
Loading Losses	2.01	1.42	Xylenes (isomers and mixture)
Storage Tanks	0.80	0.36	Toluene
Fugitive Emissions	1.30	0.41	Xylenes (isomers and mixture)
Cooling Towers	1.37	0.63	Xylenes (isomers and mixture)
CRU Regen	0.29	0.26	Hydrochloric acid
SRU	0.10	0.08	Carbonyl sulfide
Thermal Oxidizer / Remediation	0.00	0.00	Xylenes (isomers and mixture)
Tank Degassing	0.00	0.00	Xylenes (isomers and mixture)
Total Facility-Wide	7.08	2.83	Xylenes (isomers and mixture)

Table 2: Facility-Wide HAP Summary - 2014 Actual Emissions by Source Type
Kern Oil Refining

		Facility-Wide Total		Actual 2014 Emissions, Pounds												
CAS No.	HAP Name	lb/yr	tpy	NG / RFG Ext. Combustion	NG Turbine	IC Engines	Flare	Loading Losses	Storage Tanks	Fugitive Emissions	Cooling Towers	CRU Regen	SRU	Thermal Oxidizer / Remediation	Tank Degassing
79345	1,1,2,2-Tetrachloroethane	0	0.00			0.14									
79005	1,1,2-Trichloroethane	0	0.00			0.08									
106990	1,3-Butadiene	28	0.01	13.22		3.61		0.00	0.00	1.08	10.02				0.00
542756	1,3-Dichloropropene	0	0.00			0.07									
540841	2,2,4-Trimethylpentane	47	0.02			0.00		0.94	45.56	0.86					0.00
1746016	2,3,7,8-Tetrachlorodibenzo-p-dioxin	0	0.00									0.00			
75070	Acetaldehyde	51	0.03	32.69	2.02	15.51	0.47								
107028	Acrolein	61	0.03	47.02		14.25	0.11								
7440382	Arsenic Compounds (inorganic including arsine)	1	0.00	3.00			0.00								
71432	Benzene	520	0.26	3.82		8.58	1.74	65.40	17.81	363.95	41.25	6.14		0.26	0.82
7440417	Beryllium Compounds	0	0.00	0.09			0.00								
92524	Biphenyl	7	0.00			0.00		0.57	0.08	5.91					0.01
7440439	Cadmium Compounds	8	0.00	7.00	1.43		0.01								
75150	Carbon disulfide	61	0.03							0.17	10.02		51.12		
56235	Carbon tetrachloride	0	0.00			0.10									
463581	Carbonyl sulfide	153	0.08										153.16		
7782505	Chlorine	28	0.01									28.33			
108907	Chlorobenzene	0	0.00			0.07									
67663	Chloroform	0	0.00			0.08									
Cr Cmpd	Chromium Compounds	27	0.01	2.19	24.60		0.02								
7440484	Cobalt Compounds	0	0.00	0.13			0.00								
1319773	Cresols/Cresylic acid (isomers and mixture)	6	0.00					0.75	0.57	4.82					0.04
98828	Cumene	172	0.09					116.47	21.38	33.53					0.85
100414	Ethyl benzene	914	0.46	5.19		0.14	15.78	400.83	78.58	190.96	221.61			0.32	0.68
106934	Ethylene dibromide (Dibromoethane)	22	0.01			0.11					22.13				
107062	Ethylene dichloride (1,2-Dichloroethane)	12	0.01			0.06					12.13				
75343	Ethylidene dichloride (1,1-Dichloroethane)	0	0.00			0.06									
50000	Formaldehyde	1,569	0.78	23.73	1,416.86	115.22	11.77								
GlycolEth	Glycol ethers	4	0.00					0.00	0.00	4.23					0.00
110543	Hexane	950	0.48	9.68		0.00	0.32	216.04	371.79	341.05	10.72				0.55
7647010	Hydrochloric acid	517	0.26									517.25			
PbCmpd	Lead Compounds	2	0.00	2.00											
7439965	Manganese Compounds	25	0.01	1.55	23.61		0.00								
7439976	Mercury Compounds	5	0.00	2.90	2.16		0.00								
67561	Methanol	17	0.01			16.97									
108101	Methyl isobutyl ketone (Hexone)	12	0.01								12.13				
1634044	Methyl tert butyl ether	6	0.00						0.00	0.00	6.16				0.00
75092	Methylene chloride (Dichloromethane)	0	0.00			0.22									
91203	Naphthalene	319	0.16	1.18	18.20	0.55	0.12	30.16	8.52	25.26	254.88	0.05			0.07
7440020	Nickel Compounds	99	0.05	0.71	37.88		0.02								
108952	Phenol	35	0.02	6.27	10.82	0.00	0.04	1.59	5.96	10.59					0.04
7723140	Phosphorus	1	0.00	1.00			0.01								
1336363	Polychlorinated biphenyls (Aroclors)	0	0.00									0.00			
POM	Polycylic Organic Matter	3	0.00	1.44	0.61	0.81	0.03	0.00	0.00			0.00			0.00
78875	Propylene dichloride (1,2-Dichloropropane)	0	0.00			0.07									
7782492	Selenium Compounds	13	0.01	12.79			0.01								
100425	Styrene	0	0.00			0.07		0.00	0.00	0.00					0.00
108883	Toluene	2,956	1.48	4.51	78.71	1.16	0.63	374.81	710.34	786.12	881.99	14.78		1.31	0.11
75014	Vinyl chloride	0	0.00			0.08									
1330207	Xylenes (isomers and mixture)	5,630	2.81	220.90	182.03	1.15	0.37	2,831.99	332.83	826.22	1,254.13	10.78		2.02	7.28

Total HAP tpy	0.20	0.90	0.09	0.02	2.01	0.80	1.30	1.37	0.29	0.10	0.00	0.00
Max Single HAP tpy	0.11	0.71	0.06	0.01	1.42	0.36	0.41	0.63	0.26	0.08	0.00	0.00
Max Single HAP	Xylenes (isomers and mixture)	Formaldehyde	Formaldehyde	Ethyl benzene	Xylenes (isomers and mixture)	Toluene	Xylenes (isomers and mixture)	Xylenes (isomers and mixture)	Hydrochloric acid	Carbonyl sulfide	Xylenes (isomers and mixture)	Xylenes (isomers and mixture)

Table 3: External Combustion - Refinery Fuel Gas (RFG)
Kern Oil Refining

	lb/yr	tpy	
Total HAPs	403	0.20	
Max HAP	221	0.11	Xylene (total)

List of RFG Combustion Units

Permit	Type	2014 MMBtu/yr
S-37-1	Heater	284,915.1
S-37-1	Heater	404,956.7
S-37-3	Heater	56,206.0
S-37-3	Heater	34,773.0
S-37-4	Heater	65,805.0
S-37-4	Heater	19,297.0
S-37-4	Heater	19,387.0
S-37-6	Boiler	0.0
S-37-7	Flare purge	930.8
S-37-38	Heater	35,998.0
S-37-77	Heater	79,292.9
S-37-77	Heater	65,265.0
S-37-103	Boiler	92,546.0
S-37-116	Heater	42,471.0
S-37-118	Heater	85,540.0
S-37-118	Heater	54,476.0
S-37-119	Heater	94,209.0
S-37-119	Heater	61,393.0
S-37-119	Heater	23,319.0
S-37-119	Heater	46,430.0
Total MMBtu/yr		1,567,210.4

RFG External Combustion HAP Emissions Total MMBtu/yr: 1,567,210

CAS No.	Pollutant	EF lb/MMBtu	EF Source	Emissions lb/yr
75070	Acetaldehyde	2.09E-05	SJVAPCD RFG Ext Comb EFs	32.69
107028	Acrolein	3.00E-05	SJVAPCD RFG Ext Comb EFs	47.02
7440382	Arsenic	1.91E-06	SJVAPCD RFG Ext Comb EFs	3.00
71432	Benzene	2.44E-06	SJVAPCD RFG Ext Comb EFs	3.82
7440417	Beryllium	6.01E-08	SJVAPCD RFG Ext Comb EFs	0.09
7440439	Cadmium	4.47E-06	SJVAPCD RFG Ext Comb EFs	7.00
106990	1,3-Butadiene	8.44E-06	SJVAPCD RFG Ext Comb EFs	13.22
Cr Cmpd	Chromium (other than Cr^{6+})	1.40E-06	ICR Table 4-3	2.19
7440484	Cobalt	8.20E-08	ICR, Table 4-3	0.13
100414	Ethylbenzene	3.31E-06	SJVAPCD RFG Ext Comb EFs	5.19
50000	Formaldehyde	1.51E-05	SJVAPCD RFG Ext Comb EFs	23.73
110543	Hexane	6.18E-06	VCAPCD Ext Comb EFs	9.68
PbCmpd	Lead	1.28E-06	SJVAPCD RFG Ext Comb EFs	2.00
7439965	Manganese	9.90E-07	SJVAPCD RFG Ext Comb EFs	1.55
7439976	Mercury	1.85E-06	SJVAPCD RFG Ext Comb EFs	2.90
91203	Naphthalene	7.54E-07	SJVAPCD RFG Ext Comb EFs	1.18
7440020	Nickel	4.55E-07	SJVAPCD RFG Ext Comb EFs	0.71
108952	Phenol	4.00E-06	ICR, Table 4-3	6.27
7723140	Phosphorus	6.40E-07	ICR, Table 4-3	1.00
7782492	Selenium	8.13E-06	SJVAPCD RFG Ext Comb EFs	12.75
108883	Toluene	2.88E-06	SJVAPCD RFG Ext Comb EFs	4.51
1330207	Xylene (total)	1.41E-04	SJVAPCD RFG Ext Comb EFs	220.90
POM	Total PAH	9.17E-07	SJVAPCD RFG Ext Comb EFs	1.44

Notes:

- [HAP Emissions, lb/yr] = [EF, lb/MMBtu] × [Fuel Use, MMBtu/yr]
- Emission factor sources:
  - "SJVAPCD RFG Ext Comb" indicates refinery fuel gas external combustion emission factors provided and preferred by the San Joaquin Valley Air Pollution Control District. See sheet "SJVAPCD RFG Combustion".
  - "ICR, Table 4-3" indicates natural gas/refinery gas emission factors fromTable 4-3 of "Emissions Estimation Protocol for Petroleum Refineries", version 3 (April 2015), RTI International. See sheet "ICR Ext Comb".
  - "VCAPCD Ext Comb EFs" indicates the maximum of the "<10 MMBtu/hr" and "10-100 MMBtu/hr" natural gas fired external combustion equipment emission factors from "Ventura County Air Pollution Control District (VCAPCD) AB 2588 Combustion Emission Factors", May 17, 2001. See sheet "VCAPCD Comb".
  - Total chromium emissions determined from ICR Table 4-3 emission factor for total chromium, since this value is larger than the SJVAPCD RFG combustion emission factor for hexavalent chromium.

Table 4: External Combustion - Natural Gas / LPG
Kern Oil Refining

	lb/yr	tpy	
Total HAPs	6	0.00	
Max HAP	2	0.00	Toluene

List of Natural Gas/LPG Combustion Units

Permit	Type	2014 MMBtu/yr
S-37-7	Flare pilot	8,252.8
S-37-122	Incinerator	21,900.0
S-4162-3	Th Ox	9,482.5
S-4162-4	Th Ox	10,475.0
Total MMBtu/yr		50,110.3

Natural Gas/LPG Ext. Combustion HAP Emissions Total MMBtu/yr: 50,110

CAS No.	Pollutant	EF lb/MMBtu	EF Source	Emissions lb/yr
75070	Acetaldehyde	4.22E-06	VCAPCD Ext Comb EFs	0.21
107028	Acrolein	2.65E-06	VCAPCD Ext Comb EFs	0.13
7440382	Arsenic	2.00E-07	ICR Table 4-3	0.01
71432	Benzene	7.84E-06	VCAPCD Ext Comb EFs	0.39
7440417	Beryllium	1.30E-07	ICR Table 4-3	0.01
7440439	Cadmium	1.10E-06	ICR Table 4-3	0.06
Cr Cmpd	Chromium (total)	1.40E-06	ICR Table 4-3	0.07
7440484	Cobalt	8.20E-08	ICR, Table 4-3	0.00
100414	Ethylbenzene	9.31E-06	VCAPCD Ext Comb EFs	0.47
50000	Formaldehyde	1.67E-05	VCAPCD Ext Comb EFs	0.84
110543	Hexane	6.18E-06	VCAPCD Ext Comb EFs	0.31
7439965	Manganese	3.70E-07	ICR Table 4-3	0.02
7439976	Mercury	2.50E-07	ICR Table 4-3	0.01
91203	Naphthalene	2.94E-07	VCAPCD Ext Comb EFs	0.01
7440020	Nickel	2.10E-06	ICR Table 4-3	0.11
108952	Phenol	4.00E-06	ICR, Table 4-3	0.20
7723140	Phosphorus	6.40E-07	ICR, Table 4-3	0.03
7782492	Selenium	8.80E-07	ICR Table 4-3	0.04
108883	Toluene	3.59E-05	VCAPCD Ext Comb EFs	1.80
1330207	Xylene (total)	2.67E-05	VCAPCD Ext Comb EFs	1.34
POM	Total PAH	9.80E-08	VCAPCD Ext Comb EFs	0.00

Notes:

- [HAP Emissions, lb/yr] = [EF, lb/MMBtu] × [Fuel Use, MMBtu/yr]
- Emission factor sources:
  - "VCAPCD Ext Comb EFs" indicates the maximum of the "<10 MMBtu/hr" and "10-100 MMBtu/hr" natural gas fired external combustion equipment emission factors from "Ventura County Air Pollution Control District (VCAPCD) AB 2588 Combustion Emission Factors", May 17, 2001. See sheet "VCAPCD Comb".
  - "ICR, Table 4-3" indicates natural gas/refinery gas emission factors fromTable 4-3 of "Emissions Estimation Protocol for Petroleum Refineries", version 3 (April 2015), RTI International. See sheet "ICR Ext Comb".
- S-4162-3 and S-4162-4 supplemental fuel use is taken to be the max heat capacity rating (1.25 MMBtu/hr) times 2014 operating hours.

Table 5: Natural Gas / Refinery Fuel Combustion Turbines
Kern Oil Refining

	lb/yr	tpy	
Total HAPs	1,799	0.90	
Max HAP	1,417	0.71	Formaldehyde

Permit: S-37-114

Turbine 2014 fuel	423,184	MMBtu/yr
Duct Burner 2014 fuel	68,783	MMBtu/yr
Total 2014 fuel	491,967	MMBtu/yr

Turbine HAP Emissions MMBtu/yr: 491,967

CAS No.	Pollutant	EF lb/MMBtu	EF Source	Emissions lb/yr
75070	Acetaldehyde	4.10E-06	ICR, Table 4-5	2.02
7440439	Cadmium	2.90E-06	ICR, Table 4-5	1.43
Cr Cmpd	Chromium (total)	5.00E-05	ICR, Table 4-5	24.60
50000	Formaldehyde	0.00288	Solar PIL 168	1,416.86
7439965	Manganese	4.80E-05	ICR, Table 4-5	23.61
7439976	Mercury	4.40E-06	ICR, Table 4-5	2.16
91203	Naphthalene	3.70E-05	ICR, Table 4-5	18.20
7440020	Nickel	7.70E-05	ICR, Table 4-5	37.88
108952	Phenol	2.20E-05	ICR, Table 4-5	10.82
108883	Toluene	1.60E-04	ICR, Table 4-5	78.71
1330207	Xylene (total)	3.70E-04	ICR, Table 4-5	182.03
POM	Total POM	1.25E-06	ICR, Table 4-5	0.61

Notes:

- [HAP Emissions, lb/yr] = [EF, lb/MMBtu] × [Fuel Use, MMBtu/yr]
- Emission factor sources:
  - "ICR, Table 4-5" indicates natural gas/refinery fuel gas/LPG turbine with duct burner emission factors from Table 4-5 of "Emissions Estimation Protocol for Petroleum Refineries", version 3 (April 2015), RTI International. See sheet "ICR Turbines".
  - Formaldehyde EF is from Solar Product Information Letter (PIL) 168, Rev 3 (2/15/2008), for <50 MW lean-premix gas turbines burning natural gas.

Table 6: Flared Gas
Kern Oil Refining

	lb/yr	tpy	
Total HAPs	32	0.02	
Max HAP	16	0.01	Ethylbenzene

2014 MMscf/yr Flared	8.03
Flare gas HHV (Btu/scf)	1388.59

Flare Gas HAP Emissions Total MMBtu/yr: 11,147

CAS No.	Pollutant	EF lb/MMBtu	EF Source	Emissions lb/yr
75070	Acetaldehyde	4.22E-05	VCAPCD Flare EFs	0.47
107028	Acrolein	9.80E-06	VCAPCD Flare EFs	0.11
7440382	Arsenic	2.00E-07	ICR, Table 4-3	0.00
71432	Benzene	1.56E-04	VCAPCD Flare EFs	1.74
7440417	Beryllium	1.30E-07	ICR, Table 4-3	0.00
7440439	Cadmium	1.10E-06	ICR, Table 4-3	0.01
Cr Cmpd	Chromium (total)	1.40E-06	ICR, Table 4-3	0.02
7440484	Cobalt	8.20E-08	ICR, Table 4-3	0.00
100414	Ethylbenzene	1.42E-03	VCAPCD Flare EFs	15.78
50000	Formaldehyde	1.15E-03	VCAPCD Flare EFs	12.77
110543	Hexane	2.84E-05	VCAPCD Flare EFs	0.32
7439965	Manganese	3.70E-07	ICR, Table 4-3	0.00
7439976	Mercury	2.50E-07	ICR, Table 4-3	0.00
91203	Naphthalene	1.08E-05	VCAPCD Flare EFs	0.12
7440020	Nickel	2.10E-06	ICR, Table 4-3	0.02
108952	Phenol	4.00E-06	ICR, Table 4-3	0.04
7723140	Phosphorus	6.40E-07	ICR, Table 4-3	0.01
7782492	Selenium	8.80E-07	ICR, Table 4-3	0.01
108883	Toluene	5.69E-05	VCAPCD Flare EFs	0.63
1330207	Xylene (total)	2.84E-05	VCAPCD Flare EFs	0.32
POM	Total PAH	2.94E-06	VCAPCD Flare EFs	0.03

Notes:

- [HAP Emissions, lb/yr] = [EF, lb/MMBtu] × [Fuel Use, MMBtu/yr]
- Flare gas HHV is the average of weekly flare gas samples.
- Emission factor sources:
  - "VCAPCD Flare EFs" indicates the "flare" emission factors from the natural gas fired external combustion equipment table in "Ventura County Air Pollution Control District (VCAPCD) AB 2588 Combustion Emission Factors", May 17, 2001. See sheet "VCAPCD Comb".
  - "ICR, Table 4-3" indicates natural gas/refinery gas emission factors fromTable 4-3 of "Emissions Estimation Protocol for Petroleum Refineries", version 3 (April 2015), RTI International. See sheet "ICR Ext Comb".

Table 7: Internal Combustion Engines - Natural Gas, Diesel
Kern Oil Refining

	lb/yr	tpy	
Total HAPs	182	0.09	
Max HAP	115	0.06	Formaldehyde

List of Internal Combustion Engines

Permit	Fuel	Control	2014 hr/yr	HP	HAP Control Eff.	MMBtu/yr
S-37-80	Diesel	Emergency	5.9	471	0.0%	19.5
S-37-81	Diesel	Emergency	60.97	225	0.0%	96.0
S-37-123	Diesel	Emergency	35.6	481	0.0%	119.9
S-37-82	NG	Emergency	3.4	60	0.0%	1.4
S-37-83	NG	Emergency	22.7	150	0.0%	23.8
S-37-84	NG	OxCat	7421.1	165	96.0%	8,571.4
S-37-85	NG	OxCat	7317.6	165	85.1%	8,451.8
S-37-86	NG	OxCat	2653.5	165	93.8%	3,064.8
S-37-87	NG	OxCat	8561.8	120	85.0%	7,191.9
S-37-88	NG	OxCat	8246.3	120	85.0%	6,926.9
S-37-92	NG	NSCR	296.2	180	90.6%	373.2
S-37-100	NG	NSCR	8528.3	180	90.0%	10,745.7
S-37-101	NG	NSCR	3399.7	180	90.0%	4,283.6

From AP-42 section 3.4:

BSFC	7000	Btu/hp-hr
Diesel HHV	19300	Btu/lb
NG HHV	1050	Btu/scf

February 10-12, 2014 Formaldehyde Source Test Results:

Permit	Outlet ppm @ 15% O2	Formaldehyde Reduction
S-37-92	0.30	90.6%
S-37-84	0.12	96.0%
S-37-85	0.15	85.1%
S-37-86	0.10	93.8%

Engine Fuel:	Diesel	NG	NG	
Engine Type(5):	Emergency	Emergency	Non-Emergency	
Control Technology:	-	-	NSCR or OxCat	
Total fuel use, MMBtu/yr:	235.34525	25.263	49,609	
EF Category:	Diesel, O2 not specified	NG, Rich, 4-Stroke	NG, Rich, 4-Stroke	

CAS No.	Pollutant	EF lb/MMBtu	EF lb/MMBtu	EF lb/MMBtu	Control Eff	EF Source	Emissions lb/yr
75070	Acetaldehyde	7.70E-04	2.80E-03	2.80E-03	89%	ICR, Table 4-4	15.51
107028	Acrolein	9.30E-05	2.60E-03	2.60E-03	89%	ICR, Table 4-4	14.25
71432	Benzene	9.30E-04	1.60E-03	1.60E-03	89%	ICR, Table 4-4	8.98
92524	Biphenyl	-	-	-	89%	ICR, Table 4-4	-
106990	1,3-Butadiene	3.90E-05	6.60E-04	6.60E-04	89%	ICR, Table 4-4	3.62
56235	Carbon tetrachloride	-	1.80E-05	1.80E-05	89%	ICR, Table 4-4	0.10
108907	Chlorobenzene	-	1.30E-05	1.30E-05	89%	ICR, Table 4-4	0.07
75003	Chloroethane	-	-	-	89%	ICR, Table 4-4	-
67663	Chloroform	-	1.40E-05	1.40E-05	89%	ICR, Table 4-4	0.08
75343	1,1-Dichloroethane	-	1.10E-05	1.10E-05	89%	ICR, Table 4-4	0.06
107062	1,2-Dichloroethane	-	1.10E-05	1.10E-05	89%	ICR, Table 4-4	0.06
78875	1,2-Dichloropropane	-	1.30E-05	1.30E-05	89%	ICR, Table 4-4	0.07
542756	1,3-Dichloropropene	-	1.30E-05	1.30E-05	89%	ICR, Table 4-4	0.07
100414	Ethylbenzene	-	2.50E-05	2.50E-05	89%	ICR, Table 4-4	0.14
106934	Ethylene dibromide	-	2.10E-05	2.10E-05	89%	ICR, Table 4-4	0.11
50000	Formaldehyde	1.20E-03	2.10E-02	2.10E-02	89%	ICR, Table 4-4	115.22
110543	n-Hexane	-	-	-	89%	ICR, Table 4-4	-
67561	Methanol	-	3.10E-03	3.10E-03	89%	ICR, Table 4-4	16.97
75092	Methylene chloride	-	4.10E-05	4.10E-05	89%	ICR, Table 4-4	0.22
91203	Naphthalene	8.50E-05	9.70E-05	9.70E-05	89%	ICR, Table 4-4	0.55
108952	Phenol	-	-	-	89%	ICR, Table 4-4	-
100425	Styrene	-	1.20E-05	1.20E-05	89%	ICR, Table 4-4	0.07
79345	1,1,2,2-Tetrachloroethane	-	2.50E-05	2.50E-05	89%	ICR, Table 4-4	0.14
108883	Toluene	4.10E-04	5.60E-04	5.60E-04	89%	ICR, Table 4-4	3.16
79005	1,1,2-Trichloroethane	-	1.50E-05	1.50E-05	89%	ICR, Table 4-4	0.08
540841	2,2,4-Trimethylpentane	-	-	-	89%	ICR, Table 4-4	-
75014	Vinyl chloride	-	7.20E-06	7.20E-06	89%	ICR, Table 4-4	0.04
1330207	Xylene (total)	2.90E-04	2.00E-04	2.00E-04	89%	ICR, Table 4-4	1.16
POM	Total POM	1.70E-04	1.40E-04	1.40E-04	89%	ICR, Table 4-4	0.81

Notes:

- [HAP Emissions, lb/yr] = [EF, lb/MMBtu] × [Fuel Use, MMBtu/yr]
- HAP control efficiency for engines with NSCR or oxidation catalyst is the average of the individual engine control efficiencies, weighted by MMBtu
  - Use control efficiencies determined in Feb. 2014 source tests, for the engines tested. Assume formaldehyde control efficiency is valid for the other hydrocarbon HAPs.
  - Assume 85% control for oxidation catalysts not source tested, and 90% control for NSCRs not source tested.
- Emission factor sources:
  - "ICR, Table 4-4" indicates internal combustion engine emission factors from Table 4-4 of "Emissions Estimation Protocol for Petroleum Refineries", version 3 (April 2015), RTI International. See sheet "ICR IC Engines".

Table 8: Loading
Kern Oil Refining

	lb/yr	tpy	
Total HAPs	4,020	2.01	
Max HAP	2,832	1.42	Xylenes (isomers and mixture)

List of Loading Operations - Loading Losses

Permit	S-17-8	S-17-8	S-17-93	S-17-94	S-17-138	S-17-141
Rack ID	A	A,K,L	C	W	X	Y
Loaded Liquid	Gasoline	Diesel	AGO	IC747	IC747 / kerosene	AGO
Control	VRS	VRS	None	None	None	None
Top/Bottom Loading	Bottom	Bottom	Top	Top	Top	Top
Throughput, gal/yr	232,663,410	264,902,400	179,805,570	193,290,000	8,400,840	58,836,540
Basis	ICR reported capacity (PES, TM 1A)	ICR reported capacity (PES, TM 1A)	ICR reported capacity (PES, TM 1A)	ICR reported capacity (PES, TM 1A)	Permit limit	ICR reported capacity (PES, TM 1A)
TVP, psia	6.391	0.009	0.006578947	0.055	0.006578947	0.006578947
Basis	Max TVP base fuel sampling + 10%	From Kern MSDS, 0.009 psia @ 70 deg F	From AGO @321, 5 mm/g @ 100 deg F	Max TVP base fuel sampling + 10%	From Kern MSDS, 0.5 mm/g @ 100 deg F	From AGO @321, 5 mm/g @ 100 deg F
MWv	66	130	130	130	130	130
MWv Basis	Tesoro gasoline	Tesoro diesel	Tesoro diesel	Tesoro jet kerosene	Tesoro jet kerosene	Tesoro diesel
S (AP-42, Tbl 5.2-1)	1	1	1	1	1	1
Temperature, degF	67.63	67.63	67.63	67.63	67.63	67.63
Temperature, degR	527.63	527.63	527.63	527.63	527.63	527.63
Collection Eff.	99.2%	99.2%	0.0%	0.0%	0.0%	0.0%
Control Eff.	100%	100%	0%	0%	0%	0%
VOC Loading Loss, lb/yr	18,540	59	3,632	33,650	17	1,188
HAP Speciations	Gasoline 94 10007 (Sample) (Gas/Vapor)	Diesel (PES) (Gas/Vapor)	Atmospheric Gas Oil (AGO) (PES) (Gas/Vapor)	IC 747-1021 (Sample) (Gas/Vapor)	K-1 (Sample) (Gas/Vapor)	Atmospheric Gas Oil (AGO) (PES) (Gas/Vapor)
CAS No.	**Pollutant**	**Weight %**					
71432	Benzene	0.3241%	-	-	-	0.7604%	-
92524	Biphenyl	-	0.0013%	0.0014%	-	-	0.0014%
106990	1,3-Butadiene	-	-	-	-	-	-
1319773	Cresols/Cresylic acid (isomers a	-	0.0147%	0.0094%	-	-	0.0094%
98828	Cumene	0.0042%	0.2630%	0.2197%	0.3068%	0.2827%	0.2197%
100414	Ethyl benzene	0.0494%	0.7029%	-	1.1392%	0.8773%	-
GlycolEth	Glycol ethers	-	-	-	-	-	-
110543	Hexane	1.0876%	6.4020%	-	-	3.8994%	-
91203	Naphthalene	0.0002%	0.1012%	0.0191%	0.0206%	0.0269%	0.0191%
POM	Polycyclic Organic Matter	-	-	-	-	-	-
108952	Phenol	-	0.1912%	0.0103%	-	-	0.0103%
100425	Styrene	-	-	-	-	-	-
108883	Toluene	0.5947%	3.5587%	-	0.6884%	1.1485%	-
540841	2,2,4-Trimethylpentane	-	1.5264%	-	-	-	-
1330207	Xylenes (isomers and mixture)	0.2200%	2.4687%	1.8819%	7.8918%	6.3357%	1.8819%
CAS No.	**Pollutant**	**Emissions (lb/year)**					
71432	Benzene	60.5	-	-	-	0.1	-
92524	Biphenyl	-	0.0	0.0	-	-	0.0
106990	1,3-Butadiene	-	-	-	-	-	-
1319773	Cresols/Cresylic acid (isomers a	-	0.0	0.0	-	-	0.1
98828	Cumene	0.8	0.2	0.0	103.2	0.0	2.6
100414	Ethyl benzene	9.2	0.4	-	383.3	0.1	-
GlycolEth	Glycol ethers	-	-	-	-	-	-
110543	Hexane	203.0	3.7	-	-	0.7	-
91203	Naphthalene	0.0	0.1	0.7	7.0	0.0	0.2
POM	Polycyclic Organic Matter	-	-	-	-	-	-
108952	Phenol	-	0.2	0.4	-	-	0.1
100425	Styrene	-	-	-	-	-	-
108883	Toluene	110.9	2.1	-	231.7	0.2	-
540841	2,2,4-Trimethylpentane	-	0.9	-	-	-	-
1330207	Xylenes (isomers and mixture)	40.8	1.4	68.3	2655.6	1.1	22.4

List of Loading Operations - Drainage Emissions

Permit	S-17-8	S-17-8	S-17-93	S-17-94	S-17-138	S-17-141	S-17-307	
Rack ID	A	A,K,L	C	W	X	Y	V	
Loaded Liquid	Gasoline	Diesel	AGO	IC747	IC747 / kerosene	AGO	LPGs	
Disconnects/day				144			56	
Disconnects/yr	33573	38225	25946	52560	1212	8490	20440	
Throughput, gal/yr	232,663,410	264,902,400	179,805,570		8,400,840	58,836,540		
Basis	ICR reported capacity (PES, TM 1A)	ICR reported capacity (PES, TM 1A)	ICR reported capacity (PES, TM 1A)		Permit limit	ICR reported capacity (PES, TM 1A)		
mL/disconnect	10	10	10	10	10	10	10	
Density, lb/gal	5.6	7.1	7.1	7	7	7.1	4.8	
Basis	Estimated 1 disconnect /165 bbl throughput	Estimated 1 disconnect /165 bbl throughput	Estimated 1 disconnect /165 bbl throughput	Permit limit	Estimated 1 disconnect /165 bbl throughput	Estimated 1 disconnect /165 bbl throughput	Permit limit	
Evaporated %	100%	50%	50%	50%	50%	50%	100%	
VOC Drainage, lb/yr	497	358	243	486	11	80	261	
HAP Speciations	Gasoline 94 10007 (Sample)	Diesel (PES)	Atmospheric Gas Oil (AGO) (PES)	IC 747-1021 (Sample)	K-1 (Sample)	Atmospheric Gas Oil (AGO) (PES)		
Pollutant				**Weight %**				
Benzene	0.9700%	-	-	-	0.0043%	-	-	
Biphenyl		0.0710%	0.0770%			0.0770%	-	
1,3-Butadiene							-	
Cresols/Cresylic acid (isomers and	-	0.0500%	0.0320%			0.0320%	-	
Cumene	0.2300%	0.0240%	0.0200%	0.0280%	0.0370%	0.0200%	-	
Ethyl benzene	1.5000%	0.0790%	-	0.0420%	0.0520%	-	-	
Glycol ethers	-	-	-	-	-	-	-	
Hexane	2.0000%	0.0160%	-	-	0.0140%	-	-	
Naphthalene	0.2500%	0.1700%	0.0320%	0.0550%	0.0650%	0.0320%	-	
Polycyclic Organic Matter		-	-			-	-	
Phenol		0.2600%	0.0140%			0.0560%	-	
Styrene		-	-			-	-	
Toluene	6.1000%	0.0500%	-	0.0096%	0.0230%	-	-	
2,2,4-Trimethylpentane		0.0120%	-			-	-	
Xylenes (isomers and mixture)	8.0000%	0.1220%	0.0930%	0.3900%	0.4500%	0.0930%	-	
Pollutant				**Emissions (lb/year)**				
Benzene	4.8	-	-	-	0.0	-	-	
Biphenyl	-	0.3	0.2	-	-	0.1	-	
1,3-Butadiene	-	-	-	-	-	-	-	
Cresols/Cresylic acid (isomers and	-	0.2	0.1	-	-	0.0	-	
Cumene	1.4	0.1	0.0	0.1	0.0	0.0	-	
Ethyl benzene	7.5	0.3	-	0.2	0.0	-	-	
Glycol ethers	-	-	-	-	-	-	-	
Hexane	9.9	0.3	-	-	0.0	-	-	
Naphthalene	1.2	0.6	0.1	0.2	0.0	0.0	-	
Polycyclic Organic Matter	-	-	-	-	-	-	-	
Phenol	-	0.9	0.0	-	-	0.0	-	
Styrene	-	-	-	-	-	-	-	
Toluene	30.3	0.2	-	0.0	0.0	-	-	
2,2,4-Trimethylpentane	-	0.0	-	-	-	-	-	
Xylenes (isomers and mixture)	39.7	0.4	0.2	1.9	0.1	0.3	-	

Total Loading Emissions lb/yr
65.4
0.8
-
0.7
116.5
400.8
-
216.0
10.2
1.6
-
374.8
0.9
2832.0

Notes:

- Total emissions from loading operations taken to be the loading losses (including uncaptured fraction for controlled loading racks) plus excess drainage emissions upon disconnect. Emissions are estimated conservatively high based on rack throughput limits or capacity.
- VOC loading losses calculated based on AP-42 section 5.2 (6/2008), Equation 1 and additional guidance in section 5.2:

  [VOC, lb/yr] = [S] x [P, psia] x [MW_v, lb/lb-mol] / [T, degR] x (1 - [Capture Eff.] x [Control Eff.]) x [Throughput, gal/yr]/1000
- VOC drainage emissions based on 10 mL excess drainage per disconnect, per SIVAPCD Rule 4624, times the estimated number of disconnects based on annual throughput.
  - For lighter materials, it is assumed that the entire excess drainage volume evaporated and is emitted to the air; for heavier materials (diesel, gas oils), it is conservatively assumed that 50% evaporates and is emitted to the air.
- HAP emissions are calculated by applying the vapor and liquid material HAP compositions as follows:

  [HAP Emissions, lb/yr] = [VOC loading losses, lb/yr] x [HAP Wt%]$_{vap}$ + [VOC drainage emissions, lb/yr] x [HAP Wt%]$_{liq}$

Table 9: Cooling Towers
Kern Oil Refining

	lb/yr	tpy	
Total HAPs	2,737	1.37	
Max HAP	1,254	0.63	Xylenes (isomers and mixture)

Op Hrs	8760	hr/yr

HAP Speciation			Concentration of Air-Strippable Compounds in CT Water (ppmw)											
			71432	106990	75150	106934	107062	100414	110543	108101	1634044	91203	108883	1330207
Cooling Tower	CT ID No.	Circ. Rate gpm	Benzene	1,3-Butadiene	Carbon disulfide	Ethylene dibromide (Dibromoethane)	Ethylene dichloride (1,2-Dichloroethane)	Ethyl benzene	Hexane	Methyl isobutyl ketone (Hexone)	Methyl tert butyl ether	Naphthalene	Toluene	Xylenes (isomers and mixture)
Cooling Tower #1	1	4000	0.0003	0.0002	0.0002	0.0004	0.0002	0.0005	0.0002	0.0002	0.0001	0.0044	0.0009	0.0038
Cooling Tower #2	2	1600	0.0050	0.0008	0.0008	0.0019	0.0011	0.0302	0.0009	0.0011	0.0005	0.0225	0.1233	0.1687
Cooling Tower #3	3	1250	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0022	0.0001	0.0002
LRU Cooling Tower	4	800	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0022	0.0001	0.0007

HAP Emissions			Pounds/Year											
			71432	106990	75150	106934	107062	100414	110543	108101	1634044	91203	108883	1330207
Cooling Tower	CT ID No.	Circ. Rate gpm	Benzene	1,3-Butadiene	Carbon disulfide	Ethylene dibromide (Dibromoethane)	Ethylene dichloride (1,2-Dichloroethane)	Ethyl benzene	Hexane	Methyl isobutyl ketone (Hexone)	Methyl tert butyl ether	Naphthalene	Toluene	Xylenes (isomers and mixture)
Cooling Tower #1	1	4000	5.26	3.51	3.51	7.02	3.51	8.77	3.51	3.51	1.75	77.20	15.79	66.67
Cooling Tower #2	2	1600	35.09	5.61	5.61	13.33	7.72	211.94	6.32	7.72	3.51	157.90	865.30	1183.90
Cooling Tower #3	3	1250	0.55	0.55	0.55	1.10	0.55	0.55	0.55	0.55	0.55	12.06	0.55	1.10
LRU Cooling Tower	4	800	0.35	0.35	0.35	0.70	0.35	0.35	0.35	0.35	0.35	7.72	0.35	2.46
Total Cooling Tower Emissions, lb/yr			41.25	10.02	10.02	22.15	12.13	221.61	10.72	12.13	6.16	254.88	881.99	1254.13

Notes:

- Concentrations of air-strippable HAP compounds in the cooling tower water were obtained by performing the Modified El Paso method on water samples from each cooling tower, per the ICR, Table 8-1.
- Circulation rate is the design capacity of the cooling tower pumps.
- [HAP Emissions, lb/yr] = ([HAP strippable concentration in water, ppmw]/10^6) x [Water Circulation Rate, gal/min] x [60 min/hr] x [8760 hr/yr] x [8.345 lb/gal]

Table 10: Sulfur Recovery
Kern Oil Refining

	lb/yr	tpy	
Total HAPs	204	0.10	
Max HAP	153	0.08	Carbonyl sulfide

Natural gas combustion at the incinerator is included in the natural gas external combustion emission calculations.

Sulfur Production - 2014	1278	LT/yr
Sulfur Production - 2014	3.50	LT/day

CAS No.	Pollutant	EF lb/LT	EF Source	lb/year
463581	Carbonyl sulfide	1.20E-01	ICR, Table 5-7	153.4
75150	Carbon disulfide	4.00E-02	ICR, Table 5-7	51.1

Notes:

- [HAP Emissions, lb/yr] = [HAP EF, lb/LT sulfur] × [Sulfur Production, LT sulfur/yr]
- Sulfur recovery emission factors are from Table 5-7 of "Emissions Estimation Protocol for Petroleum Refineries", version 3 (April 2015), RTI International.

Table 11: Remediation
Kern Oil Refining

	lb/yr	tpy	
Total HAPs	4	0.00	
Max HAP	2	0.00	Mixed Xylenes

Thermal Oxidizer No. 1 Outlet

		Concentration (ppmv)												
Chemical	**CAS No.**	**Jan 2014**	**Feb 2014**	**Mar 2014**	**Apr 2014**	**May 2014**	**Jun 2014**	**Jul 2014**	**Aug 2014**	**Sep 2014**	**Oct 2014**	**Nov 2014**	**Dec 2014**	**Annual Avg**
Sample Results Collected:														
Benzene		ND	0.0014	0.00084	0.0011	ND	ND	0.00099	0.0012	0.0044	0.00074	ND	ND	
Toluene		0.0013	ND	0.0028	0.0033	0.00054	0.0018	0.0076	0.0046	0.022	0.0013	ND	0.0019	
Ethylbenzene		ND	ND	ND	ND	ND	0.00076	0.0029	0.0026	0.0047	0.00092	ND	ND	
p/m-Xylene		ND	ND	ND	ND	ND	0.0037	0.013	0.013	0.018	0.0034	ND	ND	
o-Xylene		ND	ND	ND	ND	ND	0.0014	0.0057	0.0061	0.0071	0.0017	ND	ND	
TPH as Gasoline		ND	ND	ND	ND	1.7	1.7	ND	ND	47	2.6	12	ND	
Sample Results with ND = 1/2 Detection Limit:														
Benzene	71432	0.00025	0.0014	0.00084	0.0011	0.00025	0.00025	0.00099	0.0012	0.0044	0.00074	0.00025	0.00025	9.93E-04
Toluene	108883	0.0013	0.00025	0.0028	0.0033	0.00054	0.0018	0.0076	0.0046	0.022	0.0013	0.00025	0.0019	3.97E-03
Ethylbenzene	100414	0.00025	0.00025	0.00025	0.00025	0.00025	0.00076	0.0029	0.0026	0.0047	0.00092	0.00025	0.00025	1.14E-03
p/m-Xylene	See below	0.001	0.001	0.001	0.001	0.001	0.0037	0.013	0.013	0.018	0.0034	0.001	0.001	4.84E-03
o-Xylene	See below	0.00025	0.00025	0.00025	0.00025	0.00025	0.0014	0.0057	0.0061	0.0071	0.0017	0.00025	0.00025	1.98E-03
Mixed Xylenes	1330207	0.00125	0.00125	0.00125	0.00125	0.00125	0.0051	0.0187	0.0191	0.0251	0.0051	0.00125	0.00125	6.82E-03
TPH as Gasoline		0.75	0.75	0.75	0.75	1.7	1.7	0.75	0.75	47	2.6	12	0.75	5.85E+00

	Jan 2014	Feb 2014	Mar 2014	Apr 2014	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Annual Avg
Avg Influent Flow Rate (scfm)	305.65	313.56	333.75	328.97	348.82	390.22	414.96	395.4	378.13	365.39	394.8	389.23	363.24

Thermal Oxidizer No. 2 Outlet

		Concentration (ppmv)												
Chemical	**CAS No.**	**Jan 2014**	**Feb 2014**	**Mar 2014**	**Apr 2014**	**May 2014**	**Jun 2014**	**Jul 2014**	**Aug 2014**	**Sep 2014**	**Oct 2014**	**Nov 2014**	**Dec 2014**	**Annual Avg**
Sample Results Collected:														
Benzene		0.00068	0.0027	0.00095	0.0005	0.0022	0.0013	0.013	0.011	0.018	0.0022	0.0011	ND	
Toluene		0.00069	0.0042	0.0033	ND	0.0029	0.0046	0.065	0.041	0.099	0.00089	0.0015	ND	
Ethylbenzene		ND	0.00063	ND	ND	0.00079	ND	0.014	0.016	0.012	ND	ND	ND	
p/m-Xylene		ND	0.0033	ND	ND	0.003	ND	0.059	0.084	0.056	ND	ND	ND	
o-Xylene		ND	0.00063	0.0005	ND	0.0012	0.0012	0.023	0.031	0.017	ND	ND	ND	
TPH as Gasoline		ND	ND	ND	ND	1.8	ND	ND	ND	24	ND	43	ND	
Sample Results with ND = 1/2 Detection Limit:														
Benzene	71432	0.00068	0.0027	0.00095	0.0005	0.0022	0.0013	0.013	0.011	0.018	0.0022	0.0011	0.00025	5.59E-03
Toluene	108883	0.00069	0.0042	0.0033	0.00025	0.0029	0.0046	0.065	0.041	0.099	0.00089	0.0015	0.00025	2.45E-02
Ethylbenzene	100414	0.00025	0.00063	0.00025	0.00025	0.00079	0.00025	0.014	0.016	0.012	0.00025	0.00025	0.00025	4.94E-03
p/m-Xylene	See below	0.001	0.0033	0.001	0.001	0.003	0.001	0.059	0.084	0.056	0.001	0.001	0.001	2.33E-02
o-Xylene	See below	0.00025	0.00063	0.0005	0.00025	0.0012	0.0012	0.023	0.031	0.017	0.00025	0.00025	0.00025	8.34E-03
Mixed Xylenes	1330207	0.00125	0.00393	0.0015	0.00125	0.0042	0.0022	0.082	0.115	0.073	0.00125	0.00125	0.00125	3.16E-02
TPH as Gasoline		0.75	0.75	0.75	0.75	1.8	0.75	0.75	0.75	24	0.75	43	0.75	3.45E+00

	Jan 2014	Feb 2014	Mar 2014	Apr 2014	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Annual Avg
Avg Influent Flow Rate (scfm)	344.12	368.23	365.53	361.73	386.12	396.37	368.17	373.39	407.66	406.1	409.18	411.24	383.15

2014 Emissions

	ThOx 1	ThOx 2
Operating Hrs	7586	8380
Avg Influent Flow Rate (scfm)	363.24	383.15
Influent Flow Rate (MMscf/yr)	165.332	192.649

			ThOx 1	ThOx 2	Combined
Chemical	**CAS No.**	**MW**	**lb/year**	**lb/year**	**lb/year**
Benzene	71432	78.1118	0.03	0.22	0.26
Toluene	108883	92.1384	0.16	1.15	1.31
Ethylbenzene	100414	106.165	0.05	0.27	0.32
Mixed Xylenes	1330207	106.165	0.32	1.70	2.02

Notes:

- Monthly thermal oxidizer outlet concentration samples taken.
- Where concentrations were below detection limits, 1/2 of the detection limit is used.
- HAP outlet concentrations taken to be the arithmetic average of monthly results determined as described above
- [HAP Emissions, lb/yr] = [Flow rate (MMscf/yr)] x [HAP conc (ppm)] x [MW lb/lb-mol] / [379.4 scf/lb-mol]

Table 12: CRU Regeneration
Kern Oil Refining

	lb/yr	tpy	
Total HAPs	577	0.29	
Max HAP	517	0.26	Hydrogen chloride

Natural gas combustion at the incinerator is included in the natural gas external combustion emission calculations.

No regeneration events in 2014.

Platformer Unit 2014 Production	748,663	bbl
Reformer Unit 2014 Production	790,784	bbl
Total CRU 2014 Production	1,539,447	bbl

Mbbl/yr: 1,539

CAS No.	Chemical Name	EF lb/1000 bbl	EF Source	Control Eff.	lb/year
1746016	Dioxin toxic equivalents (TEQ)	5.70E-09	ICR, Table 5-6	0%	0.0
1336363	Total polychlorinated biphenyls	2.60E-06	ICR, Table 5-6	0%	0.0
91203	Naphthalene	3.50E-05	ICR, Table 5-6	0%	0.1
71432	Benzene	4.00E-03	ICR, Table 5-6	0%	6.2
108883	Toluene	9.60E-03	ICR, Table 5-6	0%	14.8
1330207	Xylene	7.00E-03	ICR, Table 5-6	0%	10.8
7647010	Hydrogen chloride	4.20E+00	ICR, Table 5-6	92%	517.3
7782505	Chlorine	2.30E-01	ICR, Table 5-6	92%	28.3
POM	Total POM	2.40E-06	ICR, Table 5-6	0%	0.0

Notes:

- There were no regeneration events (and no HAP emissions from the CRU) in 2014.
- Emissions associated with actual 2014 production haves been calculated and included for emission inventory completeness.
- [HAP Emissions, lb/yr] = [HAP EF, lb/1000 bbl production] × [Unit Production, 1000 bbl/yr]
- HCl and Cl control efficiency based on footnote "d" of ICR Table 5-6 for direct caustic injection.
- Catalytic regeneration emission factors are from Table 5-6 of "Emissions Estimation Protocol for Petroleum Refineries", version 3 (April 2015), RTI International.

Table 13: Tank Degassing
Kern Oil Refining

	lb/yr	tpy	
Total HAPs	10	0.00	
Max HAP	7	0.00	Xylenes (isomers and mixture)

HAP Speciation

						Wt %															
						71432	92524	106990	1319773	98828	100414	GlycolEth	1634044	110543	91203	POM	108952	100425	108883	540841	1330207
Tank ID	Volume (gal)	Tank Contents	Speciation	MWv lb/lb-mol	VOC lbs to Atmos.	Benzene	Biphenyl	1,3-Butadiene	Cresylic/Cresylic acid (isomers and mixture)	Cumene	Ethyl benzene	Glycol ethers	Methyl tert butyl ether	Hexane	Naphthalene	Polycylic Organic Matter	Phenol	Styrene	Toluene	2,2,4-Trimethylpentane	Xylenes (isomers and mixture)
Tank 10004	420,000	Sour Water	Sour Water (Sample) [Gas/Vapor]	130	96.3	0.6184%	-	-	0.0006%	0.0000%	0.0008%	-	-	0.0680%	0.0000%	-	0.0004%	-	0.0330%	-	0.0038%
Tank 20001	840,000	Hvy Distillate	Heavy Distillate (PERF) [Gas/Vapor]	130	192.6	-	0.0014%	-	0.0094%	0.2192%	-	-	-	-	0.0191%	-	0.0103%	-	-	-	1.8819%
Tank 3012	126,000	Oil / Water	Sour Water (Sample) [Gas/Vapor]	130	28.9	0.6184%	-	-	0.0006%	0.0000%	0.0008%	-	-	0.0680%	0.0000%	-	0.0004%	-	0.0330%	-	0.0038%
Tank 20001	840,000	Hvy Distillate	Heavy Distillate (PERF) [Gas/Vapor]	130	192.6	-	0.0014%	-	0.0094%	0.2192%	-	-	-	-	0.0191%	-	0.0103%	-	-	-	1.8819%
Tank 80000	1,050,000	Crude	Crude Oil TK74001 (Sample) [Gas/Vapor]	50	92.6	0.0537%	-	-	-	0.0012%	0.0080%	-	-	0.4999%	0.0001%	-	-	-	0.0708%	-	0.0319%

HAP Emissions

						Pounds/Year															
						71432	92524	106990	1319773	98828	100414	GlycolEth	1634044	110543	91203	POM	108952	100425	108883	540841	1330207
Tank ID	Volume (gal)	Tank Contents	Speciation	MWv lb/lb-mol	VOC lbs to Atmos.	Benzene	Biphenyl	1,3-Butadiene	Cresylic/Cresylic acid (isomers and mixture)	Cumene	Ethyl benzene	Glycol ethers	Methyl tert butyl ether	Hexane	Naphthalene	Polycylic Organic Matter	Phenol	Styrene	Toluene	2,2,4-Trimethylpentane	Xylenes (isomers and mixture)
Tank 10004	420,000	Sour Water	Sour Water (Sample) [Gas/Vapor]	130	96.3	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tank 20001	840,000	Hvy Distillate	Heavy Distillate (PERF) [Gas/Vapor]	130	192.6	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6
Tank 3012	126,000	Oil / Water	Sour Water (Sample) [Gas/Vapor]	130	28.9	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tank 20001	840,000	Hvy Distillate	Heavy Distillate (PERF) [Gas/Vapor]	130	192.6	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6
Tank 80000	1,050,000	Crude	Crude Oil TK74001 (Sample) [Gas/Vapor]	50	92.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Total Degassing Emissions						0.8	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.5	0.1	0.0	0.0	0.0	0.1	0.0	7.3

Notes:

- Tank degassing emissions are minimized in accordance with SJVAPCD Rule 4623 Requirements.
- Tanks initially degas to thermal oxidizer; when VOC concentration reaches 5000 ppmv or less, tank is vented to atmosphere
- Degas stream sent to atmosphere is calculated here; degas stream sent to thermal oxidizer is included in the Remediation emissions.
- [VOC to atm, lbs] = [Vol, gal] / (7.48 gal/scf) x [5000 ppmv VOC]/10^6 / [379 scf/lb-mol] x [MWv lb/lb-mol]
- [HAP Emissions, lb] = [VOC, lbs] x [HAP Vapor Wt Fract]
- Tank 20001 was degassed in March and August 2014.
- Tank 10010 was degassed by the thermal oxidizer, but is not considered here because it is located at a separate facility.

Table 14A: Fugitive HAP Speciation Calculations - VOC Totals & HAP Weight Percents
Kern Oil Refining

HAP Speciation			Wt %																
			71432	92524	106990	75150	1319773	98828	100414	GlycolEth	1634044	110543	91203	108952	100425	108883	540841	1330207
Speciation Name	Component Counts	VOC lb/yr	Benzene	Biphenyl	1,3-Butadiene	Carbon disulfide	Cresols/Cresylic acid (isomers and mixture)	Cumene	Ethyl benzene	Glycol ethers	Methyl tert butyl ether	Hexane	Naphthalene	Phenol	Styrene	Toluene	2,2,4-Trimethylpentane	Xylenes (isomers and mixture)
Atmospheric Gas Oil (AGO) (PERF)	827	644	-	0.0770%	-	-	0.0320%	0.0200%	-	-	-	-	0.0320%	0.0140%	-	-	-	0.0930%
Atmospheric Gas Oil (AGO) (PERF) [Gas/Vapor]	16	4	-	0.0014%	-	-	0.0094%	0.2192%	-	-	-	-	0.0191%	0.0103%	-	-	-	1.8819%
B-100/B-99 (BioDiesel/BioFeed) (MSDS - Vendor)	529	633	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Butane (PERF)	587	876	-	-	0.0470%	-	-	-	-	-	-	0.1900%	-	-	-	-	-	-
Crude Oil TK74001 (Sample)	7437	3,181	0.0660%	-	-	-	-	0.0320%	0.1000%	-	-	0.3800%	0.0590%	-	-	0.3000%	-	0.4800%
Crude Oil TK74001 (Sample) [Gas/Vapor]	33	6	0.0537%	-	-	-	-	0.0012%	0.0080%	-	-	0.4999%	0.0001%	-	-	0.0708%	-	0.0319%
Diesel (PERF)	3837	3,213	-	0.0710%	-	-	0.0500%	0.0240%	0.0290%	-	-	0.0160%	0.1700%	0.2600%	-	0.0500%	0.0120%	0.1220%
Diesel (PERF) [Gas/Vapor]	47	24	-	0.0013%	-	-	0.0147%	0.2630%	0.7029%	-	-	6.4020%	0.1012%	0.1912%	-	3.5867%	1.5264%	2.4687%
Ethanol	184	89	0.0485%	-	-	-	-	0.0140%	0.0750%	-	-	0.1000%	0.0125%	-	-	0.3050%	-	0.4000%
Gasoline TK 10007 (Sample)	3722	1,955	0.9700%	-	-	-	-	0.2800%	1.5000%	-	-	2.0000%	0.2500%	-	-	6.1000%	-	8.0000%
Gasoline TK 10007 (Sample) [Gas/Vapor]	186	843	0.3261%	-	-	-	-	0.0042%	0.0494%	-	-	1.0876%	0.0002%	-	-	0.5947%	-	0.2200%
Glycol Ether EB (GEEB) (MSDS - Vendor)	65	4	-	-	-	-	-	-	-	99.0000%	-	-	-	-	-	-	-	-
HAP-free stream	4412	2,644	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Heavy Distillate (PERF)	1070	1,198	-	0.0770%	-	-	0.0320%	0.0200%	-	-	-	-	0.0320%	0.0140%	-	-	-	0.0930%
Heavy Reformate TK10005 (Sample)	846	265	1.3000%	-	-	-	-	0.7300%	5.3000%	-	-	0.3700%	0.7700%	-	-	8.1000%	-	12.0000%
JC-747 TK22 (Sample)	525	25	-	-	-	-	-	0.0280%	0.0470%	-	-	-	0.0350%	-	-	0.0096%	-	0.3900%
JC-747 TK22 (Sample) [Gas/Vapor]	40	34	-	-	-	-	-	0.3068%	1.1392%	-	-	-	0.0208%	-	-	0.6886%	-	7.8918%
K-1 (Sample)	1701	764	0.0043%	-	-	-	-	0.0370%	0.0520%	-	-	0.0140%	0.0650%	-	-	0.0230%	-	0.4500%
K-1 (Sample) [Gas/Vapor]	21	18	0.7404%	-	-	-	-	0.2822%	0.8773%	-	-	3.6934%	0.0269%	-	-	1.1485%	-	6.3387%
Light Gasoline (MSDS Average - KORC)	1	1	-	-	-	-	-	-	-	-	-	5.0000%	-	-	-	-	-	-
Light Naphtha TK5014 (Sample)	9759	10,400	2.6000%	-	-	0.0011%	-	-	0.0051%	-	-	0.8200%	-	-	-	2.0000%	-	0.0110%
Light Naphtha TK5014 (Sample) [Gas/Vapor]	1874	996	0.8741%	-	-	-	-	-	0.0002%	-	-	0.4459%	-	-	-	0.1950%	-	0.0003%
Light Reformate TK2502, Inlet (Sample)	560	169	4.5000%	-	-	-	-	0.0060%	0.1700%	-	-	2.5000%	0.0290%	-	-	9.4000%	-	0.7200%
LPG (PERF)	1054	1,285	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mid/Heavy Naphtha (Sample)	4766	5,882	0.2000%	-	-	-	-	0.2100%	1.2000%	-	-	1.3000%	0.0470%	-	-	3.2000%	-	5.5000%
Mid/Heavy Naphtha (Sample) [Gas/Vapor]	1719	2,018	0.0672%	-	-	-	-	0.0031%	0.0395%	-	-	0.7069%	0.0000%	-	-	0.3120%	-	0.1513%
Natural Gasoline (Sample)	263	432	1.3000%	-	-	-	-	0.0016%	0.0140%	-	-	2.1000%	0.0130%	-	-	0.5200%	-	0.0640%
Natural Gasoline (Sample) [Gas/Vapor]	59	20	0.4370%	-	-	-	-	0.0000%	0.0005%	-	-	1.1419%	0.0000%	-	-	0.0507%	-	0.0018%
Plat Splitter Gas (PERF)	3	2	0.6120%	-	0.0140%	-	-	-	-	-	-	0.3860%	-	-	-	-	-	-
Pre-Frac. Off Gas	955	1,121	-	-	0.0580%	-	-	-	0.5880%	-	-	0.7320%	-	-	-	-	-	-
Propane (MSDS Average - Misc Vendor)	758	439	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PS-1500 (MSDS - KORC)	248	352	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Refinery Fuel Gas (Sample)	7529	3,862	0.0148%	-	0.0000%	-	-	-	0.0022%	-	-	0.0000%	-	-	-	0.0233%	-	0.0095%
Reformer Splitter Gas (PERF)	114	44	0.6120%	-	0.0140%	-	-	-	-	-	-	0.3860%	-	-	-	-	-	-
Rich Amine (Sample)	509	27	0.0021%	-	-	0.0490%	-	0.0002%	0.0002%	-	0.0001%	0.0002%	0.0002%	-	-	0.0009%	-	0.0004%
Sour Gas (Sample)	3324	1,391	0.0576%	-	-	-	-	-	0.0007%	-	-	0.0000%	-	-	-	0.0073%	-	0.0031%
Sour water (Sample)	2672	900	0.0025%	-	-	0.0000%	0.0022%	0.0000%	0.0000%	-	-	0.0002%	0.0000%	0.0006%	-	0.0005%	-	0.0002%
Sour water (Sample) [Gas/Vapor]	38	30	0.6184%	-	-	-	0.0006%	0.0000%	0.0008%	-	-	0.0680%	0.0000%	0.0004%	-	0.0330%	-	0.0038%
SWS Acid Gas (PERF)	96	23	-	-	0.0580%	-	-	-	0.5880%	-	-	0.7320%	-	-	-	-	-	-
Toluene (PERF)	9	10	0.0770%	-	-	-	-	-	0.9360%	-	-	-	-	-	-	95.3260%	-	0.6450%
Topped Crude (PERF)	132	108	-	0.0400%	-	-	-	-	0.0800%	-	-	-	2.0000%	-	-	-	-	0.0500%
Transmix	1429	736	0.0600%	0.0497%	-	-	0.0350%	0.0798%	0.3803%	-	-	0.4012%	0.1331%	0.1820%	-	0.9950%	0.0084%	1.7354%
Transmix (Gas/Vapor)	23	167	0.3453%	0.0000%	-	-	0.0002%	0.0203%	0.2145%	-	-	3.7352%	0.0018%	0.0031%	-	1.6608%	0.0249%	0.8171%
Treated Water (PERF)	340	55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unfinate TK5007 (Sample)	4899	3,576	0.3100%	-	-	-	-	0.2600%	1.5000%	-	-	1.6000%	0.0280%	-	-	3.9000%	-	6.7000%
Unfinate TK5007 (Sample) [Gas/Vapor]	14	11	0.1042%	-	-	-	-	0.0039%	0.0494%	-	-	0.8700%	0.0000%	-	-	0.3802%	-	0.1843%
VRU Gas (Sample)	1130	3,435	0.1768%	-	0.0000%	-	-	-	0.0078%	-	-	0.0000%	-	-	-	0.2570%	-	0.0268%
Virgin Gas Oil (VGO) (PERF)	781	858	-	0.2100%	-	-	0.0320%	0.0670%	0.1700%	-	-	0.0250%	0.3150%	0.0320%	-	0.2350%	-	0.6640%
Virgin Gas Oil (VGO) (PERF) [Gas/Vapor]	66	77	-	0.0026%	-	-	0.0066%	0.5111%	2.8682%	-	-	6.9632%	0.1306%	0.0164%	-	11.7347%	-	9.3531%
Total	71,209	54,848																

Notes:

- Fugitive VOC emissions are based on 2014 LDAR results and the correlation equations of the CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities (Feb 1999), Table IV-3a.
- Speciations are assigned based on the stream type and service (gas, light liquid, heavy liquid).
- Refinery fugitive VOC emissions are lower than calculations based on the EPA Average Emission Factor Method due to the LDAR restrictions of SJVAPCD Rule 4455.

Table 14B: Fugitive HAP Speciation Calculations - HAP Mass Emissions
Kern Oil Refining

	lb/yr	tpy	
Total HAPs	2,595	1.30	
Max HAP	826	0.41	Xylenes (isomers and mixture)

HAP Emissions		Pounds/Year															
		71432	92524	106990	75150	1319773	98828	100414	Glycol Eth	1634044	110543	91203	108952	100425	108883	540841	1330207
Speciation Name	VOC lb/yr	Benzene	Biphenyl	1,3-Butadiene	Carbon disulfide	Cresols/Cresylic acid (isomers and mixture)	Cumene	Ethyl benzene	Glycol ethers	Methyl tert-butyl ether	Hexane	Naphthalene	Phenol	Styrene	Toluene	2,2,4-Trimethylpentane	Xylenes (isomers and mixture)
Atmospheric Gas Oil (AGO) (PERF)	644	0.0	0.5	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.6
Atmospheric Gas Oil (AGO) (PERF) [Gas/Vapor]	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
B-100/B-99 (BioDiesel/BioFeed) (MSDS - Vendor)	633	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Butane (PERF)	876	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0
Crude Oil TK74001 (Sample)	3,181	2.1	0.0	0.0	0.0	0.0	1.0	3.2	0.0	0.0	12.1	1.9	0.0	0.0	9.5	0.0	15.3
Crude Oil TK74001 (Sample) [Gas/Vapor]	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Diesel (PERF)	3,213	0.0	2.3	0.0	0.0	1.6	0.8	0.9	0.0	0.0	0.5	5.5	8.4	0.0	1.6	0.4	3.9
Diesel (PERF) [Gas/Vapor]	24	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.0	1.6	0.0	0.0	0.0	0.9	0.4	0.6
Ethanol	89	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.4
Gasoline TK 10007 (Sample)	1,955	19.0	0.0	0.0	0.0	0.0	5.5	29.3	0.0	0.0	39.1	4.9	0.0	0.0	119.2	0.0	156.4
Gasoline TK 10007 (Sample) [Gas/Vapor]	843	2.7	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	9.2	0.0	0.0	0.0	5.0	0.0	1.9
Glycol Ether EB (GEEB) (MSDS - Vendor)	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HAP-free stream	2,644	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Heavy Distillate (PERF)	1,198	0.0	0.9	0.0	0.0	0.4	0.2	0.0	0.0	0.0	0.0	0.4	0.2	0.0	0.0	0.0	1.1
Heavy Reformate TK10005 (Sample)	265	3.4	0.0	0.0	0.0	0.0	1.9	14.0	0.0	0.0	1.0	2.0	0.0	0.0	21.5	0.0	31.8
IC-747 TK22 (Sample)	25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
IC-747 TK22 (Sample) [Gas/Vapor]	34	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	2.7
K-1 (Sample)	764	0.0	0.0	0.0	0.0	0.0	0.3	0.4	0.0	0.0	0.1	0.5	0.0	0.0	0.2	0.0	3.4
K-1 (Sample) [Gas/Vapor]	18	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.7	0.0	0.0	0.0	0.2	0.0	1.1
Light Gasoline (MSDS Average - KORC)	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Light Naphtha TK5014 (Sample)	10,400	270.4	0.0	0.0	0.1	0.0	0.0	0.5	0.0	0.0	85.3	0.0	0.0	0.0	708.0	0.0	1.1
Light Naphtha TK5014 (Sample) [Gas/Vapor]	996	8.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.4	0.0	0.0	0.0	1.9	0.0	0.0
Light Reformate TK2502, Inlet (Sample)	169	7.6	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	4.2	0.0	0.0	0.0	15.9	0.0	1.2
LPG (PERF)	1,285	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mid/Heavy Naphtha (Sample)	5,882	11.8	0.0	0.0	0.0	0.0	12.4	70.6	0.0	0.0	76.5	2.8	0.0	0.0	188.2	0.0	323.5
Mid/Heavy Naphtha (Sample) [Gas/Vapor]	2,018	1.4	0.0	0.0	0.0	0.0	0.1	0.8	0.0	0.0	14.3	0.0	0.0	0.0	6.3	0.0	3.1
Natural Gasoline (Sample)	432	5.6	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	9.1	0.1	0.0	0.0	2.2	0.0	0.3
Natural Gasoline (Sample) [Gas/Vapor]	20	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Plat Splitter Gas (PERF)	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pre-Frac. Off Gas	1,121	0.0	0.0	0.7	0.0	0.0	0.0	6.6	0.0	0.0	8.2	0.0	0.0	0.0	0.0	0.0	0.0
Propane (MSDS Average - Misc Vendor)	439	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PS-1500 (MSDS - KORC)	352	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Refinery Fuel Gas (Sample)	3,862	0.6	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.4
Reformer Splitter Gas (PERF)	44	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Rich Amine (Sample)	27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sour Gas (Sample)	1,391	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Sour water (Sample)	900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sour water (Sample) [Gas/Vapor]	30	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SWS Acid Gas (PERF)	23	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Toluene (PERF)	10	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	9.9	0.0	0.1
Topped Crude (PERF)	108	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	2.2	0.0	0.0	0.0	0.0	0.1
Transmix	736	0.4	0.4	0.0	0.0	0.3	0.6	2.8	0.0	0.0	3.0	1.0	1.1	0.0	7.3	0.1	12.8
Transmix [Gas/Vapor]	167	0.6	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	6.2	0.0	0.0	0.0	2.8	0.0	1.4
Treated Water (PERF)	55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unfinate TK5007 (Sample)	3,576	11.1	0.0	0.0	0.0	0.0	9.3	53.6	0.0	0.0	57.2	1.0	0.0	0.0	139.5	0.0	239.6
Unfinate TK5007 (Sample) [Gas/Vapor]	11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
VRU Gas (Sample)	3,435	6.1	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	8.8	0.0	0.9
Virgin Gas Oil (VGO) (PERF)	858	0.0	1.8	0.0	0.0	0.3	0.6	1.5	0.0	0.0	0.2	2.7	0.3	0.0	2.0	0.0	5.7
Virgin Gas Oil (VGO) (PERF) [Gas/Vapor]	77	0.0	0.0	0.0	0.0	0.0	0.4	2.2	0.0	0.0	5.4	0.1	0.0	0.0	9.1	0.0	7.2
Wastewater		10.9	0.0	0.0	0.0	2.1	0.1	1.9	0.0	0.0	0.4	0.0	0.3	0.0	24.4	0.0	9.6
Total Fugitives	54,848	363.9	5.9	1.1	0.2	4.8	33.5	191.0	4.2	0.0	341.1	25.3	10.6	0.0	786.1	0.9	826.2

Notes:
- HAP emissions are calculated as follows: [HAP Emissions, lb/yr] = [VOC, lb/yr] x [HAP Wt%]
- Wastewater emissions included in fugitive totals and calculated per EPA's RWET v2-1.

Table 15: Storage Tank HAP Speciation Calculations
Kern Oil Refining

	lb/yr	tpy	
Total HAPs	1,594	0.80	
Max HAP	710	0.36	Toluene

									Pounds/Year															
								CAS No:	71432	92524	106990	1319773	98828	100414	Glycol Eth	1634044	110543	91203	POM	108952	100425	108883	540841	1330207
Tank ID	Tank Type	Tank Contents	Liquid Speciation Name	Vapor Speciation Name	TANKS Throughput bbl/d	Vapor Control Eff.	TANKS Liquid Loss VOC lb/yr	TANKS Vapor Loss VOC lb/yr	Benzene	Biphenyl	1,3-Butadiene	Cresols/Cresylic acid (isomers and mixture)	Cumene	Ethyl benzene	Glycol ethers	Methyl tert-butyl ether	Hexane	Naphthalene	Polycyclic Organic Matter	Phenol	Styrene	Toluene	2,2,4-Trimethylpentane	Xylenes (isomers and mixture)
12000	EFR	Heavy Naphtha	Mid/Heavy Naphtha (Sample)	Mid/Heavy Naphtha (Sample) [Gas/Vapor]	4,244		229	384	1	0	0	0	0	3	0	0	6	0	0	0	0	9	0	11
12001	EFR	Toluene	Toluene (PEAF)	Toluene (PEAF)	265		19	436	0	0	0	0	0	4	0	0	0	0	0	0	0	433	0	3
37000	IFR	Crude	Crude Oil TK74001 (Sample)	Crude Oil TK74001 (Sample) [Gas/Vapor]	148		22	811	0	0	0	0	0	0	0	0	4	0	0	0	0	1	0	0
80000	IFR	Crude	Crude Oil TK74001 (Sample)	Crude Oil TK74001 (Sample) [Gas/Vapor]	15,841		1,936	350	1	0	0	0	1	2	0	0	9	1	0	0	0	6	0	9
80001	EFR	Crude	Crude Oil TK74001 (Sample)	Crude Oil TK74001 (Sample) [Gas/Vapor]	23,427		2,863	1,038	2	0	0	0	1	3	0	0	16	2	0	0	0	9	0	14
55000	IFR	Crude	Crude Oil TK74001 (Sample)	Crude Oil TK74001 (Sample) [Gas/Vapor]	1		0	1,215	1	0	0	0	0	0	0	0	6	0	0	0	0	1	0	0
74000	IFR	Crude	Crude Oil TK74001 (Sample)	Crude Oil TK74001 (Sample) [Gas/Vapor]	1,584		221	961	1	0	0	0	0	0	0	0	5	0	0	0	0	1	0	1
74001	IFR	Crude	Crude Oil TK74001 (Sample)	Crude Oil TK74001 (Sample) [Gas/Vapor]	1,538		215	861	1	0	0	0	0	0	0	0	5	0	0	0	0	1	0	1
54000	EFR	Water	Diesel (PEAF)	Diesel (PEAF) [Gas/Vapor]	228		9	43	0	0	0	0	0	0	0	0	3	0	0	0	0	2	1	1
10006	Fixed	AGO	Atmospheric Gas Oil (AGO) (PERF)	Atmospheric Gas Oil (AGO) (PERF) [Gas/Vapor]	1,506		0	568	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	11
3014	Fixed	B100	HAP-free stream	HAP-free stream	110		0	71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3026	Fixed	B100	HAP-free stream	HAP-free stream	19		0	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3027	Fixed	B100	HAP-free stream	HAP-free stream	27		0	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3013	Fixed	Bio-feed	HAP-free stream	HAP-free stream	287		0	139	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
200	Fixed	Diesel	Diesel (PEAF)	Diesel (PEAF) [Gas/Vapor]	0		0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10004	Fixed	Diesel	Diesel (PEAF)	Diesel (PEAF) [Gas/Vapor]	6	95%	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16003	Fixed	Diesel	Diesel (PEAF)	Diesel (PEAF) [Gas/Vapor]	8,640		0	1,265	0	0	0	0	3	9	0	0	81	1	0	2	0	45	19	31
16004	Fixed	Diesel	Diesel (PEAF)	Diesel (PEAF) [Gas/Vapor]	8,640		0	1,251	0	0	0	0	3	9	0	0	80	1	0	2	0	45	19	31
1007	Fixed	Diesel-like	HAP-free stream	HAP-free stream	17		0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10001	Fixed	Resid	Residual Fuel Oil (PERF)	Residual Fuel Oil (PERF) [Gas/Vapor]	27		0	27	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
5061	Fixed	Resid	Residual Fuel Oil (PERF)	Residual Fuel Oil (PERF) [Gas/Vapor]	17		0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5030	Fixed	GEEB	Glycol Ether EB (GEEB) (MSDS - Vendor)	Glycol Ether EB (GEEB) (MSDS - Vendor)	18		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3018	Fixed	Kerosene	K-1 (Sample)	K-1 (Sample) [Gas/Vapor]	183		0	113	1	0	0	0	0	1	0	0	4	0	0	0	0	1	0	7
3022	Fixed	JC747	JC-747 TK22 (Sample)	JC-747 TK22 (Sample) [Gas/Vapor]	183		0	100	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	8
3023	Fixed	JC747	JC-747 TK22 (Sample)	JC-747 TK22 (Sample) [Gas/Vapor]	183		0	100	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	8
3021	Fixed	Kerosene	K-1 (Sample)	K-1 (Sample) [Gas/Vapor]	2,000		0	305	2	0	0	0	1	3	0	0	12	0	0	0	0	4	0	19
16002	Fixed	Kerosene	K-1 (Sample)	K-1 (Sample) [Gas/Vapor]	2,000		0	1,001	7	0	0	0	3	9	0	0	39	0	0	0	0	12	0	63
55001	Fixed	PS1500	HAP-free stream	HAP-free stream	11,729		0	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3019	Fixed	Sour Water	Diesel (PEAF)	Diesel (PEAF) [Gas/Vapor]	1		0	28	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	1
10003	Fixed	Sour Water	Diesel (PEAF)	Diesel (PEAF) [Gas/Vapor]	167	95%	0	8	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
3016	Fixed	Sour Water	Diesel (PEAF)	Diesel (PEAF) [Gas/Vapor]	1,340		0	214	0	0	0	0	1	2	0	0	14	0	0	0	0	8	3	5
3017	Fixed	Sour Water	Diesel (PEAF)	Diesel (PEAF) [Gas/Vapor]	1,340		0	162	0	0	0	0	1	0	0	0	10	0	0	0	0	6	2	4
16001	Fixed	VGO	Virgin Gas Oil (VGO) (PERF)	Virgin Gas Oil (VGO) (PERF) [Gas/Vapor]	3,812		0	1,062	0	0	0	0	5	30	0	0	74	1	0	0	0	125	0	93
Total Storage Tank HAPs									18	0	0	1	21	80	0	0	372	9	0	6	0	710	44	333

Notes:

- VOC emissions are calculated in TANKS.
- Liquid VOC losses calculated as the sum of the following as calculated in TANKS: withdrawal losses (WD_LOSS).
- Vapor VOC losses calculated as the sum of the following as calculated in TANKS: standing losses (S_LOSS), working losses (W_LOSS), rim deck losses (RIM_LOSS), deck fitting losses (DECKF_LOSS), and deck seam losses (DECKS_LOSS).
  - Where a tank has a control device (e.g., carbon), vapor VOC losses are modified from TANKS as follows:
    [Vapor VOC Losses, lb/yr] = (1-[Control Eff %]) x [Vapor VOC Losses from TANKS, lb/yr]
- HAP emissions are calculated using the HAP contents from the relevant listed liquid and vapor speciation for that tank:
  $[\text{HAP Emissions, lb/yr}] = ([\text{Liquid VOC Losses, lb/yr}] \times [\text{HAP Wt\%}]_{liq}) + ([\text{Vapor VOC Losses, lb/yr}] \times [\text{HAP Wt\%}]_{vap})$
- Table above compiles and summarizes VOC and HAP emissions by tank.
- Per SJVAPCD policy SSP-2015, emissions from fixed roof tanks connected to vapor recovery are estimated using the fugitive component emission calculation methodology. These tank emissions are included in the fugitive emissions totals.

ATTACHMENT D

Detailed Facility List

Detailed Facility Report

For Facility=37 and excluding Deleted Permits
Sorted by Facility Name and Permit Number

KERN OIL & REFINING CO	FAC #	S 37	TYPE:	TitleV	EXPIRE ON:	08/31/2016
PANAMA LN & WEEDPATCH HWY	STATUS:	A	TOXIC ID:	50130	AREA:	103 / 318
BAKERSFIELD, CA 93307-9210	TELEPHONE:	661-845-0761			INSP. DATE:	03/18

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-37-1-13	120 MMBtu/hr	3020-02 H	1	1,128.00	1,128.00	A	120 MMBTU/HR CRUDE UNIT INCLUDING ONE DESALTER, 4 FRACTIONATION VESSELS, STRIPPER, 2 ACCUMULATORS, LIGHT NAPHTHA STABILIZER, KNOCKOUT DRUM SCRUBBER, 60 MMBTU/HR TULSA HEATERS INC. PROCESS HEATER, 60 MMBTU/HR BORN HEATER AND 35 HEAT EXCHANGERS
S-37-2-6	77.5 HP	3020-01 C	1	217.00	217.00	A	RERUN UNIT INCLUDING PRE-FLASH DRUM, FRACTIONATOR, STRIPPER, ACCUMULATOR, AND ASSOCIATED VALVES, FLANGES, AND CONNECTORS
S-37-3-7	23.9 MMBTU/HR	3020-02 H	1	1,128.00	1,128.00	A	UNIFINER UNIT INCLUDING A SPLITTER, A REACTOR, A SEPARATOR, 3 ACCUMULATORS, 11.4 MMBTU/HR CHARGE HEATER WITH ZEECO GLSF-10 LOW NOX BURNERS AND 12.5 MMBTU/HR SPLITTER REBOILER HEATER WITH ZEECO GLSF-10 LOW NOX BURNERS
S-37-4-17	59.1 MMBtu/hr	3020-02 H	1	1,128.00	1,128.00	A	PLATFORMER UNIT INCLUDING SEPARATOR, ADSORBER, 3 REACTORS, 4 FT. DIA. STABILIZER TOWER, ACCUMULATORS, 29.3 MMBTU/HR CHARGE HEATER #1 WITH ZEECO GLSF-12 LOW NOX BURNERS, 17.9 MMBTU/HR CHARGE HEATER #2 WITH ZEECO GLSF-12 LOW NOX BURNERS, AND 11.9 MMBTU/HR CHARGE HEATER #3 WITH ZEECO GLSF-10 LOW NOX BURNERS
S-37-5-2	7 HP	3020-01 A	1	97.00	97.00	A	LIQUID-LIQUID MEROX SWEETENING UNIT INCLUDING MIXER, CAUSTIC SETTLER, CATALYST INJECTION PORT, AND ASSOCIATED PUMPS AND PIPING
S-37-6-16	49.0 MMBtu/hr	3020-02 H	1	1,128.00	1,128.00	A	49.0 MMBTU/HR COEN, MODEL #D-57, DUAL-FIRED INDUCED DRAFT WATER TUBE BOILER #6 - REPLACEMENT STANDBY BOILER FOR THE TURBINE AND/OR DUCT BURNER (COGENERATION UNIT S-37-114) COMPLIANT DORMANT EMISSIONS UNIT
S-37-7-6	112,500 BTU/HR	3020-02 A	1	97.00	97.00	A	JOHN ZINK STF-S-8 STEAM ASSIST FLARE WITH CONSTANT IGNITION PILOTS, INCLUDING THE FOLLOWING GAS RECOVERY EQUIPMENT: TWO ELECTRIC DRIVEN GAS COMPRESSORS (350 HP TOTAL), FOUR KNOCKOUT POTS, ONE SEAL POT, TWO HEAT EXCHANGERS, TWO STEAM DRIVEN LIQUID RECOVERY PUMPS, AND ONE ELECTRIC DRIVEN LIQUID RECOVERY PUMP (2 HP), C-02 COMPRESSOR SKID INCLUDING: COMPRESSOR (250 HP), TWO KNOCKOUT POTS AND A HEAT EXCHANGER
S-37-8-31	415 hp	3020-01 F	1	666.00	666.00	A	ORGANIC LIQUID LOADING AREAS AND REFINERY VAPOR RECOVERY SYSTEM SERVING TANK S-37-150 AND INCLUDING COMPRESSOR(S), LOADING RACKS WITH 10 PRODUCT LINES AND 9 VAPOR RETURN LINES
S-37-9-10	315 HP	3020-01 E	1	451.00	451.00	A	OIL/WATER SEPARATION OPERATION INCLUDING API SEPARATOR, CORRUGATED PLATE SEPARATOR, INDUCED AIR FLOATATION UNIT, DRAIN PIT, FOUR FILTERS, AND THREE 5,000 BBL STORAGE TANKS (#5061, 5062, AND 5063)

Detailed Facility Report

For Facility=37 and excluding Deleted Permits
Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-37-12-2	210,000 GALLONS	3020-05 E	1	270.00	270.00	A	210,000 GALLON FIXED ROOF GASOLINE STORAGE TANK #5009 WITH SHARED VAPOR RECOVERY SYSTEM LISTED IN S-37-8
S-37-13-2	210,000 GALLONS	3020-05 E	1	270.00	270.00	A	210,000 GALLON FIXED ROOF GASOLINE STORAGE TANK #5010 WITH SHARED VAPOR RECOVERY SYSTEM LISTED IN S-37-8
S-37-14-2	210,000 GALLONS	3020-05 E	1	270.00	270.00	A	210,000 GALLON FIXED ROOF GASOLINE STORAGE TANK #5011 WITH SHARED VAPOR RECOVERY SYSTEM LISTED IN S-37-8
S-37-15-3	210,000 GALLONS	3020-05 E	1	270.00	270.00	A	210,000 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK #5020 WITH SHARED VAPOR RECOVERY SYSTEM LISTED IN S-37-8
S-37-16-3	504,000 GALLONS	3020-05 F	1	330.00	330.00	A	504,000 GALLON WELDED EXTERNAL FLOATING ROOF TANK (#12000) WITH RESILIENT PRIMARY SEAL AND RIM-MOUNTED SECONDARY SEAL
S-37-17-4	504,000 gallons	3020-05 F	1	330.00	330.00	A	504,000 GALLON FIXED ROOF TANK (#12001) WITH VAPOR CONTROL SYSTEM LISTED ON PERMIT S-37-8
S-37-18-2	420,000 GALLONS	3020-05 E	1	270.00	270.00	A	420,000 GALLON FIXED ROOF GASOLINE STORAGE TANK #10007 WITH SHARED VAPOR RECOVERY SYSTEM LISTED IN S-37-8
S-37-19-2	420,000 GALLONS	3020-05 E	1	270.00	270.00	A	420,000 GALLON FIXED ROOF GASOLINE STORAGE TANK #10008 WITH SHARED VAPOR RECOVERY SYSTEM LISTED IN S-37-8
S-37-20-3	420,000 GALLONS	3020-05 E	1	270.00	270.00	A	420,000 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK #10001 WITH SHARED VAPOR RECOVERY SYSTEM LISTED IN S-37-8
S-37-21-9	210,000 GALLONS	3020-05 E	1	270.00	270.00	A	210,000 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK #5006
S-37-22-9	210,000 GALLONS	3020-05 E	1	270.00	270.00	A	210,000 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK #5007
S-37-23-7	210,000 GALLONS	3020-05 E	1	270.00	270.00	A	210,000 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK #5008 SERVED BY REFINERY SHARED VAPOR RECOVERY SYSTEM LISTED ON S-37-8
S-37-24-4	126,000 gal	3020-05 E	1	270.00	270.00	A	3000 BBL FIXED-ROOF ORGANIC LIQUID STORAGE TANK #3014 CONNECT TO THE VAPOR RECOVERY SYSTEM LISTED ON PERMIT S-37-8
S-37-25-3	126,000 GALLONS	3020-05 E	1	270.00	270.00	A	126,000 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK #3026
S-37-26-3	126,000 GALLONS	3020-05 E	1	270.00	270.00	A	126,000 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK #3027
S-37-27-3	1,554,000 GALLONS	3020-05 G	1	419.00	419.00	A	37,000 BBL (ALTECH INDUSTRIES) INTERNAL FLOATING ROOF CRUDE OIL STORAGE TANK (#37,000), RIVETED CONSTRUCTION WITH RESILIENT PRIMARY SEAL AND RIM-MOUNTED SECONDARY SEAL
S-37-28-4	3,360,000 GALLONS	3020-05 G	1	419.00	419.00	A	80,000 BBL (ALTECH INDUSTRIES) INTERNAL FLOATING ROOF CRUDE OIL STORAGE TANK (#80,000), RIVETED CONSTRUCTION WITH RESILIENT PRIMARY SEAL AND RIM-MOUNTED SECONDARY SEAL
S-37-31-6	42,000 GALLONS	3020-05 C	1	149.00	149.00	A	1,000 BBL FIXED-ROOF ORGANIC LIQUID STORAGE TANK(#1000) WITH A SHARED VAPOR RECOVERY SYSTEM (LISTED ON PERMIT UNIT S-37-8)

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-37-34-4	3,360,000 GALLONS	3020-05 G	1	419.00	419.00	A	80,000 BBL EXTERNAL FLOATING ROOF PETROLEUM STORAGE TANK (#80,001), WELDED CONSTRUCTION WITH METALLIC SHOE PRIMARY SEAL AND SECONDARY RIM-MOUNTED SEAL
S-37-38-10	3.75 MMBtu/hr	3020-02 F	1	666.00	666.00	A	SOLVENT UNIT INCLUDING V-7 FRACTIONATOR, 1 REFLUX DRUM V-8, AND 3,750,000 BTU/HR GAS FIRED FIRE TUBE HEATER (H-1)
S-37-42-3	150,000 GALLONS	3020-05 E	1	270.00	270.00	A	3,600 BBL ORGANIC LIQUID STORAGE TANK (#3300) WITH A SHARED VAPOR RECOVERY SYSTEM (LISTED ON PERMIT UNIT S-37-8)
S-37-43-2	15 HP	3020-01 A	1	97.00	97.00	A	15 HP LIGHT SOLVENT TRUCK LOADING OPERATION WITH VAPOR CONTROL SYSTEM INCLUDING: EMCO WHEATON LOADING HOSE AND VAPOR RETURN COUPLERS, 15 PUMP, METER AND CHECK VALVES AND VAPOR RETURN PIPING TO VAPOR CONTROL SYSTEM
S-37-44-3	126,000 GALLONS	3020-05 E	1	270.00	270.00	A	126,000 GALLON NAPHTHA STORAGE TANK (#3019)
S-37-46-5	30 HP	3020-01 B	1	129.00	129.00	A	30 HP LIQUID LOADING/UNLOADING OPERATION INCLUDING ONE UNCONTROLLED LIQUID LOADOUT LINE, ONE ORGANIC LIQUID LOADOUT/UNLOAD (TRANSFER) LINE EQUIPPED WITH VAPOR RECOVERY, TWO 15 HP PUMPS, DRY-BREAK CONNECTORS, METER(S), AND CHECK VALVES
S-37-48-3	225,600 GALLONS	3020-05 E	1	270.00	270.00	A	5,400 BBL ORGANIC LIQUID STORAGE TANK (#5014) WITH A SHARED VAPOR RECOVERY SYSTEM (LISTED ON PERMIT UNIT S-37-8)
S-37-49-3	225,600 GALLONS	3020-05 E	1	270.00	270.00	A	5,400 BBL ORGANIC LIQUID STORAGE TANK (#5015) WITH A SHARED VAPOR RECOVERY SYSTEM (LISTED ON PERMIT UNIT S-37-8)
S-37-50-4	42,000 GALLONS	3020-05 C	1	149.00	149.00	A	1,000 BBL ORGANIC LIQUID STORAGE TANK (#1100) WITH A SHARED VAPOR RECOVERY SYSTEM (LISTED ON PERMIT UNIT S-37-8)
S-37-51-4	840,000 GALLONS	3020-05 F	1	330.00	330.00	A	20,000 BBL FIXED-ROOF ORGANIC LIQUID STORAGE TANK (#20001) WITH A SHARED VAPOR RECOVERY SYSTEM (LISTED ON PERMIT UNIT S-37-8)
S-37-52-5	420,000 GALLONS	3020-05 E	1	270.00	270.00	A	10,000 BBL FIXED-ROOF ORGANIC LIQUID STORAGE TANK (#10000) WITH A SHARED VAPOR RECOVERY SYSTEM (LISTED ON PERMIT UNIT S-37-8)
S-37-53-4	420,000 GALLONS	3020-05 E	1	270.00	270.00	A	10,000 BBL FIXED-ROOF ORGANIC LIQUID STORAGE TANK (#10002) WITH A SHARED VAPOR RECOVERY SYSTEM (LISTED ON PERMIT UNIT S-37-8)
S-37-56-3	21,000 GALLONS	3020-05 C	1	149.00	149.00	A	500 BBL FIXED ROOF ORGANIC LIQUID STORAGE TANK (#505) WITH A SHARED VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT S-37-8
S-37-57-6	210,000 GALLONS	3020-05 E	1	270.00	270.00	A	210,000 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK #5017 WITH SHARED VAPOR RECOVERY SYSTEM LISTED IN S-37-8 AND 29 HP CIRCULATION PUMP WITH CLAY FILTER

Detailed Facility Report

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PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-37-58-2	29 HP	3020-01 B	1	129.00	129.00	A	29 HP JP-4 TRUCK LOADING OPERATION INCLUDING TWO EMCO WHEATON API STYLE DRYBREAK BOTTOM LOADING COUPLERS AND HOSES, TWO OPW MODEL 633 VAPOR RECOVERY COUPLERS AND VAPOR RETURN HOSES, 29 HP UNLOADING PUMP, FILTER, AND METER AND CHECK VALVES
S-37-59-4	840,000 GALLONS	3020-05 F	1	330.00	330.00	A	20,000 BBL FIXED-ROOF ORGANIC LIQUID STORAGE TANK (#20000) WITH A SHARED VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT S-37-8
S-37-61-6	33,600 GALLONS	3020-05 C	1	149.00	149.00	A	800 BBL FIXED ROOF ORGANIC LIQUID STORAGE TANK (#800) WITH A SHARED VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT S-37-8
S-37-65-4	11,256 GALLONS	3020-05 B	1	103.00	103.00	A	250 BBL FIXED-ROOF ORGANIC LIQUID STORAGE TANK (#250, DEHY NORTH) WITH A SHARED VAPOR RECOVERY SYSTEM LISTED ON PERMIT UNIT S-37-8
S-37-66-4	11,256 GALLONS	3020-05 B	1	103.00	103.00	A	250 BBL FIXED-ROOF ORGANIC LIQUID STORAGE TANK (#251, DEHY SOUTH) WITH A SHARED VAPOR RECOVERY SYSTEM (LISTED ON PERMIT UNIT S-37-8)
S-37-67-3	8,400 Gallons	3020-05 B	1	103.00	103.00	A	8,400 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK (#200) WITH VAREC P/R VALVE, 1 HP PUMP, AND TRUCK UNLOADING FILL LINE WITH DRY-BREAK COUPLER
S-37-71-5	25 HP	3020-01 A	1	97.00	97.00	A	ORGANIC LIQUID TRUCK LOADING/UNLOADING OPERATION INCLUDING TRUCK UNLOADING CONNECTION, TRUCK LOADING HOSE WITH DRY BREAK COUPLER, VAPOR RECOVERY HOSE WITH DRY BREAK CONNECTOR AND PIPING TO PERMITTED TANKS S-37-50 AND S-37-56
S-37-77-13	36 MMBtu/hr	3020-02 H	1	1,128.00	1,128.00	A	36 MMBTU/HR DIESEL HYDROTREATER UNIT INCLUDING A 18 MMBTU/HR CHARGE HEATER WITH ZEECO INCORPORATED MODEL GLSF-11 FREE JET BURNERS, 18 MMBTU/HR STRIPPER HEATER WITH A CALLIDUS LE-CSG LOW NOX BURNER, HYDROGEN REACTOR VESSEL, HYDROGEN RECYCLE GAS SCRUBBER, AND ASSOCIATED PIPING AND COMPONENTS
S-37-78-3	335 HP	3020-01 E	1	451.00	451.00	A	SULFUR SCRUBBING SYSTEM INCLUDING MEA/DEA CONTACTOR VESSEL (ABSORBER), GAS LIQUID SEPARATOR, AMINE REGENERATION VESSEL, LIQUID SOLID SEPARATOR, SULFUR FILTER, AND ASSOCIATED AIR BLOWERS, PUMPS AND PIPING
S-37-79-2	14,700 Gallons	3020-05 B	1	103.00	103.00	A	14,700 GALLON FIXED-ROOF ORGANIC LIQUID STORAGE TANK (#335) CONNECTED TO VAPOR RECOVERY SYSTEM LISTED ON PERMIT S-37-8
S-37-80-2	471 BHP	3020-10 D	1	525.00	525.00	A	471 BHP DETROIT MODEL 12V71T DIESEL FIRED IC ENGINE DRIVING AN EMERGENCY GENERATOR
S-37-81-2	225 BHP	3020-10 C	1	264.00	264.00	A	225 HP CUMMINS MODEL NT855F1 DIESEL FIRED IC ENGINE DRIVING AN EMERGENCY FIREWATER PUMP

Detailed Facility Report

For Facility=37 and excluding Deleted Permits
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PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-37-82-3	60 BHP	3020-10 A	1	88.00	88.00	A	60 BHP WAUKESHA MODEL 135 GZU-15861-G GAS-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN INSTRUMENT AIR COMPRESSOR
S-37-83-3	150 BHP	3020-10 B	1	129.00	129.00	A	150 BHP WAUKESHA MODEL 6 WAKB-10F GAS-FIRED EMERGENCY STANDBY IC ENGINE POWERING A UTILITY AIR COMPRESSOR
S-37-84-5	165 HP	3020-10 B	1	129.00	129.00	A	165 BHP STATIONARY NATURAL GAS-FIRED INGERSOLL RAND, MODEL 6JVG (SERIAL #6AAJ226), I.C. ENGINE EQUIPPED WITH 3-WAY CATALYST SERVING THE NORTH HYDROGEN COMPRESSOR AT THE PLATFORMER UNIT (#S-37-4)
S-37-85-5	165 BHP	3020-10 B	1	129.00	129.00	A	165 BHP INGERSOLL-RAND MODEL 6JVG NATURAL GAS-FIRED IC ENGINE EQUIPPED WITH 3-WAY CATALYST SERVING THE #2 HYDROGEN COMPRESSOR - MIDDLE, AT THE PLATFORMER UNIT (#S-37-4)
S-37-86-5	165 BHP	3020-10 B	1	129.00	129.00	A	165 BHP INGERSOLL-RAND MODEL 6JVG NATURAL GAS-FIRED IC ENGINE EQUIPPED WITH 3-WAY CATALYST SERVING THE #1 HYDROGEN COMPRESSOR - SOUTH, AT THE PLATFORMER UNIT (#S-37-4)
S-37-87-5	120 BHP	3020-10 B	1	129.00	129.00	A	120 BHP INGERSOLL-RAND MODEL 4JVG NATURAL GAS-FIRED IC ENGINE EQUIPPED WITH 3-WAY CATALYST SERVING THE EAST HYDROGEN COMPRESSOR AT THE UNIFIER UNIT (#S-37-3)
S-37-88-5	120 BHP	3020-10 B	1	129.00	129.00	A	120 BHP INGERSOLL-RAND MODEL 4JVG NATURAL GAS-FIRED IC ENGINE EQUIPPED WITH 3-WAY CATALYST SERVING THE WEST HYDROGEN COMPRESSOR AT THE UNIFINER UNIT (#S-37-3)
S-37-90-4	105,000 GALLONS	3020-05 E	1	270.00	270.00	A	2,500 BBL FIXED-ROOF ORGANIC LIQUID STORAGE TANK (#2501) WITH A SHARED VAPOR RECOVERY SYSTEM (LISTED ON PERMIT UNIT S-37-8)
S-37-91-5	105,000 GALLONS	3020-05 E	1	270.00	270.00	A	2,500 BBL FIXED-ROOF ORGANIC LIQUID STORAGE TANK (#2502) WITH A SHARED VAPOR RECOVERY SYSTEM (LISTED ON PERMIT UNIT S-37-8)
S-37-92-4	180 BHP	3020-10 B	1	129.00	129.00	A	180 BHP INGERSOLL-RAND, MODEL JVG-6, NATURAL GAS-FIRED IC ENGINE (SERIAL # 6AJ450) WITH NON-SELECTIVE CATALYTIC REDUCTION (NSCR) TO SERVE HYDROGEN BOOSTER COMPRESSOR AT THE PLATFORMER UNIT (S-37-4)
S-37-93-3	80 HP	3020-01 C	1	217.00	217.00	A	TRUCK LOADING RACK, INCLUDING 4 FUEL OIL LOADING SPOTS AND 2 ATMOSPHERIC GAS OIL (AGO) LOADING SPOTS
S-37-94-6	365 hp	3020-01 E	1	451.00	451.00	A	RAILCAR LIQUID TRANSFER FACILITY INCLUDING 48 ORGANIC LIQUID TRANSFER HOSES, 6 BUTANE TRANSFER HOSES, 8 TRANSFER PUMPS, AND 1 TRANSFER COMPRESSOR
S-37-95-6	420,000 GALLONS	3020-05 E	1	270.00	270.00	A	10,000 BBL FIXED-ROOF ORGANIC LIQUID STORAGE TANK (#10003) VENTING TO A 2,000 LB CARBON CANISTER (SHARED WITH PERMIT UNIT S-37-96)

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For Facility=37 and excluding Deleted Permits
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PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-37-96-5	420,000 GALLONS	3020-05 E	1	270.00	270.00	A	10,000 BBL FIXED-ROOF ORGANIC LIQUID STORAGE TANK (#10004) VENTING TO A 2,000 LB CARBON CANISTER (SHARED WITH PERMIT UNIT S-37-95)
S-37-97-4	126,000 GALLONS	3020-05 E	1	270.00	270.00	A	3,000 BBL FIXED ROOF ORGANIC LIQUID STORAGE TANK (#3012) WITH A VAPOR CONTROL SYSTEM (LISTED ON PERMIT UNIT S-37-8)
S-37-100-4	180 BHP	3020-10 B	1	129.00	129.00	A	180 BHP INGERSOLL-RAND, MODEL JVG-6, GAS-FIRED IC ENGINE (SERIAL # 6BJ537) WITH NSCR DRIVING MAKEUP COMPRESSOR UNIT SERVING THE DIESEL HYDROTREATER (S-37-77)
S-37-101-4	180 BHP	3020-10 B	1	129.00	129.00	A	180 BHP INGERSOLL-RAND, MODEL JVG-6, GAS-FIRED IC ENGINE (SERIAL # 6BJ518) WITH NSCR DRIVING RECYCLE COMPRESSOR UNIT SERVING THE DIESEL HYDROTREATER (#S 37-77)
S-37-102-5	420,000 GALLONS	3020-05 E	1	270.00	270.00	A	10,000 BBL (420,000 GALLON) FIXED ROOF ORGANIC LIQUID STORAGE TANK #10005 SERVED BY VAPOR CONTROL SYSTEM LISTED ON PTO S-37-8
S-37-103-8	49 MMBtu/hr	3020-02 H	1	1,128.00	1,128.00	A	49.0 MMBTU/HR NATURAL-GAS/REFINERY FIRED FORCED AIR BOILER #11 WITH A NORTH AMERICAN MODEL 4796-24 MAGNA-FLAME BURNER AND FGR UTILIZING ELECTRIC OR STEAM FANS
S-37-107-2	LOADING RACK	3020-06	1	116.00	116.00	A	LPG, NATURAL GASOLINE, & MIXED LIGHT HYDROCARBON LOADING/UNLOADING RACK WITH VAPOR COLLECTION SYSTEM SERVING TANKS S-37-108 & -109
S-37-108-2	210,000 GALLONS	3020-05 E	1	270.00	270.00	A	5,000 BBL SPHERICAL PRESSURE VESSEL STORING LPG, NATURAL GASOLINE, OR MIXED LIGHT HYDROCARBONS (TANK S-5000, EAST SPHERE)
S-37-109-2	210,000 GALLONS	3020-05 E	1	270.00	270.00	A	5,000 BBL SPHERICAL PRESSURE VESSEL STORING LPG, NATURAL GASOLINE, OR MIXED LIGHT HYDROCARBONS (TANK S-5001, WEST SPHERE)
S-37-111-6	2,310,000 GALLONS	3020-05 G	1	419.00	419.00	A	55,000 BBL ORGANIC LIQUID INTERNAL FLOATING ROOF TANK (#55000), WELDED CONSTRUCTION WITH MECHANICAL SHOE PRIMARY SEAL AND RIM-MOUNTED SECONDARY SEAL
S-37-114-5	4.968 MW	3020-08A C	1	1,678.00	1,678.00	A	SOLAR CENTAUR C-50 COGENERATION SYSTEM WITH NATURAL GAS FIRED SOLAR TURBINE, INC. GAS TURBINE ENGINE (GTE) WITH DRY LOW NOX (DLN) COMBUSTORS POWERING A 4.968 MEGAWATT ELECTRICAL GENERATOR, 23 MMBTU/HR NATURAL GAS FIRED DUCT BURNER, HEAT RECOVERY STEAM GENERATOR, SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM, AND OXIDATION CATALYST
S-37-116-5	14.1 MMBtu/hr	3020-02 G	1	893.00	893.00	A	14.1 MMBTU/HR SPLITTER REBOILER HEATER
S-37-118-3	23.7 MMBtu/hr	3020-02 H	1	1,128.00	1,128.00	A	NAPHTHA FEED PRETREATMENT UNIT (NAPHTHA HYDROTREATER) WITH 12.6 MMBTU/HR CHARGE HEATER WITH JOHN ZINK COOLSTAR LOW NOX BURNER, 11.1 MMBTU/HR STRIPPER REBOILER HEATER WITH JOHN ZINK COOLSTAR LOW NOX BURNER, REACTOR VESSEL, HYDROGEN COMPRESSORS, HEAT EXCHANGERS, AND ASSOCIATED SEPARATOR VESSELS, KNOCKOUTS, PIPING, AND COMPONENTS

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-37-119-3	56.3 MMBtu/hr	3020-02 H	1	1,128.00	1,128.00	A	NAPHTHA REFORMER UNIT WITH 25.7 MMBTU/HR CHARGE HEATER #1 WITH JOHN ZINK SMR LOW NOX BURNER OR EQUIVALENT, 13.4 MMBTU/HR CHARGE HEATER #2 WITH JOHN ZINK SMR LOW NOX BURNER OR EQUIVALENT, 8.9 MMBTU/HR CHARGE HEATER #3 WITH JOHN ZINK SMR LOW NOX BURNER OR EQUIVALENT, 8.3 MMBTU/HR SPLITTER/STABILIZER HEATER WITH JOHN ZINK SMR LOW NOX BURNER OR EQUIVALENT, REACTOR VESSELS, HYDROGEN COMPRESSORS, HEAT EXCHANGERS, AND ASSOCIATED SEPARATOR VESSELS, KNOCKOUTS, PIPING, AND COMPONENTS
S-37-120-2	70.25 HP	3020-01 C	1	217.00	217.00	A	AMINE SYSTEM WITH ABSORBER VESSELS, KNOCKOUTS, HEAT EXCHANGERS, AND ASSOCIATED PIPING AND COMPONENTS. TREATED VAPOR RECOVERY GAS USED AS FUEL GAS FOR PROCESS HEATERS OR FLARED IN S-37-7
S-37-121-2	20 HP	3020-01 A	1	97.00	97.00	A	SOUR WATER SYSTEM WITH STRIPPER COLUMN, STEAM REBOILER, KNOCKOUTS, HEAT EXCHANGERS, AND ASSOCIATED PIPING AND COMPONENTS
S-37-122-5	2.5 MMBtu/hr	3020-02 F	1	666.00	666.00	A	CLAUS PROCESS SULFUR RECOVERY UNIT WITH REACTION FURNACE, THREE CONVERTER VESSELS, HYDROGENATION REACTOR, ENCLOSED SULFUR PIT WITH EDUCTOR VENT TO SULFUR PLANT, TAIL GAS TREATMENT UNIT INCLUDING AMINE SCRUBBING SYSTEM AND 2.5 MMBTU/HR INCINERATOR WITH JOHN ZINK VYD BURNER OR EQUIVALENT, KNOCKOUTS, HEAT EXCHANGERS, AND ASSOCIATED PIPING AND COMPONENTS
S-37-123-2	481 BHP	3020-10 D	1	525.00	525.00	A	481 HP CATERPILLAR DIESEL-FIRED EMERGENCY IC ENGINE MODEL 3408DITA POWERING AN EMERGENCY FIREWATER PUMP
S-37-125-2	126,000 gallon	3020-05 E	1	270.00	270.00	A	3,000 BBL (126,000 GALLON) FIXED ROOF ORGANIC LIQUID STORAGE TANK, #3013, SERVED BY THE VAPOR CONTROL SYSTEM OPERATING UNDER PERMIT S-37-8
S-37-126-2	2,310,000 GALLONS	3020-05 G	1	419.00	419.00	A	55,000 BBL ORGANIC LIQUID STORAGE TANK #55002 WITH VAPOR BALANCE RETURN LINE FROM ORGANIC LIQUID LOADING RACK VAPOR RETURN PIPING AND VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-37-8
S-37-127-3	1 NOZZLE	3020-11 A	1	38.00	38.00	A	GASOLINE DISPENSING OPERATION WITH ONE 12,000 SPLIT (9,000 GALLONS GASOLINE/3,000 GALLONS DIESEL) STEEL TANK INSTITUTE FIREGUARD ABOVEGROUND STORAGE TANK SERVED BY OPW PHASE I ENHANCED VAPOR RECOVERY (EVR) SYSTEM (VR-401-C), STANDING LOSS CONTROL (VR-301-E), AND 1 FUELING POINT WITH 1 GASOLINE DISPENSING NOZZLE SERVED BY BALANCE PHASE II VAPOR RECOVERY SYSTEM (G-70-162-A)
S-37-130-2	3,108,000 GALLONS	3020-05 G	1	419.00	419.00	A	74,000 BBL INTERNAL FLOATING ROOF ORGANIC LIQUID STORAGE TANK, WELDED CONSTRUCTION WITH METALLIC SHOE PRIMARY SEAL AND WIPER SECONDARY SEAL (TANK #74000)
S-37-131-2	3,108,000 GALLONS	3020-05 G	1	419.00	419.00	A	74,000 BBL INTERNAL FLOATING ROOF ORGANIC LIQUID STORAGE TANK, WELDED CONSTRUCTION WITH METALLIC SHOE PRIMARY SEAL AND WIPER SECONDARY SEAL (TANK #74001)

Detailed Facility Report

For Facility=37 and excluding Deleted Permits
Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-37-138-2	15 HP	3020-01 A	1	97.00	97.00	A	ORGANIC LIQUID TRANSFER FACILITY WITH FOUR TRANSFER RACKS
S-37-139-2	<= 25 HP	3020-01 A	1	97.00	97.00	A	CRUDE OIL UNLOADING RACK (NORTH OF TANK #80000) WITH TWO UNLOADING STATIONS, TRANSFER PUMP, AND ASSOCIATED HOSES, VALVES, FLANGES, AND THREADED CONNECTIONS - LANE 1 SOUTH
S-37-140-2	<= 25 HP	3020-01 A	1	97.00	97.00	A	CRUDE OIL UNLOADING RACK (NORTH OF TANK #80000) WITH TWO UNLOADING STATIONS, TRANSFER PUMP, AND ASSOCIATED HOSES, VALVES, FLANGES, AND THREADED CONNECTIONS - LANE 2 MIDDLE
S-37-141-2	< 50 HP	3020-01 B	1	129.00	129.00	A	ORGANIC LIQUID UNLOADING RACK NORTH OF TANK #80000 WITH TWO UNLOADING HOSES, TRANSFER PUMP, AND ASSOCIATED VALVES, FLANGES, AND THREADED CONNECTIONS - LANE 3 NORTH
S-37-142-2	< 50 HP	3020-01 B	1	129.00	129.00	A	RESIDUAL OIL TRANSFER RACK (FROM TRUCKS TO REFINERY OR REVERSE) EAST OF TANK #10000, WITH TWO TRANSFER POINTS, TRANSFER PUMP, AND ASSOCIATED HOSES, VALVES, FLANGES, AND THREADED CONNECTIONS (RACK A)
S-37-143-2	< 50 HP	3020-01 B	1	129.00	129.00	A	RESIDUAL OIL TRANSFER RACK (FROM TRUCKS TO REFINERY OR REVERSE) NORTHWEST OF TANK #10006, WITH ONE TRANSFER POINT, TRANSFER PUMP, AND ASSOCIATED HOSES, VALVES, FLANGES, AND THREADED CONNECTIONS (RACK B)
S-37-147-0	30 hp	3020-01 B	1	129.00	129.00	A	ORGANIC LIQUID UNLOADING RACK (RACK S) - SOUTH OF DIESEL TANK FARM
S-37-148-0	2.268 mega-gallons	3020-05 G	1	419.00	419.00	A	54,000 BBL EXTERNAL FLOATING ROOF ORGANIC LIQUID STORAGE TANK WITH EITHER A DUAL WIPER SEAL WITH DRIP CURTAIN OR PRIMARY METAL SHOE SEAL WITH SECONDARY WIPER SEAL
S-37-149-0	1190 hp	3020-01 G	1	893.00	893.00	A	4 MMSCF/DAY LPG RECOVERY UNIT INCLUDING GAS COMPRESSION, MEMBRANE SEPARATION, REFRIGERATION, SOLID PHASE DRYING/ DEHYDRATION, AND FRACTIONATION
S-37-150-0	126,000 gallons	3020-05 E	1	270.00	270.00	A	3000 BBL ORGANIC LIQUID STORAGE TANK VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-37-8

Number of Facilities Reported: 1

ATTACHMENT E

Summary of Comments and District's Response

Kern Oil & Refining Company's Comments:

On August 25, 2017, Kern Oil & Refining Company submitted comments to the District regarding the draft Title V Permit Renewal dated July 26, 2017. Kern Oil's comments and the District's responses are summarized below:

Comment 1:
Change the Responsible Official to Mr. David A McCoy, Vice President – Refining.

Response 1:
The Responsible Official has been changed.

Comments 2:
Section VI.A (Rules Updated Since January 19, 2012) should include 40 CFR Part 63 Subpart CC (National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries) as an updated rule.

Response 2:
40 CFR Part 63 Subpart CC has been added to this list.

Comment 3:
The 40 CFR Part 60 Subpart Ja discussion in Section VIII. needs to be updated to reflect how the facility complies with the monitoring of the flare in this Subpart. Specifically, the second paragraph indicates that Kern Oil complies with the alternative monitoring methods of 40 CFR 60.107a(g), which is incorrect. Kern Oil has instead installed continuous monitoring equipment for hydrogen sulfide and total sulfur, as required by the NSPS.

Response 3:
The Subpart Ja discussion in the evaluation has been corrected and updated to incorporate both the permittee's and EPA's comments. EPA provided an extensive list of comments related to the Subpart Ja discussion as listed in the EPA Comments section that follows.

Comment 4:
A discussion of 40 CFR Part 63 Subpart CC (National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries) needs to be added to Section VIII.

Response 4:
A 40 CFR Part 63 Subpart CC discussion has been added to the evaluation.

Comment 5:
The permittee provided a worksheet with detailed comments on individual draft Title V emission unit permits. The comments and responses are summarized below.

a. Comment: Permit unit S-37-0: Remove former condition #43 ("40 CFR 60 SUBPART GGG CONDITION: Affected facilities for which construction or modification commenced after January 4, 1983 shall comply with applicable requirements of 40 CFR, Subpart GGG. [40 CFR60.590(a)]") pertaining to NSPS Subpart GGG applicability since this subpart applies to specific process units and/or compressors in the refinery, and the associated equipment permits already have the necessary conditions denoting applicability.

   Response: The change has been made since the associated equipment permits already have the necessary conditions denoting Subpart GGG applicability.

b. Comment: Permit units S-37- 3, 4, 38, 78, 103: Add revised condition 3 from permit S-37-77 ("The combustion in the fuel gas combustion devices of gases released as a result of start-up, shutdown, upset, malfunction, or the result of relief valve leakage is exempt from the H2S or sulfur content requirement. [District Rules 2201, 4001, Subpart J, 60.104(a)(1)]") .

   Response: The revised condition has been added. This condition was already an existing condition on permits S-37-77, 118, 119, and 122 but will be revised for consistency.

c. Comment: Permit units S-37- 3, 4, 38: Add a permit shield from GGGa for units subject to GGG.

   Response: The permit shield condition has been added with the following condition:

   - The requirements of 40 CFR 60 Subpart GGGa do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2]

d. Comment: Permit unit S-37-3 and -4: Replace the requirement to calculate the total reduced sulfur (TRS) to H2S ratio, which incorrectly assumes that non-H2S species are proportional to the H2S concentration. Instead, the TRS should be determined by adding the non-H2S species from the sample result to the H2S CEM value. Also, allow the samples to be analyzed by the listed test method or other District-approved method.

Response: The changes have been made requiring that TRS be determined by adding the non-H2S species in the H2S concentration. The conditions will be revised to the following:

- The permittee shall demonstrate continuous compliance with the sulfur content limit (as total reduced sulfur) of the fuel combusted in this unit by calculation, as the sum of the non-H2S reduced sulfur compounds (carbon disulfide, carbonyl sulfide, dimethyl disulfide, dimethyl sulfide, methyl mercaptan), based on the most recently conducted fuel sample analysis for total sulfur, and each one hour monitored H2S result. The calculated hourly fuel sulfur values shall be averaged over a rolling three hour period to determine compliance. [District Rule 2201]

e. Comment: Permit units S-37-3, 4, 17, 21 through 24, 31, 38, 43, 50 through 53, 56, 57, 59, 61, 65, 66, 79, 90, 91, 95 through 97, 102, 126, 148, and 150: Update existing fugitive emissions permit conditions to allow for the use of the correlation equation.

Response: The changes have been made to allow the current fugitive emission limits by the proposed alternate method. The requirements will be updated to the following conditions:

- Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. [District Rule 2201]

- Operator shall maintain records to demonstrate compliance with fugitive VOC emissions limit of this permit annually. Compliance shall be demonstrated by calculation, using the correlation equations, zero default and 10,000 ppmv pegged factors set forth in the CAPCOA California implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-3a, February 1999, and the average emission concentrations of total organic compounds measured for each component during all inspections conducted during the prior 365 day period. [District Rule 2201]

f. Comment: Permit unit S-37-9: Delete operating management plan condition which is already included in S-37-0.

Response: The change has been made.

g. Comment: Permit unit S-37-9 and 119: Add a condition stating that the units are subject to the applicable leak detection and repair (LDAR) conditions on permit S-37-0.

Response: The changes have been made.

h. Comment: Permit units S-37-16, 27, 28: Update the tank equipment description and permit conditions to reflect the correct tank seal types in place since tank installation.

16 – mechanical shoe seal type
27– mechanical shoe seal type
28 – mechanical shoe seal type

Response: The tank equipment descriptions and conditions have been updated to reflect the correct tank seal types.

i. Comment: Permit unit S-37-23 condition #2, S-37-53 condition #17: Remove reference to NSPS Subpart K, which does not apply, from the applicable rule tags in the conditions.

Response: The changes have been made as Subpart K does not apply per condition #18 on each of the permits.

j. Permit unit S-37-57 condition #6, S-37-96 condition #27, S-37-97 condition #17: Remove reference to NSPS Subpart Kb condition because Subpart Kb is not applicable to these permits.

Response: The changes have been made as Subpart Kb does not apply per permit -57 condition #19, permit -96 condition #37, permit -97 condition #18.

k. Permit unit S-37-102: Reinstate the condition #12 from the current permit but remove reference to NSPS Subpart Kb, which does not apply, from the applicable rule tags in the conditions.

Response: The change have been made. The revised condition has been added as condition #8 as follows:

- Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best

maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3 ~~and 40 CFR 60.112b(a)(3)(i)~~]

l. Comment: Permit unit S-37-38: Add the applicable Rule 4307 requirements to permit.

Response: Rule 4307 requirements have been added to the existing fire tube heater (H-1) as is explained in the Rule 4307 discussion in this evaluation.

m. Comment: Permit unit S-37-38: The reflux drum vessel has always vented to the flare listed on S-37-7 instead of the vapor control system.

Response: Since the reflux drum vessel has always vented to the flare, condition #2 has been revised to reflect that.

n. Comment: Permit unit S-37-43, -130, -131: Delete monitoring data and support information recordkeeping condition which is already included in S-37-0.

Response: The extra condition has been deleted from the permits since it is already listed on the facilitywide permit as condition #144.

- Operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520 9.4.2]

o. Comment: Permit unit S-37-71: Update permit to state that the requirements of NSPS Subpart GGGa apply to the rack.

Response: A condition has been added to the permit.

p. Comment: Permit unit S-37-130: Include a permit shield for NSPS Subpart K and Ka.

Response: The permit shield condition has been added with the following condition:

- This unit commenced construction, modification, or reconstruction after July 23, 1984. Therefore, the requirements of 40 CFR 60 Subpart K and Ka do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2]

q. Comment: S-37-140 and -141: Add "Rack AA" to permit equipment description.

Response: The changes have been made.

US EPA's Comments:

On October 19, 2017, US EPA submitted comments to the District regarding the draft Title V Permit Renewal dated July 26, 2017. The comments all pertain to the permit for the flare (Unit S-37-7) and mostly pertain to ensuring the permit contains conditions with sufficient specificity to ensure compliance with the requirements of NSPS Ja. EPA's comments and the District's responses are summarized below:

Comment 1:
Condition 2 (S-37-7), requires that visible emissions be monitored at least annually using EPA Method 22, but it does not specify the observation period of 2 hrs, as specified in 40 CFR 60.18(f)(1). Please revise the condition to specify the required 2 hrs observation period.

Response 1:
The condition will be changed to the following condition:

- Demonstration of compliance with the visible emissions limit of this permit shall be conducted at least annually, using EPA Method 22. The observation period shall be 2 hours. [40 CFR 60.18(f)(1)]

Comment 2:
For Condition 8, please add 40 CFR 60.18(f) as the basis for this condition.

Response 2:
The reference to 40 CFR 60.18(f) was added to the condition as basis for the condition as follows:

- The flame shall be present at all times when combustible gases are vented through the flare. [District Rule 4311, 5.2 and 40CFR 60.18(c)(2) and (f)]

Comment 3:
Condition 43 requires the permittee to comply with all applicable monitoring, testing, recordkeeping and reporting requirements specified in Rule 4001 – New Source Performance Standards, including but not limited to Subparts Ja. NSPS Subpart Ja applies to various types of sources located at refineries, includes various dates for triggering applicability of certain requirements, and contains multiple options for monitoring and determining compliance. Therefore, it is not appropriate to only include such a general permit condition to ensure compliance with the requirements of NSPS Ja. As discussed in more detail in the comments listed below, the District must include conditions in the Title V permit with adequate detail to ensure compliance with the specific requirements from an applicable regulation such as Ja. In addition, those conditions should be tailored to the specific type of equipment or operation for the

permitted equipment. For example, Condition 44 includes a sentence for affected facilities, but excluding flares. Since this piece of equipment is a flare, such language should not be included in the permit. Another example throughout the permit is the use of conditions which apply to various types of flares, such as "steam-assisted and nonassisted" flares. Since the type of flare is known, these conditions should only include requirements applicable to the specific type of flare. Please review and update such permit conditions to only include conditions applicable to the specific type of permitted flare.

Response 3:
Former conditions 43-45 (those found in the draft Proposed Title V Permit Renewal) have been replaced with conditions in Subpart Ja discussion in the Final Title V Permit Renewal Evaluation (conditions # 45-61) as recommended by EPA.

The permitted flare is a "steam-assisted flare", so only the reference to "steam-assisted flares" will be retained for the conditions as follows:

- ~~Air-assisted or~~ steam-assisted flares shall only be used when the net heating value of the gas being combusted is 300 Btu/scf or greater. ~~Nonassisted flares shall only be used when the net heating value of the gas being combusted is 200 Btu/scf or greater.~~ [40 CFR 60.18 (c)(3)(ii)]

- Steam-assisted ~~and nonassisted~~ flares shall be operated with an exit velocity less than 60 ft/sec, except as provided in 40 CFR 60.18 (c)(4)(ii) and (iii). [40 CFR 60.18 (c)(4)(i)]

- Steam-assisted ~~and nonassisted~~ flares may be operated with an exit velocity equal to or greater than 60 ft/sec, but less than 400 ft/sec, if the net heating value of the gas being combusted is greater than 1,000 Btu/scf. [40 CFR 60.18 (c)(4)(ii)]

- Steam-assisted ~~and nonassisted~~ flares may be operated with an exit velocity less than the velocity Vmax, as determined by the methods specified in 40 CFR 60.18 (f)(5), and less than 400 ft/sec. [40 CFR 60.18 (c)(4)(iii)]

Comment 4:
A discussion of the applicability of 40 CFR Subpart Ja is provided on page 17 of the permit evaluation. It states that the refinery flare (Emission unit S-37-7) is subject to Subpart Ja, and that it is complying with the monitoring provisions under 60.107a(g), which specifies alternative monitoring options for certain flares equipped with water seals. The evaluation notes that because the flare has had a fifth reportable pressure exceedance in a 365-day period, the requirements of 60.107a(e) & (f) have been triggered. Paragraph (e) requires sulfur monitoring for assessing root cause analysis and paragraph (f) requires flow monitoring of the flare. In response to these newly triggered

applicable requirements, the District added three new conditions to the proposed Title V permit renewal for the flare. (See Conditions 43, 44 and 45).

Condition 43 requires the permittee to "comply with all applicable monitoring, testing, recordkeeping, and reporting requirements specified in Rule 4001 – New Source Performance Standards, including but not limited to Subparts Ja." This condition requiring compliance with all applicable monitoring, testing, recordkeeping and requirements in Subpart Ja is too general to assure compliance with these requirements. Subpart Ja contains many various options for compliance depending on what the type of flare is, what it is used for, if it is equipped with water seals, and other specific criteria. For example, 60.103a(a) requires development and submittal of a Flare Management Plan by a specific deadline. Providing a single condition requiring compliance with the entire subpart is not sufficient to identify the applicable requirements and ensure compliance with these requirements, as required by District Rule 2520, Section 9.1. The District must review the requirements contained in Subpart Ja, determine which are applicable requirements for this specific flare (steam assisted) and include permit conditions that require compliance with the identified applicable requirements. Further below, we have provided examples of conditions which include the level of specificity required to ensure compliance with the applicable provisions of Subpart Ja.

Response 4:
Former conditions 43-45 (those found in the draft Proposed Title V Permit Renewal) have been replaced with conditions in Subpart Ja discussion in the Final Title V Permit Renewal Evaluation (conditions # 45-61) as recommended by EPA.

Comment 5:
Condition 44 contains language similar to what is found in 60.100a(b). This provision contains an applicability date for flares and a separate applicability date for affected facilities, except flares. Because this specific emission unit is a flare, it is not necessary to include the language pertaining to equipment which is not a flare. EPA recommends removing the extraneous language from this condition. In addition, EPA notes that this provision does not contain any specific requirements, it is only restating the Subparts applicability criteria. This type of information is more appropriate for the Title V statement of basis (or renewal evaluation document), as it is not an actual permit condition.

Response 5:
Former conditions 43-45 (those found in the draft Proposed Title V Permit Renewal) have been replaced with conditions in Subpart Ja discussion in the Final Title V Permit Renewal Evaluation (conditions # 45-61) as recommended by EPA.

Comment 6:
Condition 45 requires the permittee to comply with the sulfur and flow monitoring requirements of 40 CFR 60.107a(e) and (f) "by continuously monitoring the recording the concentration of the total reduced sulfur, concentration of H2S, and flow rate of gas

discharged to the flare." This condition does not provide sufficient specificity regarding which of the three separate monitoring options under Section 60.107a(e) the source must comply with, nor does it contain any specificity regarding the requirements applicable to such monitoring.

Response 6:
Former conditions 43-45 (those found in the draft Proposed Title V Permit Renewal) have been replaced with conditions in Subpart Ja discussion in the Final Title V Permit Renewal Evaluation (conditions # 45-61) as recommended by EPA.

Comment 7:
EPA notes that the dates for submitting and implementing a flare management plan, as well as installation of monitoring equipment, are past due (See 40 CFR 60.103a(f)). Therefore, the Title V permit must contain a compliance plan with a specific schedule for when the source must meet these applicable requirements, if they have not already been met. The permit must require compliance with the compliance plan and include enforceable conditions to ensure the plan is submitted and implemented by the dates specified in the compliance plan.

Response 7:
The applicant indicates that the Flare Management Plan has been submitted.

Conditions in Subpart Ja discussion in the Title V Permit Renewal Evaluation (conditions # 45-61) have been added to the permit S-37-7 as recommended by EPA. Specifically, the following conditions address the Flare Management Plan:

- 46. Permittee shall develop and implement a written Flare Management Plan by November 11, 2015. The flare management plan must include the information described in 40 CFR 60.103a(a)(1) through (7). [40 CFR 60.103a(a)]

- 47. Permittee shall submit the Flare Management Plan to EPA Region 9 and the District by November 11, 2015. [40 CFR 60.103a(b)]

- 48. The Flare Management Plan shall be submitted, updated and/or resubmitted as required by 40 CFR 60.103a(b)(2) and (3). [40 CFR 60.103a(b)(2) and (3)]

- 49. Permittee shall comply with the submitted Flare Management Plan and any revisions at all times. [40 CFR 60.103a(b)(2)]

- 59. The permittee shall maintain a copy of the flare management plan on site. [40 CFR 108a(c)(1)]

Comment 8:
EPA notes that the proposed permit contains some, but not all of the conditions necessary to ensure compliance with the requirements of 40 CFR 60.18. Please add the following conditions to the permit.

- The flare shall be operated with a flame present at all times, as determined by the methods specified in 40 CFR 60.18(f). [40 CFR 60.18(c)(2)]

- The permittee shall adhere to either (1) the heat content specifications in 40 CFR 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR 60.18(c)(4), or (2) the requirements in 40 CFR 60.18(c)(3)(i). [40 CFR 60.18(c)(3)]

Response 8:
The two conditions have been added to permit S-37-7.

Comment 9:
EPA reviewed the permit to ensure it contains conditions to ensure compliance with all applicable requirements of NSPS Ja. We note that the permit does not contain any conditions to ensure compliance with the H2S emission found in 40 CFR 60.103a(h). The permit must contain a condition to ensure compliance with this emission limit and the monitoring specified in 40 CFR 60.107a(a)(2) to ensure compliance with this emission limit. Please add the conditions necessary to ensure compliance with the stated emission limit and conditions to ensure that the required monitoring equipment is installed, operated, calibrated and maintained as required by 40 CFR 60.107a(a)(2).

Response 9:
Conditions in Subpart Ja discussion in the Title V Permit Renewal Evaluation (conditions # 45-61) have been added to the permit S-37-7 as recommended by EPA.

Comment 10:
EPA provided sample permit conditions for flares subject to NSPS Ja. The permit must contain similar conditions, as appropriate, to ensure compliance with all applicable requirements of NSPS Ja.

Response 10:
Conditions in Subpart Ja discussion in the Title V Permit Renewal Evaluation (conditions # 45-61) have been added to the permit S-37-7 as recommended by EPA.