



JUN 29 2011

Gerardo C. Rios, Chief  
Permits Office  
Air Division  
U.S. EPA - Region IX  
75 Hawthorne St  
San Francisco, CA 94105

**Re: Notice of Minor Title V Permit Modification  
District Facility # S-2234  
Project # S1104946**

Dear Mr. Rios:

Enclosed for you to review is an application for minor Title V permit modification for the facility identified above. Occidental of Elk Hills, Inc is proposing a Title V minor permit modification to incorporate the recently issued S-2234-1-16, '-3-16 into the Title V operating permit. Occidental of Elk Hills received ATCs to remove the standby heater startup/shutdown emission limits that were unnecessarily added to the ATCs to install the SCR system on the heaters for Rule 4306 NOx compliance.

Enclosed is the engineering evaluation with the following attachments: proposed modified Title V permit, recently issued S-2234-1-16, '-3-16, emission increases, application, and previous Title V permit. Please submit your written comments on this project within the 45-day comment period that begins on the date you receive this letter.

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

Sincerely,

David Warner  
Director of Permit Services

Enclosures

**Seyed Sadredin**  
Executive Director/Air Pollution Control Officer

**Northern Region**  
4800 Enterprise Way  
Modesto, CA 95356-8718  
Tel: (209) 557-6400 FAX: (209) 557-6475

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1990 E. Gettysburg Avenue  
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34946 Flyover Court  
Bakersfield, CA 93308-9725  
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JUN 29 2011

Dennis Champion  
Occidental of Elk Hills, Inc  
10800 Stockdale Hwy  
Bakersfield, CA 93311

**Re: Notice of Minor Title V Permit Modification  
District Facility # S-2234  
Project # S1104946**

Dear Mr. Champion:

Enclosed is the District's analysis of your application for minor Title V permit modification for the facility identified above. You proposed a Title V minor permit modification to incorporate recently issued S-2234-1-16, '3-16 into the Title V operating permit. Occidental of Elk Hills received ATCs to remove the standby heater startup/shutdown emission limits that were unnecessarily added to the ATCs to install the SCR system on the heaters for Rule 4306 NOx compliance.

Enclosed is the engineering evaluation with the following attachments: proposed modified Title V permit, recently issued S-2234-1-16, '3-16, emission increases, application, and previous Title V permit. This project will be subject to a 45-day EPA commenting period prior to the District taking final action.

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

Sincerely,

David Warner  
Director of Permit Services

Enclosures

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# TITLE V APPLICATION REVIEW

## Minor Modification

Project #: S-1104946

Engineer: Stephen Leonard

Date: June 27, 2011

Lead Engineer: Allan Phillips *AP SUPR AQE*

Date: JUN 27 2011

Facility Number: S-2234  
Facility Name: Occidental of Elk Hills, Inc.  
Mailing Address: 10800 Stockdale Highway  
Bakersfield, CA 93311

Contact Name: Dennis Champion  
Phone: (661) 412-5214

Responsible Official: George Gough  
Title: Safety Team Lead

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### I. PROPOSAL

Occidental of Elk Hills, Inc. is proposing a Title V minor permit modification to incorporate Authority to Construct (ATCs) S-2234-1-16 and S-2234-3-16 into the Title V operating permit.

The purpose of this evaluation is to identify all applicable requirements, determine if the facility will comply with the applicable requirements and to provide the legal and factual basis for the proposed revisions.

### II. FACILITY LOCATION

The facility is located at Occidental of Elk Hills, Inc's Natural Gas Production Source S-2234 in Kern County.

**III. ATC EQUIPMENT DESCRIPTION**

**ATC #S-2234-1-16:** MODIFICATION OF LOW TEMPERATURE SEPARATION PLANT #2 INCLUDING PROCESS PUMPS, HEAT EXCHANGER(S)/COOLER(S), COOLING TOWER, FUEL GAS/LIQUID K.O. VESSEL(S) VENTED TO FLARE, AND DE-ETHANIZER, DE-BUTANIZER, DE-PROPANIZER COLUMNS VENTED TO FLARE, TWO 27.5 MMBTU/HR STANDBY HEATERS SERVED BY SCR, AND INLET HEAT EXCHANGER: REMOVE EMISSION LIMITS DURING STARTUP AND SHUTDOWN

**ATC #S-2234-3-16:** MODIFICATION OF LOW TEMPERATURE SEPARATION PLANT #1 INCLUDING FREE WATER KNOCKOUT(S), ACCUMULATOR(S), CHILLER(S), LOW TEMPERATURE SEPARATOR(S), DE-ETHANIZER & REBOILER, DE-BUTANIZER & REBOILER, DE-PROPANIZER & REBOILER, TWO 27.5 MMBTU/HR STANDBY HEATERS SERVED BY SCR, AND INLET HEAT EXCHANGER: REMOVE EMISSION LIMITS DURING STARTUP AND SHUTDOWN OF HEATERS

**IV. SCOPE OF EPA AND PUBLIC REVIEW**

This change to a Title V permit is considered to be a minor modification and, as such, requires no public review.

**V. APPLICABLE REQUIREMENTS**

District Rule 2520, Federally Mandated Operating Permits (Adopted June 21, 2001)

**VI. DESCRIPTION OF PROPOSED MODIFICATIONS**

Condition # on current PTO S-2234-1-9	Condition # on proposed PTO S-2234-1-17	Condition is: New, Modified, or Removed	Reason for Change from current PTO
15	--	Removed	Emission limits during startup and shutdown is not a requirement of Rules 4306 or 4320 and should not have been retained when the SCR based emissions were added. Recordkeeping for date and duration of startups

Condition # on current PTO S-2234-1-9	Condition # on proposed PTO S-2234-1-17	Condition is: New, Modified, or Removed	Reason for Change from current PTO
			and shutdowns is retained. No relaxation in recordkeeping occurs with removal of the previous emission limits.
50-92	48-91	Removed	Moved to the Facility Wide Requirements pursuant to condition #5 in ATC S-2234-1-9.

Condition # on current PTO S-2234-3-9	Condition # on proposed PTO S-2234-3-18	Condition is: New, Modified, or Removed	Reason for Change from current PTO
11	14	Modified	Pre-SCR emission limits replaced with post SCR emission limits
--	11-15	Added	Conditions describing startup and shutdown requirements per Rules 4306 and 4320 including emission limits and recordkeeping

**VII. COMPLIANCE**

In accordance with Rule 2520, 3.20, these modifications:

1. Do not violate requirements of any applicable federally enforceable local or federal requirement;
2. Do not relax monitoring, reporting, or recordkeeping requirements in the permit and are not significant changes in existing monitoring permit terms or conditions;
3. Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
4. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
  - a. A federally enforceable emission cap assumed to avoid classification as a modification under any provisions of Title I of the Federal Clean Air Act; and

Occidental of Elk Hills, Inc.

Facility # S-2234

Project # S-1104946

- b. An alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Federal Clean Air Act; and
5. Are not Title I modifications as defined in District Rule 2520 or modifications as defined in section 111 or 112 of the Federal Clean Air Act; and
6. Do not seek to consolidate overlapping applicable requirements.

In accordance with Rule 2520, the application meets the procedural requirements of section 11.4 by including;

1. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
2. The source's suggested draft permit; and
3. Certification by a responsible official that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used.

## VIII. ATTACHMENTS

- A. Proposed Modified Title V Operating Permits S-2234-1-17 & '3-18
- B. Authority to Construct Documents S-2234-1-16, '3-17
- C. Emissions Increases
- D. Application
- E. Previous Title V Operating Permits S-2234-1-9 & 3-9

Occidental of Elk Hills, Inc.  
Facility # S-2234  
Project # S-1104946

# **ATTACHMENT A**

**Proposed Modified Title V Operating Permits  
S-2234-1-17 & '3-18**

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-2234-1-17

**EXPIRATION DATE:** 10/31/2009

**SECTION:** 35 **TOWNSHIP:** 30S **RANGE:** 23E

## **EQUIPMENT DESCRIPTION:**

LOW TEMPERATURE SEPARATION PLANT #2 INCLUDING PROCESS PUMPS, HEAT EXCHANGER(S)/COOLER(S), COOLING TOWER, FUEL GAS/LIQUID K.O. VESSEL(S) VENTED TO FLARE, AND DE-ETHANIZER, DE-BUTANIZER, DE-PROPANIZER COLUMNS VENTED TO FLARE, AND INLET HEAT EXCHANGER:

## **PERMIT UNIT REQUIREMENTS**

1. Operation shall include refrigerant regeneration system, glycol dehydration system, and two 27.5 MMBtu/hr process heaters F-44-301 & F-44-302 (shared with S-2234-3). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Two process heaters F-44-301 & F-44-302 shall be used on a standby basis, only during periods when one or both gas turbines (S-2234-52 & '53) are inoperative. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Fugitive VOC emission rate from the control system added to control emissions from glycol dehydrator reboiler vent, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c less than or equal to 10,000 ppm (Feb 1999), shall not exceed 0.20 lb/day. Permittee shall demonstrate compliance with specified emissions limit by calculation using the installed components and emissions factors specified above. Permittee shall maintain with the permit an accurate record by number and type of the installed fugitive components and shall make such record available for inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Fugitive VOC emission rate from the propane compressor calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c less than or equal to 10,000 ppm (Feb 1999), shall not exceed 1.9 lb/day. Permittee shall demonstrate compliance with specified emissions limit by calculation using the installed components and emissions factors specified above. Permittee shall maintain with the permit an accurate record by number and type of the installed fugitive components and shall make such record available for inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Control system(s) employed to control emissions from glycol dehydration system vent(s) shall be maintained in a leak free condition, as defined in Rule 4408. [District Rule 4408, Sections 3.8.2, 5.3 and 6.3.2] Federally Enforceable Through Title V Permit
6. The propane compressor shall be maintained in a gas-tight condition. A gas-tight 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 4409 and shall be reported as a deviation. [District Rule 2201 and Rule 4409, Section 3.20] Federally Enforceable Through Title V Permit
7. Permittee shall maintain monthly records of amount of gas dehydrated and other records as required by Rule 4408. The permittee shall make such records readily available for District inspection upon request and shall be retained on the premises for a period of not less than five years. [District Rule 4408, Sections 6.1.1, 6.1.2 and 6.1.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE  
These terms and conditions are part of the Facility-wide Permit to Operate.

8. Process heaters shall be fired exclusively by PUC quality natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Permittee shall maintain operational records of standby process heaters FF-44-301 & FF-44-302, including date, time, and total amount of natural gas consumed. These records shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
10. All process vessels and lines handling volatile organic compounds shall vent only to other process vessels, District-approved flare, or substrata injection system. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Total duration of process heater startup shall not exceed 2 hr/day. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
12. Total duration of process heater shutdown shall not exceed 2 hr/day. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
13. Duration of start-up or shutdown shall not exceed two hours each per occurrence. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. The operator shall maintain daily records of the duration of start-up and shutdown periods. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
14. Except during start-up and shutdown, emissions rates from process heater exhaust shall not exceed any of the following limits: 6 ppmvd NO<sub>x</sub> @ 3% O<sub>2</sub> or 0.007 lb-NO<sub>x</sub>/MMBtu, 0.002 lb-SO<sub>x</sub>/MMBtu, 0.014 lb-PM<sub>10</sub>/MMBtu, 47 ppmvd @ 3% O<sub>2</sub> or 0.037 lb-CO/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
15. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
16. Ammonia (NH<sub>3</sub>) emissions shall not exceed 10 ppmvd @ 3% O<sub>2</sub> over a 15 minute averaging period. [District Rule 4102] Federally Enforceable Through Title V Permit
17. Exhaust stack shall be equipped with adequate provisions facilitating the collection of samples consistent with EPA test methods. [District Rule 1081] Federally Enforceable Through Title V Permit
18. Source testing to measure natural gas-combustion NO<sub>x</sub> and CO emissions, and NH<sub>3</sub> emissions from this unit shall be conducted within 60 days of initial start-up. [District Rules 4102, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
19. Source testing to measure natural gas-combustion NO<sub>x</sub> and CO emissions, and NH<sub>3</sub> emissions from this unit 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 4102, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
20. 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, 4306, and 4320] Federally Enforceable Through Title V Permit
21. Continuous Emissions Monitoring (CEM) equipment shall be in place and operating whenever process heater is operating, except for CEM systems breakdowns, repairs, and required calibration checks and zero and span adjustments, in accordance with 40 CFR 60.13(e). NO<sub>x</sub> (as NO<sub>2</sub>) and O<sub>2</sub> must be recorded continuously when the CEM equipment is operating. [District Rules 1080, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
22. Operation, calibration and data reduction for the CEM equipment shall be in accordance with the requirements of 40 CFR, Appendix P of Part 51 and Appendix B of Part 60. [District Rule 1080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

23. CEM records shall be retained for at least 5 years. Records shall include occurrence and duration of start-up, shutdown or malfunction; performance testing, calibrations, checks, and maintenance of CEM; and emission measurements. [District Rule 1080] Federally Enforceable Through Title V Permit
24. Daily summaries of CEM records for each calendar quarter shall be submitted to the District within 30 days of the end of the calendar quarter. Hourly fuel stack gas flow rates and/or hourly fuel flow rates shall be measured during operation and included in quarterly reports. [District Rule 1080] Federally Enforceable Through Title V Permit
25. A report shall be submitted to the District within 30 days of the end of each calendar quarter identifying the time and date of each exceedance of emission limits, the excess emissions generated, and any conversion factor used to calculate emissions. [District Rule 1080] Federally Enforceable Through Title V Permit
26. The quarterly report shall identify each period of excess emissions that occurs during startups, shutdowns, or malfunctions. The nature and cause of each malfunction, corrective action taken, and preventative measures adopted shall also be reported. [District Rule 1080] Federally Enforceable Through Title V Permit
27. Heat exchangers utilizing cooling water shall be properly maintained to prevent VOC emissions from cooling towers. [District Rule 2201] Federally Enforceable Through Title V Permit
28. The operator shall test the circulating water from the cooling tower at least every six months to determine the concentration of hexavalent chromium. The District shall be notified 48 hours in advance of any sampling of cooling water for testing. Required testing may be discontinued and an exemption sought when two consecutive required tests show hexavalent chromium concentrations less than 0.15 mg/l. [District Rule 7012] Federally Enforceable Through Title V Permit
29. Operator shall comply with other applicable requirements of District Rule 7012 (amended 12/17/92). [District Rule 7012] Federally Enforceable Through Title V Permit
30. 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
31. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results 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 and record specific type of noncertified fuel used. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
32. 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
33. Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO<sub>2</sub>, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
34. Nitrogen oxide (NO<sub>x</sub>) emissions shall not exceed 140 lb/hr, calculated as NO<sub>2</sub>. [District Rules 4301, 5.2.2] Federally Enforceable Through Title V Permit
35. 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
36. 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
37. NO<sub>x</sub> 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. NO<sub>x</sub> emissions during the source test shall be calculated as the arithmetic average of three 30-consecutive-minute test runs. [District Rule 4305] Federally Enforceable Through Title V Permit
38. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. CO emissions during the source test shall be calculated as the arithmetic average of three 30-consecutive-minute test runs. [District Rule 4305] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

39. Stack gas oxygen shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4305] Federally Enforceable Through Title V Permit
40. NH<sub>3</sub> emissions for source test purposes shall be determined using BAAQMD method ST-1B. [District Rule 4301] Federally Enforceable Through Title V Permit
41. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO<sub>2</sub>. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rules 2520, 9.4.2 and 4301, 5.2.1] Federally Enforceable Through Title V Permit
42. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested for sulfur content (as hydrogen sulfide). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
43. When complying with SO<sub>x</sub> emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6B; or Method 8; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months, however annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
44. If the unit is fired on noncertified gaseous fuel and compliance with SO<sub>x</sub> emission limits is achieved through fuel sulfur content limitations, then the sulfur content (as hydrogen sulfide) of the gaseous fuel being fired in the unit shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
45. If fuel analysis is used to demonstrate compliance with the conditions of this permit, the fuel higher heating value for each fuel shall be certified by third party fuel supplier or determined by: ASTM D 240-87 or D 2382-88 for liquid hydrocarbon fuels; ASTM D 1826-88 or D 1945-81 in conjunction with ASTM D 3588-89 for gaseous fuels. [District Rule 2520, 9.4.2; 4305, 6.2.1; and 4351, 6.2.1] Federally Enforceable Through Title V Permit
46. {1400} 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. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2; County Rules 404 (Madera), 406 (Fresno), and 407 (Kern, Kings, Merced, San Joaquin, Stanislaus, and Tulare)] Federally Enforceable Through Title V Permit
47. The requirements of 40 CFR 60 Subpart LLL 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
48. 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, 4306, and 4320] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-2234-3-18

**EXPIRATION DATE:** 10/31/2009

**SECTION:** NE35 **TOWNSHIP:** 30S **RANGE:** 23E

## **EQUIPMENT DESCRIPTION:**

LOW TEMPERATURE SEPARATION PLANT #1 INCLUDING FREE WATER KNOCKOUT(S), ACCUMULATOR(S), CHILLER(S), LOW TEMPERATURE SEPARATOR(S), DE-ETHANIZER & REBOILER, DE-BUTANIZER & REBOILER, DE-PROPANIZER & REBOILER, AND INLET HEAT EXCHANGER:

## **PERMIT UNIT REQUIREMENTS**

1. Operation shall include two 27.5 MMBtu/hr process heaters FF-44-301 & FF-44-302 (shared with S-2234-1). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Two process heaters F-44-301 & F-44-302 shall be used on a standby basis, only during periods when one or both gas turbines (S-2234-52 & '-53) are inoperative. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Fugitive VOC emission rate from the control system added to control emissions from glycol dehydrator reboiler vent, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c less than or equal to 10,000 ppm (Feb 1999), shall not exceed 0.20 lb/day. Permittee shall demonstrate compliance with specified emissions limit by calculation using the installed components and emissions factors specified above. Permittee shall maintain with the permit an accurate record by number and type of the installed fugitive components and shall make such record available for inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Fugitive VOC emission rate from the propane compressor, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c less than or equal to 10,000 ppm (Feb 1999), shall not exceed 1.9 lb/day. Permittee shall demonstrate compliance with specified emissions limit by calculation using the installed components and emissions factors specified above. Permittee shall maintain with the permit an accurate record by number and type of the installed fugitive components and shall make such record available for inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Control system(s) employed to control emissions from glycol dehydration system vent(s) shall be maintained in a leak free condition, as defined in Rule 4408. [District Rule 4408, Sections 3.8.2, 5.3 and 6.3.2] Federally Enforceable Through Title V Permit
6. The propane compressor shall be maintained in a gas-tight condition. A gas-tight 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 4409 and shall be reported as a deviation. [District Rule 2201 and Rule 4409, Section 3.20] Federally Enforceable Through Title V Permit
7. Permittee shall maintain monthly records of amount of gas dehydrated and other records as required by Rule 4408. The permittee shall make such records readily available for District inspection upon request and shall be retained on the premises for a period of not less than five years. [District Rule 4408, Sections 6.1.1, 6.1.2 and 6.1.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE  
These terms and conditions are part of the Facility-wide Permit to Operate.

8. Heaters shall be fired exclusively on PUC quality natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Permittee shall maintain operational records of standby process heaters FF-44-301 & FF-44-302, including date, time, and total amount of natural gas consumed. These records shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
10. All process vessels and lines handling volatile organic compounds shall vent only to other process vessels, District-approved flare, or substrata injection system. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Total duration of process heater startup shall not exceed 2 hr/day. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
12. Total duration of process heater shutdown shall not exceed 2 hr/day. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
13. Duration of start-up or shutdown shall not exceed two hours each per occurrence. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. The operator shall maintain daily records of the duration of start-up and shutdown periods. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
14. Except during start-up and shutdown, emissions rates from process heater exhaust shall not exceed any of the following limits: 6 ppmvd NOx @ 3% O2 or 0.007 lb-NOx/MMBtu, 0.002 lb-SOx/MMBtu, 0.014 lb-PM10/MMBtu, 47 ppmvd @ 3% O2 or 0.037 lb-CO/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
15. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
16. Heat exchangers utilizing cooling water shall be properly maintained to prevent VOC emissions from cooling towers. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The operator shall test the circulating water from the cooling tower at least every six months to determine the concentration of hexavalent chromium. The District shall be notified 48 hours in advance of any sampling of cooling water for testing. Required testing may be discontinued and an exemption sought when two consecutive required tests show hexavalent chromium concentrations less than 0.15 mg/l. [District Rule 7012] Federally Enforceable Through Title V Permit
18. Operator shall comply with other applicable requirements of District Rule 7012 (amended 12/17/92). [District Rule 7012] Federally Enforceable Through Title V Permit
19. 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
20. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results 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 and record specific type of noncertified fuel used. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
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 2520, 9.5.2] Federally Enforceable Through Title V Permit
22. 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
23. Source testing shall be performed for the boilers and heaters using EPA Method 7E or ARB Method 100. Source testing shall be conducted within two year after the issuance of this Title V permit and each unit shall be tested during each year in which the unit operates 720 hours or more. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

24. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO<sub>2</sub>. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rules 2520, 9.4.2 and 4301, 5.2.1] Federally Enforceable Through Title V Permit
25. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested for sulfur content (as hydrogen sulfide). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
26. When complying with SO<sub>x</sub> emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6B; or Method 8; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months, however annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
27. If the unit is fired on noncertified gaseous fuel and compliance with SO<sub>x</sub> emission limits is achieved through fuel sulfur content limitations, then the sulfur content (as hydrogen sulfide) of the gaseous fuel being fired in the unit shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
28. If fuel analysis is used to demonstrate compliance with the conditions of this permit, the fuel higher heating value for each fuel shall be certified by third party fuel supplier or determined by: ASTM D 240-87 or D 2382-88 for liquid hydrocarbon fuels; ASTM D 1826-88 or D 1945-81 in conjunction with ASTM D 3588-89 for gaseous fuels. [District Rule 2520, 9.4.2; 4305, 6.2.1; and 4351, 6.2.1] Federally Enforceable Through Title V Permit
29. {1400} 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. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2; County Rules 404 (Madera), 406 (Fresno), and 407 (Kern, Kings, Merced, San Joaquin, Stanislaus, and Tulare)] Federally Enforceable Through Title V Permit
30. Nitrogen oxide (NO<sub>x</sub>) emissions shall not exceed 140 lb/hr, calculated as NO<sub>2</sub>. [District Rules 4301, 5.2.2] Federally Enforceable Through Title V Permit
31. The requirements of 40 CFR 60 Subpart LLL 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
32. The following conditions #34 through #75 shall be moved to the facility-wide operating permit upon incorporation of this Authority to Construct into the facility's Title V operating permit.
33. Equipment that is in vacuum service is exempt from the control and monitoring requirements and work practice standards of District Rule 4409 and applicable NSPS requirements, provided the equipment is identified as such in the Operator Management Plan. [District Rule District Rule 4409, 4.2.8 and 40 CFR 60.482-1(d)] Federally Enforceable Through Title V Permit
34. For determining compliance with applicable NSPS requirements, the test methods and procedures at 40 CFR 60.485 shall be used. Alternative test methods may be used subject to approval pursuant to 40 CFR 60.8. [40 CFR 60.8, 40 CFR 60.485] Federally Enforceable Through Title V Permit
35. For all components that are subject to applicable NSPS requirements and are included in the permit unit addendum to the operator management plan and that comply with the applicable NSPS inspection, maintenance and repair requirements as specified by the terms and condition of this permit, a Title-V permit shield is granted for applicable requirements at 40 CFR 60, Subpart KKK. [District Rule 40 CFR 60, Subpart KKK] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

36. If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements as specified in this permit unit. [District Rule 4409, 4.2.8 and 40 CFR 60.482-10(i)] Federally Enforceable Through Title V Permit
37. For open ended lines and open ended valves, subject to applicable NSPS, each open-ended valve or line shall be sealed with two (2) valves, a blind flange, a cap, or a plug at all times, except during operations requiring process fluid flow through the valve or line. Open ended lines and valves designed to open automatically in the event of an emergency are exempt from this requirement [40 CFR 60.482-6(a) and 40 CFR 60.482-6(d)] Federally Enforceable Through Title V Permit
38. For valves subject to applicable new source performance standards (NSPS), any valve in gas/vapor service or light liquid service that is designated in the Operator Management Plan as an unsafe-to-monitor valve is exempt from the monthly NSPS leak inspection requirements, provided: 1) the owner/operator demonstrates the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence, and 2) a written plan is adhered to that requires monitoring of the valve as frequently as practicable during safe-to-monitor times and at least annually and during shutdown. [40 CFR 60.482-7(g)] Federally Enforceable Through Title V Permit
39. For valves subject to applicable NSPS, any valve in gas/vapor service or light liquid service that is designated in the Operator Management Plan as a difficult-to-monitor (inaccessible) valve is exempt from the monthly NSPS leak inspection requirements, provided: 1) the owner/operator demonstrates the valve cannot be monitored without elevating the monitoring personnel more than 15 feet above a support surface, or that it is over 6 feet away from a platform, 2) the process unit within which the valve is located either becomes an affected facility through 40 CFR 60.14 or 60.15 or if the owner/operator designates less than 3.0% of the total number of valves as difficult-to-monitor, and 3) a written plan is adhered to that, requires monitoring of the valve at least annually and during shutdown. [40 CFR 60.482-7(h)] Federally Enforceable Through Title V Permit
40. Any components of the closed vent system that are designated as unsafe to inspect are exempt from the inspection requirements specified in this permit unit if the owner or operator complies with the following: 1) the owner or operator determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with the inspection requirements; 2) the owner or operator identifies the components in the Operator Management Plan; 3) the owner or operator has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times; and 4) inspection and required repair of the components is performed at least annually and during shutdown. [District Rule 4409, 5.3.7.5 and 40 CFR 60.482-10(j)] Federally Enforceable Through Title V Permit
41. For components subject to applicable NSPS, when a leak is detected, a weatherproof and readily visible tag shall be attached, bearing the equipment identification number and date which the leak is detected. The tag on a valve shall remain in place until after it has been monitored for 2 successive months and no leak has been detected. The tag on all other equipment may be removed after repair and re-inspection document compliance with the applicable NSPS. [40 CFR 60.486(b) and 60.635(b)(1)] Federally Enforceable Through Title V Permit
42. Any leak detected on the basis of sight, smell, or sound shall be identified by the operator affixing a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until repair and reinspection document compliance, whether or not operator inspection is otherwise required by this permit. [District Rule 4409, 5.3.3 and 5.3.3] Federally Enforceable Through Title V Permit
43. Any leaking component and any leak shall be repaired to a leak-free condition and reinspected within 15 calendar days. [40 CFR 60.482-7] Federally Enforceable Through Title V Permit
44. For components subject to applicable NSPS standards, except as otherwise provided by 40 CFR 60.482-9, 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 or EPA Method 18 within fifteen (15) calendar days of detection. A first attempt at repair shall be made no later than 5 calendar days after leak detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates necessary and sufficient actions are being taken to correct the leak within this time period. [40 CFR 60.482-2(c)(1) and (c)(2), 60.482-3(g), 60.482-7(d), 60.482-8(c), and 60.633(b)(3)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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45. For components subject to applicable NSPS, if the leaking component is an essential part of a critical process identified in the operator management plan and which cannot be immediately shut down for repairs, the operator shall minimize the leak within 15 calendar days. If the leak which has been minimized still exceeds the applicable NSPS standard, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than six months from the date of the original leak detection for pumps and one year from the date of the original leak detection for other components. Delay of repair is allowed for equipment which is isolated from the process and which does not remain in VOC service and delay of repair is allowed pursuant to 40 CFR 60.482-2(c)(1), 40 CFR 60.482-3(g)(1), 40 CFR 60.482-4(b)(1), 40 CFR 60.482-7(d)(1), 40 CFR 60.482-8(c)(1) [40 CFR 60.482-2(c)(1), 40 CFR 60.482-3(g)(1), 40 CFR 60.482-4(b)(1), 40 CFR 60.482-7(d)(1), 40 CFR 60.482-8(c)(1), 60.482-9(a) and (b)] Federally Enforceable Through Title V Permit
46. Delay of repair of a closed vent system for which leaks have been detected is allowed if the closed vent system is an essential part of a critical process identified in the operator management plan which cannot be immediately shut down for repairs 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. However the operator shall minimize the leak within 15 calendar days. If the leak which has been minimized still exceeds the limit in 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. [40 CFR 60.482-9] Federally Enforceable Through Title V Permit
47. For the purpose of determining compliance with applicable NSPS, each operator shall maintain an inspection log for the components subject to NSPS inspection requirements that contains the following information: 1) instrument, operator, and equipment identification numbers; 2) date of leak detection; 3) dates and repair method of each attempt to repair the leak; 4) "above 10,000" if the maximum instrument reading after each repair attempt is equal to or greater than 10,000 ppm; 5) "repair delayed", reason for delay, signature of individual whose decision it was that repair could not be effected without a process shutdown, and expected date of successful repair if a leak is not repaired within 15 days of detection; 6) dates of process unit shutdown that occur while the equipment is unrepaired; 7) date of successful repair and emission level of recheck after leak is repaired. [District Rule 40 CFR 60.486(c) and 60.635(2)(i) through (ix)] Federally Enforceable Through Title V Permit
48. Each piece of equipment subject to requirements of this permit is presumed to be in VOC service or in wet gas service unless an owner or operator demonstrates that the piece of equipment is not in VOC service or in wet gas service. For a piece of equipment to be considered not in VOC service, it must be determined that the VOC content can be reasonably expected never to exceed 10.0 percent by weight. For a piece of equipment to be considered in wet gas service, it must be determined that it contains or contacts the field gas before the extraction step in the process. For purposes of determining the percent VOC content of the process fluid that is contained in or contacts a piece of equipment, procedures that conform to the methods described this permit shall be used. [40 CFR 60.485(d) and 60.632(f)] Federally Enforceable Through Title V Permit
49. Compliance the no detectable emission standards for this permit unit shall be determined as follows: 1) EPA Method 21 shall be followed, 2) Method 21 shall be used to determine the background level and all potential leak interfaces shall be traversed as close to the inter face as possible, and 3) the arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm to determine compliance. [40 CFR 60.485(c)] Federally Enforceable Through Title V Permit
50. For valves subject to applicable NSPS, if the operator elects to comply with the allowable percentage of leaking valves then for this permit unit, the operator shall notify the APCO 90 days before implementing these alternatives. [40 CFR 60.483-1(b)(1) and (d), 60.483-2(a)(2), and 60.487(d)] Federally Enforceable Through Title V Permit
51. For valves subject to applicable NSPS, if the allowable percentage of leaking valves is selected, then a performance test shall be conducted initially upon designation for allowable percentage of leaking valves, annually, and at other times requested by the APCO. The performance test shall be conducted as follows: 1) all valves in gas/vapor and light liquid service shall be monitored within 1 week using EPA Method 21 and 2) the leak percentage shall be determined by dividing the number of leaking valves detected and valves for which repair has been delayed by the number of valves in gas/vapor and light liquid service in this permit unit, 3) a record must be kept of the percent of valves found leaking during each leak detection period. [40 CFR 60.483-1(b)(2) and (c) and 60.483-2(b)(5) and (6)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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52. For compressors subject to applicable NSPS, each compressor shall meet the applicable control system requirements of 40 CFR 482-3(a) - (i), except as otherwise provided by 40 CFR 60.482-1(c) and 40 CFR 60.482-3(h) and (i). [40 CFR 60.482-3(a) through (j)], 40 CFR 60.482-1(c), 40 CFR 60.482-3(h) and (i), and 40 CFR 60.633] Federally Enforceable Through Title V Permit
53. Compressors that are subject to applicable NSPS, are exempt from requirements of 40 CFR 60.482-3(a) and 40 CFR 60.482-3(b) if the compressor is equipped with a closed vent system to capture and transport leakage from the compressor drive shaft back to a process fuel gas system or a control device. Closed vent systems piping shall comply with applicable requirements at 40 CFR 60.482-10. Closed vent vapor recovery systems shall comply with design requirements at 40 CFR 60.482-10(b). Enclosed combustion devices used by closed vent system shall comply with design requirements at 40 CFR 60.482-10(c). Flares used by closed vent systems shall comply with requirements at 40 CFR 60.482-10(d). Closed vent system control devices shall comply with monitoring requirements at 40 CFR 60.482-10(e). [40 CFR 60.482-3, 40 CFR 60.482-10] Federally Enforceable Through Title V Permit
54. Compressors that are subject to applicable NSPS and are designated in the Operator Management Plan for no detectable leak emission, as indicated by an instrument reading of less than 500 ppm above background, is are exempt from the requirements of 40 CFR 482-3(a)-(h), provided the compressor is tested for compliance with no detectable emissions initially upon designation, annually, and at other times requested by the APCO. [40 CFR 60.482-3(i)] Federally Enforceable Through Title V Permit
55. When determining compliance with applicable NSPS, if an instrument reading of 10,000 ppm or greater is measured, a leak is detected. [40 CFR 60.633(b)(2), 40482-7(a), (b), and (c)] Federally Enforceable Through Title V Permit
56. For open ended lines or valves subject to applicable NSPS, each open-ended valve or line equipped with a second valve shall be operated so 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
57. For equipment subject to applicable NSPS when a double block-and-bleed system is being used, the bleed valve or line may remain open only during operations that require venting the line between the block valves. [40 CFR 60.482-6(c)] Federally Enforceable Through Title V Permit
58. Except as provided by applicable NSPS, valves that are subject to NSPS that are in gas/vapor service or light liquid service shall be monitored monthly to detect leaks using EPA Method 21. Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter. If a leak is subsequently detected, monitoring shall revert to monthly. [40 CFR 60.482-7(a), (b), and (c)] Federally Enforceable Through Title V Permit
59. Any valve in gas/vapor service or light liquid service that is designated in the equipment log list for no detectable leak emission, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the monitoring requirements of 40 CFR 60.482-7(a), provided the valve: 1) has no external actuating mechanism in contact with the process fluid and 2) is tested for and meets compliance with no detectable leak emission initially upon designation, annually and at other times requested by the APCO. [40 CFR 60.482-7(f)] Federally Enforceable Through Title V Permit
60. For valves subject to applicable NSPS requirements, for a valve in gas/vapor service or light or heavy liquid service, first attempts at repair shall include the following where practicable: 1) tightening of bonnet bolts, 2) replacement of bonnet bolts, 3) tightening of packing gland nuts, and 4) injection of lubricant into lubricant packing. [40 CFR 60.482-7(e) and 60.482-8(d)] Federally Enforceable Through Title V Permit
61. For pumps and valves in heavy liquid service, pressure relief devices in light or heavy liquid service, and flanges and other connectors, that are subject to applicable NSPS requirements, if evidence of a potential leak is found by sight, sound, smell, or any other detection method then the device shall be monitored within 5 days for leak detection in accordance with EPA Method 21. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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62. In addition to the information required by Rule 4409, the operator management plan shall include an addendum for this permit unit containing the following applicable NSPS information: 1) list of identification numbers for equipment subject to the applicable NSPS requirements, 2) list of identification numbers for equipment which is designated for no detectable emissions and which is signed by the owner/operator, 3) list of equipment identification numbers for pressure relief devices which must be operated with no detectable emissions, 4) dates of each compliance test for emissions below 500 ppm, for all equipment subject to this no detectable emission limit and the background level measured and the maximum instrument reading measured at the equipment, during each test, and 5) list of identification numbers for equipment in vacuum service. [40 CFR 60.486(e) and 60.635(b)(2)(x)] Federally Enforceable Through Title V Permit
63. In addition to the information required by Rule 4409, the operator management plan shall include an addendum for this permit unit containing the following applicable NSPS information: for valves in gas/vapor service and light liquid service: 1) a list of identification numbers for valves designated "unsafe-to-monitor" and for valves designated "difficult-to monitor", 2) an explanation for each valve stating why it is so designated, and 3) the schedule for monitoring each such valve. [40 CFR 60.486(f)] Federally Enforceable Through Title V Permit
64. For valves subject to NSPS annual leak detection alternative requirements, the NSPS inspection log shall include the following information: 1) a schedule of monitoring and 2) the percent of valves found leaking during each monitoring period. [CFR 60.486(g)] Federally Enforceable Through Title V Permit
65. A log containing the following information for pumps and compressors equipped a barrier fluid seal system which includes a seal failure sensor, for which a system failure criteria is required to be established, pursuant to the requirements for this permit unit, shall be maintained and kept in a readily accessible location: 1) the design criterion required by this permit and an explanation and 2) any changes to this criterion and reasons for the changes. [40 CFR 60.486(h)] Federally Enforceable Through Title V Permit
66. For equipment (compressors and components) subject to applicable NSPS, the operator shall maintain information and data used to demonstrate that a piece of equipment is not in VOC service and information and data used to demonstrate that a reciprocating compressor is in wet gas service. The information shall be included in the NSPS inspection log for the permit unit and shall be kept in a readily accessible location. [40 CFR 60.486(j) and 60.635(c)] Federally Enforceable Through Title V Permit
67. Vapor recovery systems (for example, condensers and absorbers) 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
68. 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 °C. [40 CFR 60.482-10(c)] Federally Enforceable Through Title V Permit
69. If the vapor collection system or closed vent system is constructed of hard-piping, the owner or operator shall conduct an initial inspection according to the procedures specified in EPA Method 21 using the calibration gases as specified in the requirements for this permit unit. The owner or operator shall also conduct annual visual inspections for visible, audible, or olfactory indications of leaks. [40 CFR 60.482-10(f)(1) and 40 CFR 60.485(b)] Federally Enforceable Through Title V Permit
70. If the vapor collection system or closed vent system is constructed of ductwork, the owner or operator shall conduct an initial inspection and annual inspections according to the procedures specified in EPA Method 21 using the calibration gases as specified in the requirements for this permit unit. The owner or operator shall also conduct annual visual inspections for visible, audible, or olfactory indications of leaks. [40 CFR 60.482-10(f)(2) and 40 CFR 60.485(b)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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71. Any parts of the closed vent system that are designated as difficult to inspect are exempt from the inspection requirements of 40 CFR 60.482-10(f)(1) and (f)(2) if the owner or operator complies with the following: 1) the owner or operator determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and 2) the process unit within which the closed vent system is located becomes an affected facility through modification or reconstruction, as defined in 40 CFR 60.14 and 60.15, or the owner or operator designates less than 3.0 percent of the total number of closed vent system equipment as difficult to inspect; and 3) the owner or operator has a written plan that requires inspection of the equipment at least every 5 years. A closed vent system is exempt from inspection if it is operated under a vacuum. [40 CFR 60.482-10(k)] Federally Enforceable Through Title V Permit
72. Closed vent systems and control devices 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
73. A log shall be maintained containing 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 conducted in accordance with EPA Method 21 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 4) for each visual inspection conducted for visible, audible, or olfactory indications of leaks 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) and 40 CFR 60.485(b)] Federally Enforceable Through Title V Permit
74. For components subject to applicable NSPS requirements, semiannual reports shall be submitted to the APCO containing the following information: 1) process unit identification, 2) for each month during the reporting period, number of valves, pumps, compressors, and pressure relief devices for which leaks were detected; number of valves, pumps, compressors, and pressure relief devices for which leaks were not repaired within 15 days and a first attempt not made within 5 days of leak detection; 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 reporting period, and 4) revisions to items reported in the initial or subsequent semiannual reports. [40 CFR 60.487(a) and (c) and 60.636(c)] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

DRAFT

**Occidental of Elk Hills, Inc.**

**Facility # S-2234**

**Project # S-1104946**

# **ATTACHMENT B**

**Authority to Construct Documents**

**S-2234-1-16, '-3-17**



## AUTHORITY TO CONSTRUCT

PERMIT NO: S-2234-1-16

ISSUANCE DATE: 11/22/2010

LEGAL OWNER OR OPERATOR: OCCIDENTAL OF ELK HILLS INC  
MAILING ADDRESS: 10800 STOCKDALE HWY  
BAKERSFIELD, CA 93311

LOCATION: GAS PLANT  
SECTION SE-35, T-30S, R-23E  
TUPMAN, CA

SECTION: 35 TOWNSHIP: 30S RANGE: 23E

### EQUIPMENT DESCRIPTION:

MODIFICATION OF LOW TEMPERATURE SEPARATION PLANT #2 INCLUDING PROCESS PUMPS, HEAT EXCHANGER(S)/COOLER(S), COOLING TOWER, FUEL GAS/LIQUID K.O. VESSEL(S) VENTED TO FLARE, AND DE-ETHANIZER, DE-BUTANIZER, DE-PROPANIZER COLUMNS VENTED TO FLARE, TWO 27.5 MMBTU/HR STANDBY HEATERS SERVED BY SCR, AND INLET HEAT EXCHANGER: REMOVE EMISSION LIMITS DURING STARTUP AND SHUTDOWN

## CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] 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. Operation shall include refrigerant regeneration system, glycol dehydration system, and two 27.5 MMBtu/hr process heaters F-44-301 & F-44-302 (shared with S-2234-3). [District Rule 2201] Federally Enforceable Through Title V Permit
4. Two process heaters F-44-301 & F-44-302 shall be used on a standby basis, only during periods when one or both gas turbines (S-2234-52 & '53) are inoperative. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU **MUST** NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

  
DAVID WARNER, Director of Permit Services  
S-2234-1-16 : Nov 22 2010 8:23AM - LEONARDS : Job Inspection NOT Required

5. Fugitive VOC emission rate from the control system added to control emissions from glycol dehydrator reboiler vent, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c less than or equal to 10,000 ppm (Feb 1999), shall not exceed 0.20 lb/day. Permittee shall demonstrate compliance with specified emissions limit by calculation using the installed components and emissions factors specified above. Permittee shall maintain with the permit an accurate record by number and type of the installed fugitive components and shall make such record available for inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Control system(s) employed to control emissions from glycol dehydration system vent(s) shall be maintained in a leak free condition, as defined in Rule 4408. [District Rule 4408, Sections 3.8.2, 5.3 and 6.3.2] Federally Enforceable Through Title V Permit
7. Permittee shall maintain monthly records of amount of gas dehydrated and other records as required by Rule 4408. The permittee shall make such records readily available for District inspection upon request and shall be retained on the premises for a period of not less than five years. [District Rule 4408, Sections 6.1.1, 6.1.2 and 6.1.4] Federally Enforceable Through Title V Permit
8. Process heaters shall only be fired on PUC-quality natural gas. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
9. Permittee shall determine sulfur content of combusted gas annually or shall demonstrate that the combusted gas is provided from a PUC or FERC regulated source. [District Rules 1081 and 4320] Federally Enforceable Through Title V Permit
10. Permittee shall maintain operational records of standby process heaters FF-44-301 & FF-44-302, including date, time, and total amount of natural gas consumed. These records shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
11. All process vessels and lines handling volatile organic compounds shall vent only to other process vessels, District-approved flare, or substrata injection system. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Total duration of process heater startup shall not exceed 2 hr/day. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
13. Total duration of process heater shutdown shall not exceed 2 hr/day. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
14. Duration of start-up or shutdown shall not exceed two hours each per occurrence. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. The operator shall maintain daily records of the duration of start-up and shutdown periods. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
15. Except during start-up and shutdown, emissions rates from process heater exhaust shall not exceed any of the following limits: 6 ppmvd NO<sub>x</sub> @ 3% O<sub>2</sub> or 0.007 lb-NO<sub>x</sub>/MMBtu, 0.002 lb-SO<sub>x</sub>/MMBtu, 0.014 lb-PM<sub>10</sub>/MMBtu, 47 ppmvd @ 3% O<sub>2</sub> or 0.037 lb-CO/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
16. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
17. Ammonia (NH<sub>3</sub>) emissions shall not exceed 10 ppmvd @ 3% O<sub>2</sub> over a 15 minute averaging period. [District Rule 4102]
18. Exhaust stack shall be equipped with adequate provisions facilitating the collection of samples consistent with EPA test methods. [District Rule 1081] Federally Enforceable Through Title V Permit
19. Source testing to measure natural gas-combustion NO<sub>x</sub> and CO emissions, and NH<sub>3</sub> emissions from this unit shall be conducted within 60 days of initial start-up. [District Rules 4102, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

20. Source testing to measure natural gas-combustion NOx and CO emissions, and NH3 emissions from this unit 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 4102, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
21. 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 Rule District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
22. Continuous Emissions Monitoring (CEM) equipment shall be in place and operating whenever process heater is operating, except for CEM systems breakdowns, repairs, and required calibration checks and zero and span adjustments, in accordance with 40 CFR 60.13(e). NOx (as NO2) and O2 must be recorded continuously when the CEM equipment is operating. [District Rules 1080, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
23. Operation, calibration and data reduction for the CEM equipment shall be in accordance with the requirements of 40 CFR, Appendix P of Part 51 and Appendix B of Part 60. [District Rule 1080] Federally Enforceable Through Title V Permit
24. CEM records shall be retained for at least 5 years. Records shall include occurrence and duration of start-up, shutdown or malfunction; performance testing, calibrations, checks, and maintenance of CEM; and emission measurements. [District Rule 1080] Federally Enforceable Through Title V Permit
25. Daily summaries of CEM records for each calendar quarter shall be submitted to the District within 30 days of the end of the calendar quarter. Hourly fuel stack gas flow rates and/or hourly fuel flow rates shall be measured during operation and included in quarterly reports. [District Rule 1080] Federally Enforceable Through Title V Permit
26. A report shall be submitted to the District within 30 days of the end of each calendar quarter identifying the time and date of each exceedance of emission limits, the excess emissions generated, and any conversion factor used to calculate emissions. [District Rule 1080] Federally Enforceable Through Title V Permit
27. The quarterly report shall identify each period of excess emissions that occurs during startups, shutdowns, or malfunctions. The nature and cause of each malfunction, corrective action taken, and preventative measures adopted shall also be reported. [District Rule 1080] Federally Enforceable Through Title V Permit
28. Heat exchangers utilizing cooling water shall be properly maintained to prevent VOC emissions from cooling towers. [District Rule 2201] Federally Enforceable Through Title V Permit
29. The operator shall test the circulating water from the cooling tower at least every six months to determine the concentration of hexavalent chromium. The District shall be notified 48 hours in advance of any sampling of cooling water for testing. Required testing may be discontinued and an exemption sought when two consecutive required tests show hexavalent chromium concentrations less than 0.15 mg/l. [District Rule 7012] Federally Enforceable Through Title V Permit
30. Operator shall comply with other applicable requirements of District Rule 7012 (amended 12/17/92). [District Rule 7012] Federally Enforceable Through Title V Permit
31. 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
32. 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
33. 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
34. Nitrogen oxide (NOx) emissions shall not exceed 140 lb/hr, calculated as NO2. [District Rules 4301, 5.2.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

35. 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
36. 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
37. NO<sub>x</sub> 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. NO<sub>x</sub> emissions during the source test shall be calculated as the arithmetic average of three 30-consecutive-minute test runs. [District Rule 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
38. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. CO emissions during the source test shall be calculated as the arithmetic average of three 30-consecutive-minute test runs. [District Rule 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
39. Stack gas oxygen shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
40. NH<sub>3</sub> emissions for source test purposes shall be determined using BAAQMD method ST-1B. [District Rule 1081] Federally Enforceable Through Title V Permit
41. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO<sub>2</sub>. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rules 2520, 9.4.2 and 4301, 5.2.1] Federally Enforceable Through Title V Permit
42. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested for sulfur content (as hydrogen sulfide). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
43. When complying with SO<sub>x</sub> emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6B; or Method 8; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculate emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months, however annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
44. If the unit is fired on noncertified gaseous fuel and compliance with SO<sub>x</sub> emission limits is achieved through fuel sulfur content limitations, then the sulfur content (as hydrogen sulfide) of the gaseous fuel being fired in the unit shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
45. If fuel analysis is used to demonstrate compliance with the conditions of this permit, the fuel higher heating value for each fuel shall be certified by third party fuel supplier or determined by: ASTM D 240-87 or D 2382-88 for liquid hydrocarbon fuels; ASTM D 1826-88 or D 1945-81 in conjunction with ASTM D 3588-89 for gaseous fuels. [District Rule 2520, 9.4.2; 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
46. 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. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2; County Rules 404 (Madera), 406 (Fresno), and 407 (Kern, Kings, Merced, San Joaquin, Stanislaus, and Tulare)] Federally Enforceable Through Title V Permit
47. The requirements of 40 CFR 60 Subpart KKK and 40 CFR 60 Subpart LLL 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

CONDITIONS CONTINUE ON NEXT PAGE

48. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results 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 and record specific type of noncertified fuel used. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
49. 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, 4306, and 4320] Federally Enforceable Through Title V Permit



## AUTHORITY TO CONSTRUCT

PERMIT NO: S-2234-3-16

ISSUANCE DATE: 11/22/2010

LEGAL OWNER OR OPERATOR: OCCIDENTAL OF ELK HILLS INC  
MAILING ADDRESS: 10800 STOCKDALE HWY  
BAKERSFIELD, CA 93311

LOCATION: GAS PLANT  
SECTION SE-35, T-30S, R-23E  
TUPMAN, CA

SECTION: NE35 TOWNSHIP: 30S RANGE: 23E

### EQUIPMENT DESCRIPTION:

MODIFICATION OF LOW TEMPERATURE SEPARATION PLANT #1 INCLUDING FREE WATER KNOCKOUT(S), ACCUMULATOR(S), CHILLER(S), LOW TEMPERATURE SEPARATOR(S), DE-ETHANIZER & REBOILER, DE-BUTANIZER & REBOILER, DE-PROPANIZER & REBOILER, TWO 27.5 MMBTU/HR STANDBY HEATERS SERVED BY SCR, AND INLET HEAT EXCHANGER: REMOVE EMISSION LIMITS DURING STARTUP AND SHUTDOWN OF HEATERS

## CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520: [District Rule 2520] 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. Operation shall include refrigerant regeneration system, glycol dehydration system, and two 27.5 MMBtu/hr process heaters F-44-301 & F-44-302 (shared with S-2234-3). [District Rule 2201] Federally Enforceable Through Title V Permit
4. Two process heaters F-44-301 & F-44-302 shall be used on a standby basis, only during periods when one or both gas turbines (S-2234-52 & '53) are inoperative. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU **MUST** NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT: This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

  
DAVID WARNER, Director of Permit Services  
S-2234-3-16; Nov 22 2010 8:24AM - LEONARDS Joint Inspection NOT Required

5. Fugitive VOC emission rate from the control system added to control emissions from glycol dehydrator reboiler vent, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c less than or equal to 10,000 ppm (Feb 1999), shall not exceed 0.20 lb/day. Permittee shall demonstrate compliance with specified emissions limit by calculation using the installed components and emissions factors specified above. Permittee shall maintain with the permit an accurate record by number and type of the installed fugitive components and shall make such record available for inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Fugitive VOC emission rate from the propane compressor, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c less than or equal to 10,000 ppm (Feb 1999), shall not exceed 1.9 lb/day. Permittee shall demonstrate compliance with specified emissions limit by calculation using the installed components and emissions factors specified above. Permittee shall maintain with the permit an accurate record by number and type of the installed fugitive components and shall make such record available for inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The propane compressor shall be maintained in a leak-free condition. 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 4409 and shall be reported as a deviation. [District Rule 2201 and Rule 4409, Section 3.20] Federally Enforceable Through Title V Permit
8. Control system(s) employed to control emissions from glycol dehydration system vent(s) shall be maintained in a leak free condition, as defined in Rule 4408. [District Rule 4408, Sections 3.8.2, 5.3 and 6.3.2] Federally Enforceable Through Title V Permit
9. Permittee shall maintain monthly records of amount of gas dehydrated and other records as required by Rule 4408. The permittee shall make such records readily available for District inspection upon request and shall be retained on the premises for a period of not less than five years. [District Rule 4408, Sections 6.1.1, 6.1.2 and 6.1.4] Federally Enforceable Through Title V Permit
10. Process heaters shall only be fired on PUC-quality natural gas. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
11. Permittee shall determine sulfur content of combusted gas annually or shall demonstrate that the combusted gas is provided from a PUC or FERC regulated source. [District Rules 1081 and 4320] Federally Enforceable Through Title V Permit
12. Permittee shall maintain operational records of standby process heaters FF-44-301 & FF-44-302, including date, time, and total amount of natural gas consumed. These records shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
13. All process vessels and lines handling volatile organic compounds shall vent only to other process vessels, District-approved flare, or substrata injection system. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Total duration of process heater startup shall not exceed 2 hr/day. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
15. Total duration of process heater shutdown shall not exceed 2 hr/day. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
16. Duration of start-up or shutdown shall not exceed two hours each per occurrence. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. The operator shall maintain daily records of the duration of start-up and shutdown periods. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
17. Except during start-up and shutdown, emissions rates from process heater exhaust shall not exceed any of the following limits: 6 ppmvd NO<sub>x</sub> @ 3% O<sub>2</sub> or 0.007 lb-NO<sub>x</sub>/MMBtu, 0.002 lb-SO<sub>x</sub>/MMBtu, 0.014 lb-PM<sub>10</sub>/MMBtu, 47 ppmvd @ 3% O<sub>2</sub> or 0.037 lb-CO/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

18. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
19. Ammonia (NH<sub>3</sub>) emissions shall not exceed 10 ppmvd @ 3% O<sub>2</sub> over a 15 minute averaging period. [District Rule 4102]
20. Exhaust stack shall be equipped with adequate provisions facilitating the collection of samples consistent with EPA test methods. [District Rule 1081] Federally Enforceable Through Title V Permit
21. Source testing to measure natural gas-combustion NO<sub>x</sub> and CO emissions, and NH<sub>3</sub> emissions from this unit shall be conducted within 60 days of initial start-up. [District Rules 4102, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
22. Source testing to measure natural gas-combustion NO<sub>x</sub> and CO emissions, and NH<sub>3</sub> emissions from this unit 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 4102, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
23. 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 Rule District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
24. Continuous Emissions Monitoring (CEM) equipment shall be in place and operating whenever process heater is operating, except for CEM systems breakdowns, repairs, and required calibration checks and zero and span adjustments, in accordance with 40 CFR 60.13(e). NO<sub>x</sub> (as NO<sub>2</sub>) and O<sub>2</sub> must be recorded continuously when the CEM equipment is operating. [District Rules 1080, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
25. Operation, calibration and data reduction for the CEM equipment shall be in accordance with the requirements of 40 CFR, Appendix P of Part 51 and Appendix B of Part 60. [District Rule 1080] Federally Enforceable Through Title V Permit
26. CEM records shall be retained for at least 5 years. Records shall include occurrence and duration of start-up, shutdown or malfunction; performance testing, calibrations, checks, and maintenance of CEM; and emission measurements. [District Rule 1080] Federally Enforceable Through Title V Permit
27. Daily summaries of CEM records for each calendar quarter shall be submitted to the District within 30 days of the end of the calendar quarter. Hourly fuel stack gas flow rates and/or hourly fuel flow rates shall be measured during operation and included in quarterly reports. [District Rule 1080] Federally Enforceable Through Title V Permit
28. A report shall be submitted to the District within 30 days of the end of each calendar quarter identifying the time and date of each exceedance of emission limits, the excess emissions generated, and any conversion factor used to calculate emissions. [District Rule 1080] Federally Enforceable Through Title V Permit
29. The quarterly report shall identify each period of excess emissions that occurs during startups, shutdowns, or malfunctions. The nature and cause of each malfunction, corrective action taken, and preventative measures adopted shall also be reported. [District Rule 1080] Federally Enforceable Through Title V Permit
30. Heat exchangers utilizing cooling water shall be properly maintained to prevent VOC emissions from cooling towers. [District Rule 2201] Federally Enforceable Through Title V Permit
31. The operator shall test the circulating water from the cooling tower at least every six months to determine the concentration of hexavalent chromium. The District shall be notified 48 hours in advance of any sampling of cooling water for testing. Required testing may be discontinued and an exemption sought when two consecutive required tests show hexavalent chromium concentrations less than 0.15 mg/l. [District Rule 7012] Federally Enforceable Through Title V Permit
32. Operator shall comply with other applicable requirements of District Rule 7012 (amended 12/17/92). [District Rule 7012] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

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. 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
35. Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO<sub>2</sub>, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
36. Nitrogen oxide (NO<sub>x</sub>) emissions shall not exceed 140 lb/hr, calculated as NO<sub>2</sub>. [District Rules 4301, 5.2.2] Federally Enforceable Through Title V Permit
37. 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
38. 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
39. NO<sub>x</sub> 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. NO<sub>x</sub> emissions during the source test shall be calculated as the arithmetic average of three 30-consecutive-minute test runs. [District Rule 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
40. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. CO emissions during the source test shall be calculated as the arithmetic average of three 30-consecutive-minute test runs. [District Rule 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
41. Stack gas oxygen shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
42. NH<sub>3</sub> emissions for source test purposes shall be determined using BAAQMD method ST-1B. [District Rule 1081] Federally Enforceable Through Title V Permit
43. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO<sub>2</sub>. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rules 2520, 9.4.2 and 4301, 5.2.1] Federally Enforceable Through Title V Permit
44. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested for sulfur content (as hydrogen sulfide). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
45. When complying with SO<sub>x</sub> emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6B; or Method 8; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months, however annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
46. If the unit is fired on noncertified gaseous fuel and compliance with SO<sub>x</sub> emission limits is achieved through fuel sulfur content limitations, then the sulfur content (as hydrogen sulfide) of the gaseous fuel being fired in the unit shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
47. If fuel analysis is used to demonstrate compliance with the conditions of this permit, the fuel higher heating value for each fuel shall be certified by third party fuel supplier or determined by: ASTM D 240-87 or D 2382-88 for liquid hydrocarbon fuels; ASTM D 1826-88 or D 1945-81 in conjunction with ASTM D 3588-89 for gaseous fuels. [District Rule 2520, 9.4.2; 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

48. 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. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2; County Rules 404 (Madera), 406 (Fresno), and 407 (Kern, Kings, Merced, San Joaquin, Stanislaus, and Tulare)] Federally Enforceable Through Title V Permit
49. For all components that are subject to applicable NSPS requirements and are included in the permit unit addendum to the operator management plan and that comply with the applicable NSPS inspection, maintenance and repair requirements as specified by the terms and condition of this permit, a Title-V permit shield is granted for applicable requirements at 40 CFR 60, Subpart KKK. [District Rule 40 CFR 60, Subpart KKK] Federally Enforceable Through Title V Permit
50. The requirements of 40 CFR 60 Subpart LLL 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
51. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results 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 and record specific type of noncertified fuel used. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
52. 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, 4306, and 4320] Federally Enforceable Through Title V Permit

Occidental of Elk Hills, Inc.  
Facility # S-2234  
Project # S-1104946

# **ATTACHMENT C**

## **Emissions Increases**

Occidental of Elk Hills, Inc.  
 Facility # S-2234  
 Project # S-1104946

**Proposed PTO: S-2234-1-17**

	SSIPE (lb/yr)				
	NOx	SOx	PM10	CO	VOC
S-2234-1-17*	0 (-29.3 lb/day)	0	0	0	0 (-2.1 lbs/day)

**Proposed PTO: S-2234-3-18**

	SSIPE (lb/yr)				
	NOx	SOx	PM10	CO	VOC
S-2234-3-18*	0 (-175.6 lb/day)	0	0	0	0 (-2.1 lbs/day)

\*Because the process heaters are used exclusively as standby units, to be utilized only when one or both of gas turbines S-2234-52 & '-53 are down. Therefore, the process heaters are not assessed (additional) annual emissions which would be attributed to the facility's SSPE.

Occidental of Elk Hills, Inc.  
Facility # S-2234  
Project # S-1104946

# **ATTACHMENT D**

**Application**



OCCIDENTAL OF ELK HILLS, INC.  
10800 Stockdale Highway, Bakersfield, CA 93311  
Telephone 661 412-5000

**RECEIVED**

**NOV 24 2010**

**SJVAPCD  
Southern Region**

November 22, 2010

**CERTIFIED RETURN RECEIPT REQUESTED**

Mr. Leonard Scandura  
Permit Services Manager  
San Joaquin Valley APCD – Southern Region  
34946 Flyover Court  
Bakersfield, CA 93308

Subject: Amendments to Occidental of Elk Hills, Inc. Title V Permit (S-2234)

Dear Mr. Scandura:

Occidental of Elk Hills, Inc. requests District approval for a Minor Amendment to include the following Authorities to Construct into the facility S-2234 Title-V Permit:

S-2234-1-16    S-2234-3-16

Please bill OEHI for all administrative costs associated with this request. If you have any questions or require addition information concerning this issue, please contact me directly at (661) 412-5214 or on my cellular phone at (661) 331-0118.

Yours sincerely,

A handwritten signature in black ink, appearing to read "D.J. Champion".

Dennis J. Champion, PE  
Environmental Engineer

cc: Mike Glavin, OEHI  
Kevin Madry, ERM

RECEIVED

NOV 24 2010

# San Joaquin Valley Air Pollution Control District

[www.valleyair.org](http://www.valleyair.org)

SJVAPCD  
Southern Region

## Permit Application For:

ADMINISTRATIVE AMENDMENT     MINOR MODIFICATION     SIGNIFICANT MODIFICATION

1. PERMIT TO BE ISSUED TO: Occidental of Elk Hills, Inc	
2. MAILING ADDRESS: STREET/P.O. BOX: 10800 Stockdale Hwy CITY: <u>Bakersfield</u> STATE: <u>CA</u> ZIP CODE: <u>93311</u>	
3. LOCATION WHERE THE EQUIPMENT WILL BE OPERATED: STREET: <u>Elk Hills</u> CITY: <u>Tupman</u> ¼ SECTION _____ TOWNSHIP _____ RANGE _____	INSTALLATION DATE:
4. GENERAL NATURE OF BUSINESS: Oil and Natural Gas Production	
5. DESCRIPTION OF EQUIPMENT OR MODIFICATION FOR WHICH APPLICATION IS MADE (include Permit #'s if known, and use additional sheets if necessary) Incorporate following ATCs into S-2234 Title V document:  S-2234-1-16    S-2234-3-16	
6. TYPE OR PRINT NAME OF APPLICANT: Dennis J. Champion, PE	TITLE OF APPLICANT: Sr Environmental Engineer
7. SIGNATURE OF APPLICANT: 	DATE: November 22, 2010 PHONE: (661) 412-5214 FAX: (661) 412-5270 EMAIL: dennis_champion@oxy.com

### For APCD Use Only:

DATE STAMP	FILING FEE RECEIVED: \$ _____ CHECK#: _____
	DATE PAID: _____
	PROJECT NO: <u>S-110 4946</u> FACILITY ID: <u>S-2234</u>

*Title V - Minor Mod*

**San Joaquin Valley  
Unified Air Pollution Control District**

**RECEIVED**  
**NOV 24 2010**  
**SJVAPCD**  
**Southern Region**

**TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM**

**I. TYPE OF PERMIT ACTION (Check appropriate box)**

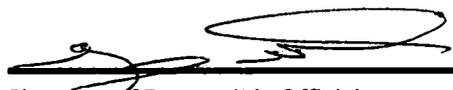
- SIGNIFICANT PERMIT MODIFICATION                       ADMINISTRATIVE AMENDMENT  
 MINOR PERMIT MODIFICATION

COMPANY NAME: Occidental of Elk Hills, Inc	FACILITY ID: S - 2234
1. Type of Organization: <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Sole Ownership <input type="checkbox"/> Government <input type="checkbox"/> Partnership <input type="checkbox"/> Utility	
2. Owner's Name: Occidental of Elk Hills, Inc	
3. Agent to the Owner: Occidental of Elk Hills, Inc.	

**II. COMPLIANCE CERTIFICATION (Read each statement carefully and initial all circles for confirmation):**

- Based on information and belief formed after reasonable inquiry, the equipment identified in this application will continue to comply with the applicable federal requirement(s).
- Based on information and belief formed after reasonable inquiry, the equipment identified in this application will comply with applicable federal requirement(s) that will become effective during the permit term, on a timely basis.
- Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted.
- Based on information and belief formed after reasonable inquiry, information and statements in the submitted application package, including all accompanying reports, and required certifications are true accurate and complete.

I declare, under penalty of perjury under the laws of the state of California, that the forgoing is correct and true:

  
\_\_\_\_\_  
Signature of Responsible Official

November 22, 2010  
\_\_\_\_\_  
Date

George Gough  
\_\_\_\_\_  
Name of Responsible Official (please print)

Safety Team Lead  
\_\_\_\_\_  
Title of Responsible Official (please print)

Occidental of Elk Hills, Inc.

Facility # S-2234

Project # S-1104946

# **ATTACHMENT E**

**Previous Title V Operating Permits  
S-2234-1-9 & '3-9**

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-2234-1-9

**EXPIRATION DATE:** 10/31/2009

**SECTION:** 35 **TOWNSHIP:** 30S **RANGE:** 23E

## **EQUIPMENT DESCRIPTION:**

LOW TEMPERATURE SEPARATION PLANT #2 INCLUDING PROCESS PUMPS, HEAT EXCHANGER(S)/COOLER(S), COOLING TOWER, FUEL GAS/LIQUID K.O. VESSEL(S) VENTED TO FLARE, AND DE-ETHANIZER, DE-BUTANIZER, DE-PROPANIZER COLUMNS VENTED TO FLARE, AND INLET HEAT EXCHANGER

## **PERMIT UNIT REQUIREMENTS**

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1. Operation shall include refrigerant regeneration system, glycol dehydration system, and two 27.5 MMBtu/hr process heaters F-44-301 & F-44-302 (shared with S-2234-3). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Two process heaters F-44-301 & F-44-302 shall be used on a standby basis, only during periods when one or both gas turbines (S-2234-52 & '53) are inoperative. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Fugitive VOC emission rate from the control system added to control emissions from glycol dehydrator reboiler vent, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c less than or equal to 10,000 ppm (Feb 1999), shall not exceed 0.20 lb/day. Permittee shall demonstrate compliance with specified emissions limit by calculation using the installed components and emissions factors specified above. Permittee shall maintain with the permit an accurate record by number and type of the installed fugitive components and shall make such record available for inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Fugitive VOC emission rate from the propane compressor calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c less than or equal to 10,000 ppm (Feb 1999), shall not exceed 1.9 lb/day. Permittee shall demonstrate compliance with specified emissions limit by calculation using the installed components and emissions factors specified above. Permittee shall maintain with the permit an accurate record by number and type of the installed fugitive components and shall make such record available for inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Control system(s) employed to control emissions from glycol dehydration system vent(s) shall be maintained in a leak free condition, as defined in Rule 4408. [District Rule 4408, Sections 3.8.2, 5.3 and 6.3.2] Federally Enforceable Through Title V Permit
6. The propane compressor shall be maintained in a gas-tight condition. A gas-tight 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 4409 and shall be reported as a deviation. [District Rule 2201 and Rule 4409, Section 3.20] Federally Enforceable Through Title V Permit
7. Permittee shall maintain monthly records of amount of gas dehydrated and other records as required by Rule 4408. The permittee shall make such records readily available for District inspection upon request and shall be retained on the premises for a period of not less than five years. [District Rule 4408, Sections 6.1.1, 6.1.2 and 6.1.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

8. Process heaters shall be fired exclusively by PUC quality natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Permittee shall maintain operational records of standby process heaters FF-44-301 & FF-44-302, including date, time, and total amount of natural gas consumed. These records shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
10. All process vessels and lines handling volatile organic compounds shall vent only to other process vessels, District-approved flare, or substrata injection system. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Total duration of process heater startup shall not exceed 2 hr/day. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit
12. Total duration of process heater shutdown shall not exceed 2 hr/day. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit
13. Duration of start-up or shutdown shall not exceed two hours each per occurrence. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. The operator shall maintain daily records of the duration of start-up and shutdown periods. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
14. Except during start-up and shutdown, emissions rates from process heater exhaust shall not exceed any of the following limits: 6 ppmvd NO<sub>x</sub> @ 3% O<sub>2</sub> or 0.007 lb-NO<sub>x</sub>/MMBtu, 0.002 lb-SO<sub>x</sub>/MMBtu, 0.014 lb-PM<sub>10</sub>/MMBtu, 47 ppmvd @ 3% O<sub>2</sub> or 0.037 lb-CO/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit
15. During start-up and shutdown periods, emissions rates from process heater exhaust shall not exceed any of the following limits: 114 ppmvd NO<sub>x</sub> @ 3% O<sub>2</sub> or 0.14 lb-NO<sub>x</sub>/MMBtu, 0.002 lb-SO<sub>x</sub>/MMBtu, 0.014 lb-PM<sub>10</sub>/MMBtu, 47 ppmvd @ 3% O<sub>2</sub> or 0.037 lb-CO/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit
16. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
17. Ammonia (NH<sub>3</sub>) emissions shall not exceed 10 ppmvd @ 3% O<sub>2</sub> over a 15 minute averaging period. [District Rule 4102] Federally Enforceable Through Title V Permit
18. Exhaust stack shall be equipped with adequate provisions facilitating the collection of samples consistent with EPA test methods. [District Rule 1081] Federally Enforceable Through Title V Permit
19. Source testing to measure natural gas-combustion NO<sub>x</sub> and CO emissions, and NH<sub>3</sub> emissions from this unit shall be conducted within 60 days of initial start-up. [District Rules 4102, 4305 and 4306] Federally Enforceable Through Title V Permit
20. Source testing to measure natural gas-combustion NO<sub>x</sub> and CO emissions, and NH<sub>3</sub> emissions from this unit 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 4102, 4305 and 4306] Federally Enforceable Through Title V Permit
21. 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 Rule District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
22. Continuous Emissions Monitoring (CEM) equipment shall be in place and operating whenever process heater is operating, except for CEM systems breakdowns, repairs, and required calibration checks and zero and span adjustments, in accordance with 40 CFR 60.13(e). NO<sub>x</sub> (as NO<sub>2</sub>) and O<sub>2</sub> must be recorded continuously when the CEM equipment is operating. [District Rules 1080, 4305 and 4306] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

23. Operation, calibration and data reduction for the CEM equipment shall be in accordance with the requirements of 40 CFR, Appendix P of Part 51 and Appendix B of Part 60. [District Rule 1080] Federally Enforceable Through Title V Permit
24. CEM records shall be retained for at least 5 years. Records shall include occurrence and duration of start-up, shutdown or malfunction; performance testing, calibrations, checks, and maintenance of CEM; and emission measurements. [District Rule 1080] Federally Enforceable Through Title V Permit
25. Daily summaries of CEM records for each calendar quarter shall be submitted to the District within 30 days of the end of the calendar quarter. Hourly fuel stack gas flow rates and/or hourly fuel flow rates shall be measured during operation and included in quarterly reports. [District Rule 1080] Federally Enforceable Through Title V Permit
26. A report shall be submitted to the District within 30 days of the end of each calendar quarter identifying the time and date of each exceedance of emission limits, the excess emissions generated, and any conversion factor used to calculate emissions. [District Rule 1080] Federally Enforceable Through Title V Permit
27. The quarterly report shall identify each period of excess emissions that occurs during startups, shutdowns, or malfunctions. The nature and cause of each malfunction, corrective action taken, and preventative measures adopted shall also be reported. [District Rule 1080] Federally Enforceable Through Title V Permit
28. Heat exchangers utilizing cooling water shall be properly maintained to prevent VOC emissions from cooling towers. [District Rule 2201] Federally Enforceable Through Title V Permit
29. The operator shall test the circulating water from the cooling tower at least every six months to determine the concentration of hexavalent chromium. The District shall be notified 48 hours in advance of any sampling of cooling water for testing. Required testing may be discontinued and an exemption sought when two consecutive required tests show hexavalent chromium concentrations less than 0.15 mg/l. [District Rule 7012] Federally Enforceable Through Title V Permit
30. Operator shall comply with other applicable requirements of District Rule 7012 (amended 12/17/92). [District Rule 7012] Federally Enforceable Through Title V Permit
31. 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
32. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results 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 and record specific type of noncertified fuel used. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
33. 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
34. Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO<sub>2</sub>, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
35. Nitrogen oxide (NO<sub>x</sub>) emissions shall not exceed 140 lb/hr, calculated as NO<sub>2</sub>. [District Rules 4301, 5.2.2] Federally Enforceable Through Title V Permit
36. 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
37. 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
38. NO<sub>x</sub> 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. NO<sub>x</sub> emissions during the source test shall be calculated as the arithmetic average of three 30-consecutive-minute test runs. [District Rule 4305] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE  
These terms and conditions are part of the Facility-wide Permit to Operate.

39. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. CO emissions during the source test shall be calculated as the arithmetic average of three 30-consecutive-minute test runs. [District Rule 4305] Federally Enforceable Through Title V Permit
40. Stack gas oxygen shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4305] Federally Enforceable Through Title V Permit
41. NH<sub>3</sub> emissions for source test purposes shall be determined using BAAQMD method ST-1B. [District Rule 4301] Federally Enforceable Through Title V Permit
42. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO<sub>2</sub>. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rules 2520, 9.4.2 and 4301, 5.2.1] Federally Enforceable Through Title V Permit
43. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested for sulfur content (as hydrogen sulfide). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
44. When complying with SO<sub>x</sub> emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6B; or Method 8; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months, however annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
45. If the unit is fired on noncertified gaseous fuel and compliance with SO<sub>x</sub> emission limits is achieved through fuel sulfur content limitations, then the sulfur content (as hydrogen sulfide) of the gaseous fuel being fired in the unit shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
46. If fuel analysis is used to demonstrate compliance with the conditions of this permit, the fuel higher heating value for each fuel shall be certified by third party fuel supplier or determined by: ASTM D 240-87 or D 2382-88 for liquid hydrocarbon fuels; ASTM D 1826-88 or D 1945-81 in conjunction with ASTM D 3588-89 for gaseous fuels. [District Rule 2520, 9.4.2; 4305, 6.2.1; and 4351, 6.2.1] Federally Enforceable Through Title V Permit
47. 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. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2; County Rules 404 (Madera), 406 (Fresno), and 407 (Kern, Kings, Merced, San Joaquin, Stanislaus, and Tulare)] Federally Enforceable Through Title V Permit
48. The requirements of 40 CFR 60 Subpart LLL 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
49. 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
50. The following conditions #56 through #97 shall be moved to the facility-wide operating permit upon incorporation of this Authority to Construct into the facility's Title V operating permit.
51. Equipment that is in vacuum service is exempt from the control and monitoring requirements and work practice standards of District Rule 4409 and applicable NSPS requirements, provided the equipment is identified as such in the Operator Management Plan. [District Rule District Rule 4409, 4.2.8 and 40 CFR 60.482-1(d)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

52. For determining compliance with applicable NSPS requirements, the test methods and procedures at 40 CFR 60.485 shall be used. Alternative test methods may be used subject to approval pursuant to 40 CFR 60.8. [40 CFR 60.8, 40 CFR 60.485] Federally Enforceable Through Title V Permit
53. For all components that are subject to applicable NSPS requirements and are included in the permit unit addendum to the operator management plan and that comply with the applicable NSPS inspection, maintenance and repair requirements as specified by the terms and condition of this permit, a Title-V permit shield is granted for applicable requirements at 40 CFR 60, Subpart KKK. [District Rule 40 CFR 60, Subpart KKK] Federally Enforceable Through Title V Permit
54. If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements as specified in this permit unit. [District Rule 4409, 4.2.8 and 40 CFR 60.482-10(i)] Federally Enforceable Through Title V Permit
55. For open ended lines and open ended valves, subject to applicable NSPS, each open-ended valve or line shall be sealed with two (2) valves, a blind flange, a cap, or a plug at all times, except during operations requiring process fluid flow through the valve or line. Open ended lines and valves designed to open automatically in the event of an emergency are exempt from this requirement [40 CFR 60.482-6(a) and 40 CFR 60.482-6(d)] Federally Enforceable Through Title V Permit
56. For valves subject to applicable new source performance standards (NSPS), any valve in gas/vapor service or light liquid service that is designated in the Operator Management Plan as an unsafe-to-monitor valve is exempt from the monthly NSPS leak inspection requirements, provided: 1) the owner/operator demonstrates the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence, and 2) a written plan is adhered to that requires monitoring of the valve as frequently as practicable during safe-to-monitor times and at least annually and during shutdown. [40 CFR 60.482-7(g)] Federally Enforceable Through Title V Permit
57. For valves subject to applicable NSPS, any valve in gas/vapor service or light liquid service that is designated in the Operator Management Plan as a difficult-to-monitor (inaccessible) valve is exempt from the monthly NSPS leak inspection requirements, provided: 1) the owner/operator demonstrates the valve cannot be monitored without elevating the monitoring personnel more than 15 feet above a support surface, or that it is over 6 feet away from a platform, 2) the process unit within which the valve is located either becomes an affected facility through 40 CFR 60.14 or 60.15 or if the owner/operator designates less than 3.0% of the total number of valves as difficult-to-monitor, and 3) a written plan is adhered to that, requires monitoring of the valve at least annually and during shutdown. [40 CFR 60.482-7(h)] Federally Enforceable Through Title V Permit
58. Any components of the closed vent system that are designated as unsafe to inspect are exempt from the inspection requirements specified in this permit unit if the owner or operator complies with the following: 1) the owner or operator determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with the inspection requirements; 2) the owner or operator identifies the components in the Operator Management Plan; 3) the owner or operator has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times; and 4) inspection and required repair of the components is performed at least annually and during shutdown. [District Rule 4409, 5.3.7.5 and 40 CFR 60.482-10(j)] Federally Enforceable Through Title V Permit
59. For components subject to applicable NSPS, when a leak is detected, a weatherproof and readily visible tag shall be attached, bearing the equipment identification number and date which the leak is detected. The tag on a valve shall remain in place until after it has been monitored for 2 successive months and no leak has been detected. The tag on all other equipment may be removed after repair and re-inspection document compliance with the applicable NSPS. [40 CFR 60.486(b) and 60.635(b)(1)] Federally Enforceable Through Title V Permit
60. Any leak detected on the basis of sight, smell, or sound shall be identified by the operator affixing a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until repair and reinspection document compliance, whether or not operator inspection is otherwise required by this permit. [District Rule 4409, 5.3.3 and 5.3.3] Federally Enforceable Through Title V Permit
61. Any leaking component and any leak shall be repaired to a leak-free condition and reinspected within 15 calendar days. [40 CFR 60.482-7] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

62. For components subject to applicable NSPS standards, except as otherwise provided by 40 CFR 60.482-9, 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 or EPA Method 18 within fifteen (15) calendar days of detection. A first attempt at repair shall be made no later than 5 calendar days after leak detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates necessary and sufficient actions are being taken to correct the leak within this time period. [40 CFR 60.482-2(c)(1) and (c)(2), 60.482-3(g), 60.482-7(d), 60.482-8(c), and 60.633(b)(3)] Federally Enforceable Through Title V Permit
63. For components subject to applicable NSPS, if the leaking component is an essential part of a critical process identified in the operator management plan and which cannot be immediately shut down for repairs, the operator shall minimize the leak within 15 calendar days. If the leak which has been minimized still exceeds the applicable NSPS standard, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than six months from the date of the original leak detection for pumps and one year from the date of the original leak detection for other components. Delay of repair is allowed for equipment which is isolated from the process and which does not remain in VOC service and delay of repair is allowed pursuant to 40 CFR 60.482-2(c)(1), 40 CFR 60.482-3(g)(1), 40 CFR 60.482-4(b)(1), 40 CFR 60.482-7(d)(1), 40 CFR 60.482-8(c)(1) [40 CFR 60.482-2(c)(1)]. [40 CFR 40 CFR 60.482-3(g)(1), 40 CFR 60.482-4(b)(1), 40 CFR 60.482-7(d)(1), 40 CFR 60.482-8(c)(1), 60.482-9(a) and (b)] Federally Enforceable Through Title V Permit
64. Delay of repair of a closed vent system for which leaks have been detected is allowed if the closed vent system is an essential part of a critical process identified in the operator management plan which cannot be immediately shut down for repairs 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. However the operator shall minimize the leak within 15 calendar days. If the leak which has been minimized still exceeds the limit in 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. [40 CFR 60.482-9] Federally Enforceable Through Title V Permit
65. For the purpose of determining compliance with applicable NSPS, each operator shall maintain an inspection log for the components subject to NSPS inspection requirements that contains the following information: 1) instrument, operator, and equipment identification numbers; 2) date of leak detection; 3) dates and repair method of each attempt to repair the leak; 4) "above 10,000" if the maximum instrument reading after each repair attempt is equal to or greater than 10,000 ppm; 5) "repair delayed", reason for delay, signature of individual whose decision it was that repair could not be effected without a process shutdown, and expected date of successful repair if a leak is not repaired within 15 days of detection; 6) dates of process unit shutdown that occur while the equipment is unrepaired; 7) date of successful repair and emission level of recheck after leak is repaired. [District Rule 40 CFR 60.486(c) and 60.635(2)(i) through (ix)] Federally Enforceable Through Title V Permit
66. Each piece of equipment subject to requirements of this permit is presumed to be in VOC service or in wet gas service unless an owner or operator demonstrates that the piece of equipment is not in VOC service or in wet gas service. For a piece of equipment to be considered not in VOC service, it must be determined that the VOC content can be reasonably expected never to exceed 10.0 percent by weight. For a piece of equipment to be considered in wet gas service, it must be determined that it contains or contacts the field gas before the extraction step in the process. For purposes of determining the percent VOC content of the process fluid that is contained in or contacts a piece of equipment, procedures that conform to the methods described this permit shall be used. [40 CFR 60.485(d) and 60.632(f)] Federally Enforceable Through Title V Permit
67. Compliance the no detectable emission standards for this permit unit shall be determined as follows: 1) EPA Method 21 shall be followed, 2) Method 21 shall be used to determine the background level and all potential leak interfaces shall be traversed as close to the inter face as possible, and 3) the arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm to determine compliance. [40 CFR 60.485(c)] Federally Enforceable Through Title V Permit
68. For valves subject to applicable NSPS, if the operator elects to comply with the allowable percentage of leaking valves then for this permit unit, the operator shall notify the APCO 90 days before implementing these alternatives. [40 CFR 60.483-1(b)(1) and (d), 60.483-2(a)(2), and 60.487(d)] Federally Enforceable Through Title V Permit

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69. For valves subject to applicable NSPS, if the allowable percentage of leaking valves is selected, then a performance test shall be conducted initially upon designation for allowable percentage of leaking valves, annually, and at other times requested by the APCO. The performance test shall be conducted as follows: 1) all valves in gas/vapor and light liquid service shall be monitored within 1 week using EPA Method 21 and 2) the leak percentage shall be determined by dividing the number of leaking valves detected and valves for which repair has been delayed by the number of valves in gas/vapor and light liquid service in this permit unit, 3) a record must be kept of the percent of valves found leaking during each leak detection period. [40 CFR 60.483-1(b)(2) and (c) and 60.483-2(b)(5) and (6)] Federally Enforceable Through Title V Permit
70. For compressors subject to applicable NSPS, each compressor shall meet the applicable control system requirements of 40 CFR 482-3(a) - (i), except as otherwise provided by 40 CFR 60.482-1(c) and 40 CFR 60.482-3(h) and (i). [40 CFR 60.482-3(a) through (j)], 40 CFR 60.482-1(c), 40 CFR 60.482-3(h) and (i), and 40 CFR 60.633] Federally Enforceable Through Title V Permit
71. Compressors that are subject to applicable NSPS, are exempt from requirements of 40 CFR 60.482-3(a) and 40 CFR 60.482-3(b) if the compressor is equipped with a closed vent system to capture and transport leakage from the compressor drive shaft back to a process fuel gas system or a control device. Closed vent systems piping shall comply with applicable requirements at 40 CFR 60.482-10. Closed vent vapor recovery systems shall comply with design requirements at 40 CFR 60.482-10(b). Enclosed combustion devices used by closed vent system shall comply with design requirements at 40 CFR 60.482-10(c). Flares used by closed vent systems shall comply with requirements at 40 CFR 60.482-10(d). Closed vent system control devices shall comply with monitoring requirements at 40 CFR 60.482-10(e). [40 CFR 60.482-3, 40 CFR 60.482-10] Federally Enforceable Through Title V Permit
72. Compressors that are subject to applicable NSPS and are designated in the Operator Management Plan for no detectable leak emission, as indicated by an instrument reading of less than 500 ppm above background, is are exempt from the requirements of 40 CFR 482-3(a)-(h), provided the compressor is tested for compliance with no detectable emissions initially upon designation, annually, and at other times requested by the APCO. [40 CFR 60.482-3(i)] Federally Enforceable Through Title V Permit
73. When determining compliance with applicable NSPS, if an instrument reading of 10,000 ppm or greater is measured, a leak is detected. [40 CFR 60.633(b)(2), 40482-7(a), (b), and (c)] Federally Enforceable Through Title V Permit
74. For open ended lines or valves subject to applicable NSPS, each open-ended valve or line equipped with a second valve shall be operated so 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
75. For equipment subject to applicable NSPS when a double block-and-bleed system is being used, the bleed valve or line may remain open only during operations that require venting the line between the block valves. [40 CFR 60.482-6(c)] Federally Enforceable Through Title V Permit
76. Except as provided by applicable NSPS, valves that are subject to NSPS that are in gas/vapor service or light liquid service shall be monitored monthly to detect leaks using EPA Method 21. Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter. If a leak is subsequently detected, monitoring shall revert to monthly. [40 CFR 60.482-7(a), (b), and (c)] Federally Enforceable Through Title V Permit
77. Any valve in gas/vapor service or light liquid service that is designated in the equipment log list for no detectable leak emission, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the monitoring requirements of 40 CFR 60.482-7(a), provided the valve: 1) has no external actuating mechanism in contact with the process fluid and 2) is tested for and meets compliance with no detectable leak emission initially upon designation, annually and at other times requested by the APCO. [40 CFR 60.482-7(f)] Federally Enforceable Through Title V Permit
78. For valves subject to applicable NSPS requirements, for a valve in gas/vapor service or light or heavy liquid service, first attempts at repair shall include the following where practicable: 1) tightening of bonnet bolts, 2) replacement of bonnet bolts, 3) tightening of packing gland nuts, and 4) injection of lubricant into lubricant packing. [40 CFR 60.482-7(e) and 60.482-8(d)] Federally Enforceable Through Title V Permit

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79. For pumps and valves in heavy liquid service, pressure relief devices in light or heavy liquid service, and flanges and other connectors, that are subject to applicable NSPS requirements, if evidence of a potential leak is found by sight, sound, smell, or any other detection method then the device shall be monitored within 5 days for leak detection in accordance with EPA Method 21. 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
80. In addition to the information required by Rule 4409, the operator management plan shall include an addendum for this permit unit containing the following applicable NSPS information: 1) list of identification numbers for equipment subject to the applicable NSPS requirements, 2) list of identification numbers for equipment which is designated for no detectable emissions and which is signed by the owner/operator, 3) list of equipment identification numbers for pressure relief devices which must be operated with no detectable emissions, 4) dates of each compliance test for emissions below 500 ppm, for all equipment subject to this no detectable emission limit and the background level measured and the maximum instrument reading measured at the equipment, during each test, and 5) list of identification numbers for equipment in vacuum service. [40 CFR 60.486(e) and 60.635(b)(2)(x)] Federally Enforceable Through Title V Permit
81. In addition to the information required by Rule 4409, the operator management plan shall include an addendum for this permit unit containing the following applicable NSPS information: for valves in gas/vapor service and light liquid service: 1) a list of identification numbers for valves designated "unsafe-to-monitor" and for valves designated "difficult-to monitor", 2) an explanation for each valve stating why it is so designated, and 3) the schedule for monitoring each such valve. [40 CFR 60.486(f)] Federally Enforceable Through Title V Permit
82. For valves subject to NSPS annual leak detection alternative requirements, the NSPS inspection log shall include the following information: 1) a schedule of monitoring and 2) the percent of valves found leaking during each monitoring period. [CFR 60.486(g)] Federally Enforceable Through Title V Permit
83. A log containing the following information for pumps and compressors equipped a barrier fluid seal system which includes a seal failure sensor, for which a system failure criteria is required to be established, pursuant to the requirements for this permit unit, shall be maintained and kept in a readily accessible location: 1) the design criterion required by this permit and an explanation and 2) any changes to this criterion and reasons for the changes. [40 CFR 60.486(h)] Federally Enforceable Through Title V Permit
84. For equipment (compressors and components) subject to applicable NSPS, the operator shall maintain information and data used to demonstrate that a piece of equipment is not in VOC service and information and data used to demonstrate that a reciprocating compressor is in wet gas service. The information shall be included in the NSPS inspection log for the permit unit and shall be kept in a readily accessible location. [40 CFR 60.486(j) and 60.635(c)] Federally Enforceable Through Title V Permit
85. Vapor recovery systems (for example, condensers and absorbers) 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
86. 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 °C. [40 CFR 60.482-10(c)] Federally Enforceable Through Title V Permit
87. If the vapor collection system or closed vent system is constructed of hard-piping, the owner or operator shall conduct an initial inspection according to the procedures specified in EPA Method 21 using the calibration gases as specified in the requirements for this permit unit. The owner or operator shall also conduct annual visual inspections for visible, audible, or olfactory indications of leaks. [40 CFR 60.482-10(f)(1) and 40 CFR 60.485(b)] Federally Enforceable Through Title V Permit
88. If the vapor collection system or closed vent system is constructed of ductwork, the owner or operator shall conduct an initial inspection and annual inspections according to the procedures specified in EPA Method 21 using the calibration gases as specified in the requirements for this permit unit. The owner or operator shall also conduct annual visual inspections for visible, audible, or olfactory indications of leaks. [40 CFR 60.482-10(f)(2) and 40 CFR 60.485(b)] Federally Enforceable Through Title V Permit

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89. Any parts of the closed vent system that are designated as difficult to inspect are exempt from the inspection requirements of 40 CFR 60.482-10(f)(1) and (f)(2) if the owner or operator complies with the following: 1) the owner or operator determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and 2) the process unit within which the closed vent system is located becomes an affected facility through modification or reconstruction, as defined in 40 CFR 60.14 and 60.15, or the owner or operator designates less than 3.0 percent of the total number of closed vent system equipment as difficult to inspect; and 3) the owner or operator has a written plan that requires inspection of the equipment at least every 5 years. A closed vent system is exempt from inspection if it is operated under a vacuum. [40 CFR 60.482-10(k)] Federally Enforceable Through Title V Permit
90. Closed vent systems and control devices 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
91. A log shall be maintained containing 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 conducted in accordance with EPA Method 21 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 4) for each visual inspection conducted for visible, audible, or olfactory indications of leaks 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) and 40 CFR 60.485(b)] Federally Enforceable Through Title V Permit
92. For components subject to applicable NSPS requirements, semiannual reports shall be submitted to the APCO containing the following information: 1) process unit identification, 2) for each month during the reporting period, number of valves, pumps, compressors, and pressure relief devices for which leaks were detected; number of valves, pumps, compressors, and pressure relief devices for which leaks were not repaired within 15 days and a first attempt not made within 5 days of leak detection; 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 reporting period, and 4) revisions to items reported in the initial or subsequent semiannual reports. [40 CFR 60.487(a) and (c) and 60.636(c)] Federally Enforceable Through Title V Permit

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-2234-3-9

**EXPIRATION DATE:** 10/31/2009

**SECTION:** NE35 **TOWNSHIP:** 30S **RANGE:** 23E

**EQUIPMENT DESCRIPTION:**

LOW TEMPERATURE SEPARATION PLANT #1 INCLUDING FREE WATER KNOCKOUT(S), ACCUMULATOR(S), CHILLER(S), LOW TEMPERATURE SEPARATOR(S), DE-ETHANIZER & REBOILER, DE-BUTANIZER & REBOILER, DE-PROPANIZER & REBOILER, AND INLET HEAT EXCHANGER

## PERMIT UNIT REQUIREMENTS

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1. Operation shall include two 27.5 MMBtu/hr process heaters FF-44-301 & FF-44-302 (shared with S-2234-1). [District NSR Rule] Federally Enforceable Through Title V Permit
2. Two process heaters F-44-301 & F-44-302 shall be used on a standby basis, only during periods when one or both gas turbines (S-2234-52 & '-53) are inoperative. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Fugitive VOC emission rate from the control system added to control emissions from glycol dehydrator reboiler vent, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c less than or equal to 10,000 ppm (Feb 1999), shall not exceed 0.20 lb/day. Permittee shall demonstrate compliance with specified emissions limit by calculation using the installed components and emissions factors specified above. Permittee shall maintain with the permit an accurate record by number and type of the installed fugitive components and shall make such record available for inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Fugitive VOC emission rate from the propane compressor, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c less than or equal to 10,000 ppm (Feb 1999), shall not exceed 1.9 lb/day. Permittee shall demonstrate compliance with specified emissions limit by calculation using the installed components and emissions factors specified above. Permittee shall maintain with the permit an accurate record by number and type of the installed fugitive components and shall make such record available for inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Control system(s) employed to control emissions from glycol dehydration system vent(s) shall be maintained in a leak free condition, as defined in Rule 4408. [District Rule 4408, Sections 3.8.2, 5.3 and 6.3.2] Federally Enforceable Through Title V Permit
6. The propane compressor shall be maintained in a gas-tight condition. A gas-tight 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 4409 and shall be reported as a deviation. [District NSR Rule and Rule 4409, Section 3.20] Federally Enforceable Through Title V Permit
7. Permittee shall maintain monthly records of amount of gas dehydrated and other records as required by Rule 4408. The permittee shall make such records readily available for District inspection upon request and shall be retained on the premises for a period of not less than five years. [District Rule 4408, Sections 6.1.1, 6.1.2 and 6.1.4] Federally Enforceable Through Title V Permit

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8. Heaters shall be fired exclusively on PUC quality natural gas. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Permittee shall maintain operational records of standby process heaters FF-44-301 & FF-44-302, including date, time, and total amount of natural gas consumed. These records shall be made readily available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
10. All process vessels and lines handling volatile organic compounds shall vent only to other process vessels, District-approved flare, or substrata injection system. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Emission rates from process heater exhaust shall not exceed the following: PM10: 0.014 lb/MMBtu, SOx (as SO2): 0.002 lb/MMBtu, NOx (as NO2): 0.140 lb/MMBtu, VOC: 0.003 lb/MMBtu, and CO: 0.035 lb/MMBtu. [District NSR Rule] Federally Enforceable Through Title V Permit
12. Heat exchangers utilizing cooling water shall be properly maintained to prevent VOC emissions from cooling towers. [District NSR Rule] Federally Enforceable Through Title V Permit
13. The operator shall test the circulating water from the cooling tower at least every six months to determine the concentration of hexavalent chromium. The District shall be notified 48 hours in advance of any sampling of cooling water for testing. Required testing may be discontinued and an exemption sought when two consecutive required tests show hexavalent chromium concentrations less than 0.15 mg/l. [District Rule 7012] Federally Enforceable Through Title V Permit
14. Operator shall comply with other applicable requirements of District Rule 7012 (amended 12/17/92). [District Rule 7012] Federally Enforceable Through Title V Permit
15. 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
16. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results 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 and record specific type of noncertified fuel used. [District Rule 2520, 9.4.2] 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 2520, 9.5.2] Federally Enforceable Through Title V Permit
18. 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
19. Source testing shall be performed for the boilers and heaters using EPA Method 7E or ARB Method 100. Source testing shall be conducted within two year after the issuance of this Title V permit and each unit shall be tested during each year in which the unit operates 720 hours or more. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
20. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rules 2520, 9.4.2 and 4301, 5.2.1] Federally Enforceable Through Title V Permit
21. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested for sulfur content (as hydrogen sulfide). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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22. When complying with SO<sub>x</sub> emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6B; or Method 8; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months, however annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
23. If the unit is fired on noncertified gaseous fuel and compliance with SO<sub>x</sub> emission limits is achieved through fuel sulfur content limitations, then the sulfur content (as hydrogen sulfide) of the gaseous fuel being fired in the unit shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
24. If fuel analysis is used to demonstrate compliance with the conditions of this permit, the fuel higher heating value for each fuel shall be certified by third party fuel supplier or determined by: ASTM D 240-87 or D 2382-88 for liquid hydrocarbon fuels; ASTM D 1826-88 or D 1945-81 in conjunction with ASTM D 3588-89 for gaseous fuels. [District Rule 2520, 9.4.2; 4305, 6.2.1; and 4351, 6.2.1] Federally Enforceable Through Title V Permit
25. 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. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2; County Rules 404 (Madera), 406 (Fresno), and 407 (Kern, Kings, Merced, San Joaquin, Stanislaus, and Tulare)] Federally Enforceable Through Title V Permit
26. Nitrogen oxide (NO<sub>x</sub>) emissions shall not exceed 140 lb/hr, calculated as NO<sub>2</sub>. [District Rules 4301, 5.2.2] Federally Enforceable Through Title V Permit
27. The requirements of 40 CFR 60 Subpart LLL 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. The following conditions #34 through #75 shall be moved to the facility-wide operating permit upon incorporation of this Authority to Construct into the facility's Title V operating permit.
29. Equipment that is in vacuum service is exempt from the control and monitoring requirements and work practice standards of District Rule 4409 and applicable NSPS requirements, provided the equipment is identified as such in the Operator Management Plan. [District Rule District Rule 4409, 4.2.8 and 40 CFR 60.482-1(d)] Federally Enforceable Through Title V Permit
30. For determining compliance with applicable NSPS requirements, the test methods and procedures at 40 CFR 60.485 shall be used. Alternative test methods may be used subject to approval pursuant to 40 CFR 60.8. [40 CFR 60.8, 40 CFR 60.485] Federally Enforceable Through Title V Permit
31. For all components that are subject to applicable NSPS requirements and are included in the permit unit addendum to the operator management plan and that comply with the applicable NSPS inspection, maintenance and repair requirements as specified by the terms and condition of this permit, a Title-V permit shield is granted for applicable requirements at 40 CFR 60, Subpart KKK. [District Rule 40 CFR 60, Subpart KKK] Federally Enforceable Through Title V Permit
32. If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements as specified in this permit unit. [District Rule 4409, 4.2.8 and 40 CFR 60.482-10(i)] Federally Enforceable Through Title V Permit
33. For open ended lines and open ended valves, subject to applicable NSPS, each open-ended valve or line shall be sealed with two (2) valves, a blind flange, a cap, or a plug at all times, except during operations requiring process fluid flow through the valve or line. Open ended lines and valves designed to open automatically in the event of an emergency are exempt from this requirement [40 CFR 60.482-6(a) and 40 CFR 60.482-6(d)] Federally Enforceable Through Title V Permit

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34. For valves subject to applicable new source performance standards (NSPS), any valve in gas/vapor service or light liquid service that is designated in the Operator Management Plan as an unsafe-to-monitor valve is exempt from the monthly NSPS leak inspection requirements, provided: 1) the owner/operator demonstrates the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence, and 2) a written plan is adhered to that requires monitoring of the valve as frequently as practicable during safe-to-monitor times and at least annually and during shutdown. [40 CFR 60.482-7(g)] Federally Enforceable Through Title V Permit
35. For valves subject to applicable NSPS, any valve in gas/vapor service or light liquid service that is designated in the Operator Management Plan as a difficult-to-monitor (inaccessible) valve is exempt from the monthly NSPS leak inspection requirements, provided: 1) the owner/operator demonstrates the valve cannot be monitored without elevating the monitoring personnel more than 15 feet above a support surface, or that it is over 6 feet away from a platform, 2) the process unit within which the valve is located either becomes an affected facility through 40 CFR 60.14 or 60.15 or if the owner/operator designates less than 3.0% of the total number of valves as difficult-to-monitor, and 3) a written plan is adhered to that, requires monitoring of the valve at least annually and during shutdown. [40 CFR 60.482-7(h)] Federally Enforceable Through Title V Permit
36. Any components of the closed vent system that are designated as unsafe to inspect are exempt from the inspection requirements specified in this permit unit if the owner or operator complies with the following: 1) the owner or operator determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with the inspection requirements; 2) the owner or operator identifies the components in the Operator Management Plan; 3) the owner or operator has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times; and 4) inspection and required repair of the components is performed at least annually and during shutdown. [District Rule 4409, 5.3.7.5 and 40 CFR 60.482-10(j)] Federally Enforceable Through Title V Permit
37. For components subject to applicable NSPS, when a leak is detected, a weatherproof and readily visible tag shall be attached, bearing the equipment identification number and date which the leak is detected. The tag on a valve shall remain in place until after it has been monitored for 2 successive months and no leak has been detected. The tag on all other equipment may be removed after repair and re-inspection document compliance with the applicable NSPS. [40 CFR 60.486(b) and 60.635(b)(1)] Federally Enforceable Through Title V Permit
38. Any leak detected on the basis of sight, smell, or sound shall be identified by the operator affixing a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until repair and reinspection document compliance, whether or not operator inspection is otherwise required by this permit. [District Rule 4409, 5.3.3 and 5.3.3] Federally Enforceable Through Title V Permit
39. Any leaking component and any leak shall be repaired to a leak-free condition and reinspected within 15 calendar days. [40 CFR 60.482-7] Federally Enforceable Through Title V Permit
40. For components subject to applicable NSPS standards, except as otherwise provided by 40 CFR 60.482-9, 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 or EPA Method 18 within fifteen (15) calendar days of detection. A first attempt at repair shall be made no later than 5 calendar days after leak detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates necessary and sufficient actions are being taken to correct the leak within this time period. [40 CFR 60.482-2(c)(1) and (c)(2), 60.482-3(g), 60.482-7(d), 60.482-8(c), and 60.633(b)(3)] Federally Enforceable Through Title V Permit
41. For components subject to applicable NSPS, if the leaking component is an essential part of a critical process identified in the operator management plan and which cannot be immediately shut down for repairs, the operator shall minimize the leak within 15 calendar days. If the leak which has been minimized still exceeds the applicable NSPS standard, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than six months from the date of the original leak detection for pumps and one year from the date of the original leak detection for other components. Delay of repair is allowed for equipment which is isolated from the process and which does not remain in VOC service and delay of repair is allowed pursuant to 40 CFR 60.482-2(c)(1), 40 CFR 60.482-3(g)(1), 40 CFR 60.482-4(b)(1), 40 CFR 60.482-7(d)(1), 40 CFR 60.482-8(c)(1) [40 CFR 60.482-2(c)(1)]. [40 CFR 40 CFR 60.482-3(g)(1), 40 CFR 60.482-4(b)(1), 40 CFR 60.482-7(d)(1), 40 CFR 60.482-8(c)(1), 60.482-9(a) and (b)] Federally Enforceable Through Title V Permit

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42. Delay of repair of a closed vent system for which leaks have been detected is allowed if the closed vent system is an essential part of a critical process identified in the operator management plan which cannot be immediately shut down for repairs 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. However the operator shall minimize the leak within 15 calendar days. If the leak which has been minimized still exceeds the limit in 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. [40 CFR 60.482-9] Federally Enforceable Through Title V Permit
43. For the purpose of determining compliance with applicable NSPS, each operator shall maintain an inspection log for the components subject to NSPS inspection requirements that contains the following information: 1) instrument, operator, and equipment identification numbers; 2) date of leak detection; 3) dates and repair method of each attempt to repair the leak; 4) "above 10,000" if the maximum instrument reading after each repair attempt is equal to or greater than 10,000 ppm; 5) "repair delayed", reason for delay, signature of individual whose decision it was that repair could not be effected without a process shutdown, and expected date of successful repair if a leak is not repaired within 15 days of detection; 6) dates of process unit shutdown that occur while the equipment is unrepaired; 7) date of successful repair and emission level of recheck after leak is repaired. [District Rule 40 CFR 60.486(c) and 60.635(2)(i) through (ix)] Federally Enforceable Through Title V Permit
44. Each piece of equipment subject to requirements of this permit is presumed to be in VOC service or in wet gas service unless an owner or operator demonstrates that the piece of equipment is not in VOC service or in wet gas service. For a piece of equipment to be considered not in VOC service, it must be determined that the VOC content can be reasonably expected never to exceed 10.0 percent by weight. For a piece of equipment to be considered in wet gas service, it must be determined that it contains or contacts the field gas before the extraction step in the process. For purposes of determining the percent VOC content of the process fluid that is contained in or contacts a piece of equipment, procedures that conform to the methods described this permit shall be used. [40 CFR 60.485(d) and 60.632(f)] Federally Enforceable Through Title V Permit
45. Compliance the no detectable emission standards for this permit unit shall be determined as follows: 1) EPA Method 21 shall be followed, 2) Method 21 shall be used to determine the background level and all potential leak interfaces shall be traversed as close to the inter face as possible, and 3) the arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm to determine compliance. [40 CFR 60.485(c)] Federally Enforceable Through Title V Permit
46. For valves subject to applicable NSPS, if the operator elects to comply with the allowable percentage of leaking valves then for this permit unit, the operator shall notify the APCO 90 days before implementing these alternatives. [40 CFR 60.483-1(b)(1) and (d), 60. 483-2(a)(2), and 60.487(d)] Federally Enforceable Through Title V Permit
47. For valves subject to applicable NSPS, if the allowable percentage of leaking valves is selected, then a performance test shall be conducted initially upon designation for allowable percentage of leaking valves, annually, and at other times requested by the APCO. The performance test shall be conducted as follows: 1) all valves in gas/vapor and light liquid service shall be monitored within 1 week using EPA Method 21 and 2) the leak percentage shall be determined by dividing the number of leaking valves detected and valves for which repair has been delayed by the number of valves in gas/vapor and light liquid service in this permit unit, 3) a record must be kept of the percent of valves found leaking during each leak detection period. [40 CFR 60.483-1(b)(2) and (c) and 60. 483-2(b)(5) and (6)] Federally Enforceable Through Title V Permit
48. For compressors subject to applicable NSPS, each compressor shall meet the applicable control system requirements of 40 CFR 482-3(a) - (i), except as otherwise provided by 40 CFR 60.482-1(c) and 40 CFR 60.482-3(h) and (i). [40 CFR 60.482-3(a) through (j)], 40 CFR 60.482-1(c), 40 CFR 60.482-3(h) and (i), and 40 CFR 60.633] Federally Enforceable Through Title V Permit

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49. Compressors that are subject to applicable NSPS, are exempt from requirements of 40 CFR 60.482-3(a) and 40 CFR 60.482-3(b) if the compressor is equipped with a closed vent system to capture and transport leakage from the compressor drive shaft back to a process fuel gas system or a control device. Closed vent systems piping shall comply with applicable requirements at 40 CFR 60.482-10. Closed vent vapor recovery systems shall comply with design requirements at 40 CFR 60.482-10(b). Enclosed combustion devices used by closed vent system shall comply with design requirements at 40 CFR 60.482-10(c). Flares used by closed vent systems shall comply with requirements at 40 CFR 60.482-10(d). Closed vent system control devices shall comply with monitoring requirements at 40 CFR 60.482-10(e). [40 CFR 60.482-3, 40 CFR 60.482-10] Federally Enforceable Through Title V Permit
50. Compressors that are subject to applicable NSPS and are designated in the Operator Management Plan for no detectable leak emission, as indicated by an instrument reading of less than 500 ppm above background, is are exempt from the requirements of 40 CFR 482-3(a)-(h), provided the compressor is tested for compliance with no detectable emissions initially upon designation, annually, and at other times requested by the APCO. [40 CFR 60.482-3(i)] Federally Enforceable Through Title V Permit
51. When determining compliance with applicable NSPS, if an instrument reading of 10,000 ppm or greater is measured, a leak is detected. [40 CFR 60.633(b)(2), 40482-7(a), (b), and (c)] Federally Enforceable Through Title V Permit
52. For open ended lines or valves subject to applicable NSPS, each open-ended valve or line equipped with a second valve shall be operated so 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. For equipment subject to applicable NSPS when a double block-and-bleed system is being used, the bleed valve or line may remain open only during operations that require venting the line between the block valves. [40 CFR 60.482-6(c)] Federally Enforceable Through Title V Permit
54. Except as provided by applicable NSPS, valves that are subject to NSPS that are in gas/vapor service or light liquid service shall be monitored monthly to detect leaks using EPA Method 21. Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter. If a leak is subsequently detected, monitoring shall revert to monthly. [40 CFR 60.482-7(a), (b), and (c)] Federally Enforceable Through Title V Permit
55. Any valve in gas/vapor service or light liquid service that is designated in the equipment log list for no detectable leak emission, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the monitoring requirements of 40 CFR 60.482-7(a), provided the valve: 1) has no external actuating mechanism in contact with the process fluid and 2) is tested for and meets compliance with no detectable leak emission initially upon designation, annually and at other times requested by the APCO. [40 CFR 60.482-7(f)] Federally Enforceable Through Title V Permit
56. For valves subject to applicable NSPS requirements, for a valve in gas/vapor service or light or heavy liquid service, first attempts at repair shall include the following where practicable: 1) tightening of bonnet bolts, 2) replacement of bonnet bolts, 3) tightening of packing gland nuts, and 4) injection of lubricant into lubricant packing. [40 CFR 60.482-7(e) and 60.482-8(d)] Federally Enforceable Through Title V Permit
57. For pumps and valves in heavy liquid service, pressure relief devices in light or heavy liquid service, and flanges and other connectors, that are subject to applicable NSPS requirements, if evidence of a potential leak is found by sight, sound, smell, or any other detection method then the device shall be monitored within 5 days for leak detection in accordance with EPA Method 21. 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
58. In addition to the information required by Rule 4409, the operator management plan shall include an addendum for this permit unit containing the following applicable NSPS information: 1) list of identification numbers for equipment subject to the applicable NSPS requirements, 2) list of identification numbers for equipment which is designated for no detectable emissions and which is signed by the owner/operator, 3) list of equipment identification numbers for pressure relief devices which must be operated with no detectable emissions, 4) dates of each compliance test for emissions below 500 ppm, for all equipment subject to this no detectable emission limit and the background level measured and the maximum instrument reading measured at the equipment, during each test, and 5) list of identification numbers for equipment in vacuum service. [40 CFR 60.486(e) and 60.635(b)(2)(x)] Federally Enforceable Through Title V Permit

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59. In addition to the information required by Rule 4409, the operator management plan shall include an addendum for this permit unit containing the following applicable NSPS information: for valves in gas/vapor service and light liquid service: 1) a list of identification numbers for valves designated "unsafe-to-monitor" and for valves designated "difficult-to monitor", 2) an explanation for each valve stating why it is so designated, and 3) the schedule for monitoring each such valve. [40 CFR 60.486(f)] Federally Enforceable Through Title V Permit
60. For valves subject to NSPS annual leak detection alternative requirements, the NSPS inspection log shall include the following information: 1) a schedule of monitoring and 2) the percent of valves found leaking during each monitoring period. [CFR 60.486(g)] Federally Enforceable Through Title V Permit
61. A log containing the following information for pumps and compressors equipped a barrier fluid seal system which includes a seal failure sensor, for which a system failure criteria is required to be established, pursuant to the requirements for this permit unit, shall be maintained and kept in a readily accessible location: 1) the design criterion required by this permit and an explanation and 2) any changes to this criterion and reasons for the changes. [40 CFR 60.486(h)] Federally Enforceable Through Title V Permit
62. For equipment (compressors and components) subject to applicable NSPS, the operator shall maintain information and data used to demonstrate that a piece of equipment is not in VOC service and information and data used to demonstrate that a reciprocating compressor is in wet gas service. The information shall be included in the NSPS inspection log for the permit unit and shall be kept in a readily accessible location. [40 CFR 60.486(j) and 60.635(c)] Federally Enforceable Through Title V Permit
63. Vapor recovery systems (for example, condensers and absorbers) 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
64. 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 °C. [40 CFR 60.482-10(c)] Federally Enforceable Through Title V Permit
65. If the vapor collection system or closed vent system is constructed of hard-piping, the owner or operator shall conduct an initial inspection according to the procedures specified in EPA Method 21 using the calibration gases as specified in the requirements for this permit unit. The owner or operator shall also conduct annual visual inspections for visible, audible, or olfactory indications of leaks. [40 CFR 60.482-10(f)(1) and 40 CFR 60.485(b)] Federally Enforceable Through Title V Permit
66. If the vapor collection system or closed vent system is constructed of ductwork, the owner or operator shall conduct an initial inspection and annual inspections according to the procedures specified in EPA Method 21 using the calibration gases as specified in the requirements for this permit unit. The owner or operator shall also conduct annual visual inspections for visible, audible, or olfactory indications of leaks. [40 CFR 60.482-10(f)(2) and 40 CFR 60.485(b)] Federally Enforceable Through Title V Permit
67. Any parts of the closed vent system that are designated as difficult to inspect are exempt from the inspection requirements of 40 CFR 60.482-10(f)(1) and (f)(2) if the owner or operator complies with the following: 1) the owner or operator determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and 2) the process unit within which the closed vent system is located becomes an affected facility through modification or reconstruction, as defined in 40 CFR 60.14 and 60.15, or the owner or operator designates less than 3.0 percent of the total number of closed vent system equipment as difficult to inspect; and 3) the owner or operator has a written plan that requires inspection of the equipment at least every 5 years. A closed vent system is exempt from inspection if it is operated under a vacuum. [40 CFR 60.482-10(k)] Federally Enforceable Through Title V Permit
68. Closed vent systems and control devices 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

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69. A log shall be maintained containing 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 conducted in accordance with EPA Method 21 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 4) for each visual inspection conducted for visible, audible, or olfactory indications of leaks 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) and 40 CFR 60.485(b)] Federally Enforceable Through Title V Permit
70. For components subject to applicable NSPS requirements, semiannual reports shall be submitted to the APCO containing the following information: 1) process unit identification, 2) for each month during the reporting period, number of valves, pumps, compressors, and pressure relief devices for which leaks were detected; number of valves, pumps, compressors, and pressure relief devices for which leaks were not repaired within 15 days and a first attempt not made within 5 days of leak detection; 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 reporting period, and 4) revisions to items reported in the initial or subsequent semiannual reports. [40 CFR 60.487(a) and (c) and 60.636(c)] Federally Enforceable Through Title V Permit

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