



OCT 09 2013

Mr. Raymond Rodriguez
Occidental of Elk Hills
10800 Stockdale Highway
Bakersfield, CA 93311

Re: Notice of Minor Title V Permit Modification
District Facility # S-2234
Project # S-1121413

Dear Mr. Rodriguez:

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 Authorities to Construct S-2234-207-3, 208-3, 209-3, 210-3, 211-3, 212-3 and 214-3 into the Title V operating permit. The modification is to designate the equipment as compliant dormant emissions units.

Enclosed is the engineering evaluation with the following attachments: proposed modified Title V permit, recently issued Authorities to Construct S-2234-207-3, 208-3, 209-3, 210-3, 211-3, 212-3 and 214-3, 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.

If you have any questions, please contact Mr. Leonard Scandura, Permit Services Manager, at (661) 392-5500.

Thank you for your cooperation in this matter.

Sincerely,



David Warner
Director of Permit Services

Enclosures

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

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

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: 661-392-5500 FAX: 661-392-5585

TITLE V APPLICATION REVIEW

Minor Modification
Project #: S-1121413

Engineer: Steve Roeder
Date: 10/8/13

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

Reviewed by AP SURRAQIE

OCT 08 2013

Contact Name: Raymond Rodriguez
Phone: (661) 412-5263

Responsible Official: Armando Gonzalez
Title: HES Manager

I. PROPOSAL

Occidental of Elk Hills has proposed a Title V minor permit modification to incorporate ATC's S-2234-207-3, 208-3, 209-3, 210-3, 211-3, 212-3 and 214-3 into their Title V operating permit. The modification is to designate all of these units as compliant Dormant Emissions Units (DEUs).

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 equipment is located in Sections 26, 27, 28, 29 and 35, Township 30S, Range 23E, in Occidental's Natural Gas Processing Plant near Tupman, California.

III. EQUIPMENT DESCRIPTION

S-2234-207-5: 1,680 BHP WAUKESHA MODEL L7044GSI NATURAL GAS-FIRED IC ENGINE WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A GAS COMPRESSOR (R-1) OPERATING AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234

- S-2234-208-6: 1,680 BHP WAUKESHA MODEL L7044GSI NATURAL GAS-FIRED IC ENGINE WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A GAS COMPRESSOR (R-2) OPERATING AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234
- S-2234-209-5: 1,680 BHP WAUKESHA MODEL L7044GSI NATURAL GAS-FIRED IC ENGINE WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A GAS COMPRESSOR (R-3) OPERATING AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234
- S-2234-210-6: 1,680 BHP WAUKESHA MODEL L7044GSI NATURAL GAS-FIRED IC ENGINE WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A GAS COMPRESSOR (R-46) OPERATING AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234
- S-2234-211-5: 1,680 BHP WAUKESHA MODEL L7044GSI NATURAL GAS-FIRED IC ENGINE WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A GAS COMPRESSOR (R-6) OPERATING AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234
- S-2234-212-6: 1,680 BHP WAUKESHA MODEL L7044GSI NATURAL GAS-FIRED IC ENGINE WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A GAS COMPRESSOR (R-47) OPERATING AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234
- S-2234-214-6: 1,680 BHP WAUKESHA MODEL L7044GSI NATURAL GAS-FIRED IC ENGINE WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A GAS COMPRESSOR (R-42) OPERATING AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234

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

Occidental has proposed to ~~make the~~ designate the units as Compliant DEUs in order to defer source testing while the equipment is non-operational.

The following conditions have been *added* to each permit in accordance with the ATCs.

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080]
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
3. While dormant, normal source testing shall not be required. [District Rule 2080]
4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080]
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080]
6. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]

The following condition has been *removed* from permits S-2234-207, -208, -209, and -211 because compliance has already been achieved and the compliance date is expired.

1. By July 1, 2012, the operator shall submit to the APCO an APCO-approvable emission control plan of all actions to be taken to satisfy the emission requirements of Section 5.2 of District Rule 4702. If there is no change to the previously-approved emission control plan, the operator shall submit a letter to the District indicating that the previously approved plan is still valid. [District Rule 4702, 6.1 and 7.5]

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
 - 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-2234-207-5, 208-6, 209-5, 210-6, 211-5, 212-6 and 214-6.
- B. ATCs S-2234-207-3, 208-3, 209-3, 210-3, 211-3, 212-3 and 214-3
- C. Emissions Increases
- D. Application
- E. Previous Title V Operating Permits S-2234-207-3, 208-3, 209-3, 210-3, 211-3, 212-3 and 214-3

ATTACHMENT A

Proposed Modified Title V Operating Permits

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-2234-207-5

EXPIRATION DATE: 10/31/2016

SECTION: 26 TOWNSHIP: 30S RANGE: 23E

EQUIPMENT DESCRIPTION:

1,680 BHP WAUKESHA MODEL L7044GSI NATURAL GAS-FIRED IC ENGINE WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A GAS COMPRESSOR (R-1) OPERATING AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]
7. Operator shall notify the District by letter or fax at least 48-hours in advance of the re-location of this unit. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Operator shall maintain records of compressor skid location and dates spent at each location and make such records available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
9. This unit shall not operate within 1,000 feet of a kindergarten through 12 grade school. [CH&SC 42301.6]
10. IC engine shall be equipped with air/fuel ratio controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
12. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
13. The permittee shall install and operate a nonresettable fuel flow meter. The fuel meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 2201] 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.

14. This IC engine shall only be fired on Public Utility Commission (PUC) quality natural gas. [District Rules 2201 and 4801] Federally Enforceable Through Title V Permit
15. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
16. Emissions from this IC engine shall not exceed any of the following limits: NOx (as NO2) - 5 ppmv @ 15% O2, VOC - 25 ppmv @ 15% O2, CO - 56 ppmv @ 15% O2, PM10 - 0.02 g/hp-hr, or SOx (as SO2) - 0.012 g/hp-hr. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
17. VOC fugitive emissions from the components in gas service associated with the compressor shall not exceed 0.7 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Permittee shall maintain accurate component count for compressor according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c (Feb 1999), Screening Value Range emission factors < 10,000 ppmv. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
19. The fuel consumption for this engine shall not exceed 241,600 scf/day. Compliance with this limit may be shown by dividing the quantity of fuel used during a calendar month over the number of days operated during that month. [District Rule 2201] Federally Enforceable Through Title V Permit
20. The engine shall only burn natural gas with fuel gas sulfur concentration (as H2S) not exceeding 1.0 grains/100 dscf. [District Rule 2201] Federally Enforceable Through Title V Permit
21. If the IC engine is fired on PUC-regulated natural gas, the permittee shall retain on file, copies of all natural gas bills. [District Rule 2201] Federally Enforceable Through Title V Permit
22. If the engine is fired on any fuel gas other than PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM methods D1072, D3246, D4084, Double GC for H2S and mercaptans, or alternative test method with prior written approval from the APCO. [District Rule 2201] Federally Enforceable Through Title V Permit
23. If the engine is fired on any fuel gas other than PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Source testing to measure natural gas-combustion NOx, CO, and VOC emissions from this engine shall be conducted not less than once every 12 months. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
25. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit
26. 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
27. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25A or 25B, or ARB Method 100. Methane and ethane, which are exempt compounds, shall be excluded from the result of the VOC test. EPA approved alternative test methods may also be used to satisfy the source testing requirements of this permit with prior written approval from the APCO. [District Rule 4702, 6.4] Federally Enforceable Through Title V Permit
28. 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. VOC emissions shall be reported as methane. NOx, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702, 6.3.3] 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.

29. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1080] Federally Enforceable Through Title V Permit
30. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1080] Federally Enforceable Through Title V Permit
31. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified on the Inspection and Monitoring (I&M) plan submitted to the District. [District Rule 4702] Federally Enforceable Through Title V Permit
32. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
33. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂, using a portable emission monitor that meets District specifications, at least once every calendar quarter (in which a source test is not performed and the engine is operated) or, if the engine is operated less than 120 calendar days in a calendar year, at least once during that calendar year (in which a source test is not performed and the engine is operated). Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last calendar quarter. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702] Federally Enforceable Through Title V Permit
34. If either the NO_x or CO concentrations corrected to 15% O₂, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit
35. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit
36. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 15% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit
37. The results of the measurements taken with the District approved analyzer shall be retained on-site at all times. [District Rule 1070]
38. This operation shall comply with the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] 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. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type, quantity (cubic feet of gas) and sulfur content of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
40. 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. For units at unstaffed sites or operated remotely, records may be maintained and retained at a District-approved off-site location. [District Rules 1070, 2201 and 4702, 6.2.1 and 6.2.2] Federally Enforceable Through Title V Permit

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

DRAFT

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-2234-208-6

EXPIRATION DATE: 10/31/2016

SECTION: 36 **TOWNSHIP:** 30S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

1,680 BHP WAUKESHA MODEL L7044GSI NATURAL GAS-FIRED IC ENGINE WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A GAS COMPRESSOR (R-2) OPERATING AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]
7. Operator shall notify the District by letter or fax at least 48-hours in advance of the re-location of this unit. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Operator shall maintain records of compressor skid location and dates spent at each location and make such records available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
9. This unit shall not operate within 1,000 feet of a kindergarten through 12 grade school. [CH&SC 42301.6]
10. IC engine shall be equipped with air/fuel ratio controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
12. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
13. The permittee shall install and operate a nonresettable fuel flow meter. The fuel meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 2201] Federally Enforceable Through Title V Permit

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14. This IC engine shall only be fired on Public Utility Commission (PUC) quality natural gas. [District Rules 2201 and 4801] Federally Enforceable Through Title V Permit
15. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
16. Emissions from this IC engine shall not exceed any of the following limits: NO_x (as NO₂) - 5 ppmv @ 15% O₂, VOC - 25 ppmv @ 15% O₂, CO - 56 ppmv @ 15% O₂, PM₁₀ - 0.02 g/hp-hr, or SO_x (as SO₂) - 0.012 g/hp-hr. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
17. VOC fugitive emissions from the components in gas service associated with the compressor shall not exceed 0.7 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
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19. The fuel consumption for this engine shall not exceed 241,600 scf/day. Compliance with this limit may be shown by dividing the quantity of fuel used during a calendar month over the number of days operated during that month. [District Rule 2201] Federally Enforceable Through Title V Permit
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21. If the IC engine is fired on PUC-regulated natural gas, the permittee shall retain on file, copies of all natural gas bills. [District Rule 2201] Federally Enforceable Through Title V Permit
22. If the engine is fired on any fuel gas other than PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM methods D1072, D3246, D4084, Double GC for H₂S and mercaptans, or alternative test method with prior written approval from the APCO. [District Rule 2201] Federally Enforceable Through Title V Permit
23. If the engine is fired on any fuel gas other than PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Source testing to measure natural gas-combustion NO_x, CO, and VOC emissions from this engine shall be conducted not less than once every 12 months. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
25. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit
26. 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
27. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25A or 25B, or ARB Method 100. Methane and ethane, which are exempt compounds, shall be excluded from the result of the VOC test. EPA approved alternative test methods may also be used to satisfy the source testing requirements of this permit with prior written approval from the APCO. [District Rule 4702, 6.4] Federally Enforceable Through Title V Permit
28. 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. VOC emissions shall be reported as methane. NO_x, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit

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30. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1080] Federally Enforceable Through Title V Permit
31. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified on the Inspection and Monitoring (I&M) plan submitted to the District.. [District Rule 4702] Federally Enforceable Through Title V Permit
32. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702, 6.5.9] Federally Enforceable Through Title V Permit
33. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂, using a portable emission monitor that meets District specifications, at least once every calendar quarter (in which a source test is not performed and the engine is operated) or, if the engine is operated less than 120 calendar days in a calendar year, at least once during that calendar year (in which a source test is not performed and the engine is operated). Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last calendar quarter. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702] Federally Enforceable Through Title V Permit
34. If either the NO_x or CO concentrations corrected to 15% O₂, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit
35. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702] Federally Enforceable Through Title V Permit
36. The permittee shall maintain records of: (1) the date and time of NO_x CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 15% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit
37. The results of the measurements taken with the District approved analyzer shall be retained on-site at all times. [District Rule 1070]
38. This operation shall comply with the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] 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. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type, quantity (cubic feet of gas) and sulfur content of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 2201 and 4702, 6.2.1] Federally Enforceable Through Title V Permit
40. 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. For units at unstaffed sites or operated remotely, records may be maintained and retained at a District-approved off-site location. [District Rules 1070, 2201 and 4702, 6.2.1 and 6.2.2] 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-2234-209-5

EXPIRATION DATE: 10/31/2016

SECTION: 27 **TOWNSHIP:** 30S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

1,680 BHP WAUKESHA MODEL L7044GSI NATURAL GAS-FIRED IC ENGINE WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A GAS COMPRESSOR (R-3) OPERATING AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]
7. Operator shall notify the District by letter or fax at least 48-hours in advance of the re-location of this unit. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Operator shall maintain records of compressor skid location and dates spent at each location and make such records available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
9. This unit shall not operate within 1,000 feet of a kindergarten through 12 grade school. [CH&SC 42301.6]
10. IC engine shall be equipped with air/fuel ratio controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
12. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
13. The permittee shall install and operate a nonresettable fuel flow meter. The fuel meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 2201] 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.

14. This IC engine shall only be fired on Public Utility Commission (PUC) quality natural gas. [District Rules 2201 and 4801] Federally Enforceable Through Title V Permit
15. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
16. Emissions from this IC engine shall not exceed any of the following limits: NOx (as NO2) - 5 ppmv @ 15% O2, VOC - 25 ppmv @ 15% O2, CO - 56 ppmv @ 15% O2, PM10 - 0.02 g/hp-hr, or SOx (as SO2) - 0.012 g/hp-hr. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
17. VOC fugitive emissions from the components in gas service associated with the compressor shall not exceed 0.7 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Permittee shall maintain accurate component count for compressor according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c (Feb 1999), Screening Value Range emission factors < 10,000 ppmv. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
19. The fuel consumption for this engine shall not exceed 241,600 scf/day. Compliance with this limit may be shown by dividing the quantity of fuel used during a calendar month over the number of days operated during that month. [District Rule 2201] Federally Enforceable Through Title V Permit
20. The engine shall only burn natural gas with fuel gas sulfur concentration (as H2S) not exceeding 1.0 grains/100 dscf. [District Rule 2201] Federally Enforceable Through Title V Permit
21. If the IC engine is fired on PUC-regulated natural gas, the permittee shall retain on file, copies of all natural gas bills. [District Rule 2201] Federally Enforceable Through Title V Permit
22. If the engine is fired on any fuel gas other than PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM methods D1072, D3246, D4084, Double GC for H2S and mercaptans, or alternative test method with prior written approval from the APCO. [District Rule 2201] Federally Enforceable Through Title V Permit
23. If the engine is fired on any fuel gas other than PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Source testing to measure natural gas-combustion NOx, CO, and VOC emissions from this engine shall be conducted not less than once every 12 months. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
25. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit
26. 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
27. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25A or 25B, or ARB Method 100. Methane and ethane, which are exempt compounds, shall be excluded from the result of the VOC test. EPA approved alternative test methods may also be used to satisfy the source testing requirements of this permit with prior written approval from the APCO. [District Rule 4702, 6.4] Federally Enforceable Through Title V Permit
28. 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. VOC emissions shall be reported as methane. NOx, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702, 6.3.3] 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.

29. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1080] Federally Enforceable Through Title V Permit
30. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1080] Federally Enforceable Through Title V Permit
31. This engine shall be operated and maintained in proper operating condition according to the manufacturer's specifications and the Rule 4702 Inspection and Monitoring (I&M) plan submitted to the District. [District Rule 4702, 6.5] Federally Enforceable Through Title V Permit
32. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702, 6.5.9] Federally Enforceable Through Title V Permit
33. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂, using a portable emission monitor that meets District specifications, at least once every calendar quarter (in which a source test is not performed and the engine is operated) or, if the engine is operated less than 120 calendar days in a calendar year, at least once during that calendar year (in which a source test is not performed and the engine is operated). Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last calendar quarter. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702] Federally Enforceable Through Title V Permit
34. If either the NO_x or CO concentrations corrected to 15% O₂, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit
35. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit
36. The permittee shall maintain records of: (1) the date and time of NO_x CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 15% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit
37. The results of the measurements taken with the District approved analyzer shall be retained on-site at all times. [District Rule 1070]
38. This operation shall comply with the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] 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. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type, quantity (cubic feet of gas) and sulfur content of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 2201 and 4702, 6.2.1] Federally Enforceable Through Title V Permit
40. 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. For units at unstaffed sites or operated remotely, records may be maintained and retained at a District-approved off-site location. [District Rules 1070, 2201 and 4702, 6.2.1 and 6.2.2] 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-2234-210-6

EXPIRATION DATE: 10/31/2016

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

EQUIPMENT DESCRIPTION:

1,680 BHP WAUKESHA MODEL L7044GSI NATURAL GAS-FIRED IC ENGINE WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A GAS COMPRESSOR (R-46) OPERATING AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]
7. Operator shall notify the District by letter or fax at least 48-hours in advance of the re-location of this unit. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Operator shall maintain records of compressor skid location and dates spent at each location and make such records available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
9. This unit shall not operate within 1,000 feet of a kindergarten through 12 grade school. [CH&SC 42301.6]
10. IC engine shall be equipped with air/fuel ratio controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
12. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
13. The permittee shall install and operate a nonresettable fuel flow meter. The fuel meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 2201] 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.

14. This IC engine shall only be fired on Public Utility Commission (PUC) quality natural gas. [District Rules 2201 and 4801] Federally Enforceable Through Title V Permit
15. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
16. Emissions from this IC engine shall not exceed any of the following limits: NOx (as NO₂) - 5 ppmv @ 15% O₂, VOC - 25 ppmv @ 15% O₂, CO - 56 ppmv @ 15% O₂, PM₁₀ - 0.02 g/hp-hr, or SOx (as SO₂) - 0.012 g/hp-hr. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
17. VOC fugitive emissions from the components in gas service associated with the compressor shall not exceed 0.7 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Permittee shall maintain accurate component count for compressor according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c (Feb 1999), Screening Value Range emission factors < 10,000 ppmv. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
19. The fuel consumption for this engine shall not exceed 114.2 MMscf per calendar year. Compliance with this limit may be shown by a record of the annual fuel usage. [District Rule 2201] Federally Enforceable Through Title V Permit
20. The engine shall only burn natural gas with fuel gas sulfur concentration (as H₂S) not exceeding 1.0 grains/100 dscf. [District Rule 2201] Federally Enforceable Through Title V Permit
21. If the IC engine is fired on PUC-regulated natural gas, the permittee shall retain on file, copies of all natural gas bills. [District Rule 2201] Federally Enforceable Through Title V Permit
22. If the engine is fired on any fuel gas other than PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM methods D1072, D3246, D4084, Double GC for H₂S and mercaptans, or alternative test method with prior written approval from the APCO. [District Rule 2201] Federally Enforceable Through Title V Permit
23. If the engine is fired on any fuel gas other than PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Source testing to measure natural gas-combustion NO_x, CO, and VOC emissions from this engine shall be conducted not less than once every 12 months. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
25. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit
26. 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
27. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25A or 25B, or ARB Method 100. Methane and ethane, which are exempt compounds, shall be excluded from the result of the VOC test. EPA approved alternative test methods may also be used to satisfy the source testing requirements of this permit with prior written approval from the APCO. [District Rule 4702, 6.4] Federally Enforceable Through Title V Permit
28. 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. VOC emissions shall be reported as methane. NO_x, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702, 6.3.3] 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.

29. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1080] Federally Enforceable Through Title V Permit
30. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1080] Federally Enforceable Through Title V Permit
31. This engine shall be operated and maintained in proper operating condition according to the manufacturer's specifications and the Rule 4702 Inspection and Monitoring (I&M) plan submitted to the District. [District Rule 4702, 6.5] Federally Enforceable Through Title V Permit
32. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702, 6.5.9] Federally Enforceable Through Title V Permit
33. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂, using a portable emission monitor that meets District specifications, at least once every calendar quarter (in which a source test is not performed and the engine is operated) or, if the engine is operated less than 120 calendar days in a calendar year, at least once during that calendar year (in which a source test is not performed and the engine is operated). Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last calendar quarter. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702] Federally Enforceable Through Title V Permit
34. If either the NO_x or CO concentrations corrected to 15% O₂, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit
35. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702] Federally Enforceable Through Title V Permit
36. The permittee shall maintain records of: (1) the date and time of NO_x CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 15% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit
37. The results of the measurements taken with the District approved analyzer shall be retained on-site at all times. [District Rule 1070]
38. This operation shall comply with the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] 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. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type, quantity (cubic feet of gas) and sulfur content of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 2201 and 4702, 6.2.1] Federally Enforceable Through Title V Permit
40. 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. For units at unstaffed sites or operated remotely, records may be maintained and retained at a District-approved off-site location. [District Rules 1070, 2201 and 4702, 6.2.1 and 6.2.2] Federally Enforceable Through Title V Permit
41. The permittee shall record the O2 sensor reading (in millivolts) on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit
42. The operator shall establish an O2 sensor output voltage range that indicates that the control device(s) on this engine are operating properly at all times. [40 CFR 64] Federally Enforceable Through Title V Permit
43. Permittee shall ensure proper operation of catalyst system by maintaining O2 sensor voltage between 0.5 millivolts and 1.1 millivolts. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit
44. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit
45. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit
46. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] 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-2234-211-5

EXPIRATION DATE: 10/31/2016

SECTION: 28 TOWNSHIP: 30S RANGE: 23E

EQUIPMENT DESCRIPTION:

1,680 BHP WAUKESHA MODEL L7044GSI NATURAL GAS-FIRED IC ENGINE WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A GAS COMPRESSOR (R-6) OPERATING AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]
7. Operator shall notify the District by letter or fax at least 48-hours in advance of the re-location of this unit. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Operator shall maintain records of compressor skid location and dates spent at each location and make such records available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
9. This unit shall not operate within 1,000 feet of a kindergarten through 12 grade school. [CH&SC 42301.6]
10. IC engine shall be equipped with air/fuel ratio controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
12. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
13. The permittee shall install and operate a nonresettable fuel flow meter. The fuel meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 2201] 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.

14. This IC engine shall only be fired on Public Utility Commission (PUC) quality natural gas. [District Rules 2201 and 4801] Federally Enforceable Through Title V Permit
15. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
16. Emissions from this IC engine shall not exceed any of the following limits: NOx (as NO2) - 5 ppmv @ 15% O2, VOC - 25 ppmv @ 15% O2, CO - 56 ppmv @ 15% O2, PM10 - 0.02 g/hp-hr, or SOx (as SO2) - 0.012 g/hp-hr. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
17. VOC fugitive emissions from the components in gas service associated with the compressor shall not exceed 0.7 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Permittee shall maintain accurate component count for compressor according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c (Feb 1999), Screening Value Range emission factors < 10,000 ppmv. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
19. The fuel consumption for this engine shall not exceed 241,600 scf/day. Compliance with this limit may be shown by dividing the quantity of fuel used during a calendar month over the number of days operated during that month. [District Rule 2201] Federally Enforceable Through Title V Permit
20. The engine shall only burn natural gas with fuel gas sulfur concentration (as H2S) not exceeding 1.0 grains/100 dscf. [District Rule 2201] Federally Enforceable Through Title V Permit
21. If the IC engine is fired on PUC-regulated natural gas, the permittee shall retain on file, copies of all natural gas bills. [District Rule 2201] Federally Enforceable Through Title V Permit
22. If the engine is fired on any fuel gas other than PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM methods D1072, D3246, D4084, Double GC for H2S and mercaptans, or alternative test method with prior written approval from the APCO. [District Rule 2201] Federally Enforceable Through Title V Permit
23. If the engine is fired on any fuel gas other than PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Source testing to measure natural gas-combustion NOx, CO, and VOC emissions from this engine shall be conducted not less than once every 12 months. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
25. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit
26. 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
27. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25A or 25B, or ARB Method 100. Methane and ethane, which are exempt compounds, shall be excluded from the result of the VOC test. EPA approved alternative test methods may also be used to satisfy the source testing requirements of this permit with prior written approval from the APCO. [District Rule 4702, 6.4] Federally Enforceable Through Title V Permit
28. 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. VOC emissions shall be reported as methane. NOx, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702, 6.3.3] 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.

29. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1080] Federally Enforceable Through Title V Permit
30. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1080] Federally Enforceable Through Title V Permit
31. This engine shall be operated and maintained in proper operating condition according to the manufacturer's specifications and the Rule 4702 Inspection and Monitoring (I&M) plan submitted to the District. [District Rule 4702, 6.5] Federally Enforceable Through Title V Permit
32. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702, 6.5.9] Federally Enforceable Through Title V Permit
33. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂, using a portable emission monitor that meets District specifications, at least once every calendar quarter (in which a source test is not performed and the engine is operated) or, if the engine is operated less than 120 calendar days in a calendar year, at least once during that calendar year (in which a source test is not performed and the engine is operated). Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last calendar quarter. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702] Federally Enforceable Through Title V Permit
34. If either the NO_x or CO concentrations corrected to 15% O₂, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit
35. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702] Federally Enforceable Through Title V Permit
36. The permittee shall maintain records of: (1) the date and time of NO_x CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 15% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit
37. The results of the measurements taken with the District approved analyzer shall be retained on-site at all times. [District Rule 1070]
38. This operation shall comply with the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] 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. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type, quantity (cubic feet of gas) and sulfur content of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 2201 and 4702, 6.2.1] Federally Enforceable Through Title V Permit
40. 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. For units at unstaffed sites or operated remotely, records may be maintained and retained at a District-approved off-site location. [District Rules 1070, 2201 and 4702, 6.2.1 and 6.2.2] Federally Enforceable Through Title V Permit

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

DRAFT

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-2234-212-6

EXPIRATION DATE: 10/31/2016

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

EQUIPMENT DESCRIPTION:

1,680 BHP WAUKESHA MODEL L7044GSI NATURAL GAS-FIRED IC ENGINE WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A GAS COMPRESSOR (R-47) OPERATING AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]
7. Operator shall notify the District by letter or fax at least 48-hours in advance of the re-location of this unit. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Operator shall maintain records of compressor skid location and dates spent at each location and make such records available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
9. This unit shall not operate within 1,000 feet of a kindergarten through 12 grade school. [CH&SC 42301.6]
10. IC engine shall be equipped with air/fuel ratio controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
12. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
13. The permittee shall install and operate a nonresettable fuel flow meter. The fuel meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 2201] 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.

14. This IC engine shall only be fired on Public Utility Commission (PUC) quality natural gas. [District Rules 2201 and 4801] Federally Enforceable Through Title V Permit
15. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
16. Emissions from this IC engine shall not exceed any of the following limits: NOx (as NO2) - 5 ppmv @ 15% O2, VOC - 25 ppmv @ 15% O2, CO - 56 ppmv @ 15% O2, PM10 - 0.02 g/hp-hr, or SOx (as SO2) - 0.012 g/hp-hr. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
17. VOC fugitive emissions from the components in gas service associated with the compressor shall not exceed 0.7 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Permittee shall maintain accurate component count for compressor according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c (Feb 1999), Screening Value Range emission factors < 10,000 ppmv. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
19. The fuel consumption for this engine shall not exceed 114.2 MMscf per calendar year. Compliance with this limit may be shown by a record of the annual fuel usage. [District Rule 2201] Federally Enforceable Through Title V Permit
20. The engine shall only burn natural gas with fuel gas sulfur concentration (as H2S) not exceeding 1.0 grains/100 dscf. [District Rule 2201] Federally Enforceable Through Title V Permit
21. If the IC engine is fired on PUC-regulated natural gas, the permittee shall retain on file, copies of all natural gas bills. [District Rule 2201] Federally Enforceable Through Title V Permit
22. If the engine is fired on any fuel gas other than PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM methods D1072, D3246, D4084, Double GC for H2S and mercaptans, or alternative test method with prior written approval from the APCO. [District Rule 2201] Federally Enforceable Through Title V Permit
23. If the engine is fired on any fuel gas other than PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Source testing to measure natural gas-combustion NOx, CO, and VOC emissions from this engine shall be conducted not less than once every 12 months. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
25. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit
26. 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
27. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25A or 25B, or ARB Method 100. Methane and ethane, which are exempt compounds, shall be excluded from the result of the VOC test. EPA approved alternative test methods may also be used to satisfy the source testing requirements of this permit with prior written approval from the APCO. [District Rule 4702, 6.4] Federally Enforceable Through Title V Permit
28. 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. VOC emissions shall be reported as methane. NOx, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702, 6.3.3] 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.

29. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1080] Federally Enforceable Through Title V Permit
30. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1080] Federally Enforceable Through Title V Permit
31. This engine shall be operated and maintained in proper operating condition according to the manufacturer's specifications and the Rule 4702 Inspection and Monitoring (I&M) plan submitted to the District. [District Rule 4702, 6.5] Federally Enforceable Through Title V Permit
32. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702, 6.5.9] Federally Enforceable Through Title V Permit
33. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂, using a portable emission monitor that meets District specifications, at least once every calendar quarter (in which a source test is not performed and the engine is operated) or, if the engine is operated less than 120 calendar days in a calendar year, at least once during that calendar year (in which a source test is not performed and the engine is operated). Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last calendar quarter. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702] Federally Enforceable Through Title V Permit
34. If either the NO_x or CO concentrations corrected to 15% O₂, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit
35. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702] Federally Enforceable Through Title V Permit
36. The permittee shall maintain records of: (1) the date and time of NO_x CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 15% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit
37. The results of the measurements taken with the District approved analyzer shall be retained on-site at all times. [District Rule 1070]
38. This operation shall comply with the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] 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. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type, quantity (cubic feet of gas) and sulfur content of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 2201 and 4702, 6.2.1] Federally Enforceable Through Title V Permit
40. 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. For units at unstaffed sites or operated remotely, records may be maintained and retained at a District-approved off-site location. [District Rules 1070, 2201 and 4702, 6.2.1 and 6.2.2] Federally Enforceable Through Title V Permit
41. The permittee shall record the O2 sensor reading (in millivolts) on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit
42. The operator shall establish an O2 sensor output voltage range that indicates that the control device(s) on this engine are operating properly at all times. [40 CFR 64] Federally Enforceable Through Title V Permit
43. Permittee shall ensure proper operation of catalyst system by maintaining O2 sensor voltage between 0.5 millivolts and 1.1 millivolts. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit
44. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit
45. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit
46. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] 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-2234-214-6

EXPIRATION DATE: 10/31/2016

SECTION: 29 **TOWNSHIP:** 30S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

1,680 BHP WAUKESHA MODEL L7044GSI NATURAL GAS-FIRED IC ENGINE WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A GAS COMPRESSOR (R-42) OPERATING AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]
7. Operator shall notify the District by letter or fax at least 48-hours in advance of the re-location of this unit. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Operator shall maintain records of compressor skid location and dates spent at each location and make such records available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
9. This unit shall not operate within 1,000 feet of a kindergarten through 12 grade school. [CH&SC 42301.6]
10. IC engine shall be equipped with air/fuel ratio controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
12. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
13. The permittee shall install and operate a nonresettable fuel flow meter. The fuel meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 2201] 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.

14. This IC engine shall only be fired on Public Utility Commission (PUC) quality natural gas. [District Rules 2201 and 4801] Federally Enforceable Through Title V Permit
15. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
16. Emissions from this IC engine shall not exceed any of the following limits: NOx (as NO2) - 5 ppmv @ 15% O2, VOC - 25 ppmv @ 15% O2, CO - 56 ppmv @ 15% O2, PM10 - 0.02 g/hp-hr, or SOx (as SO2) - 0.012 g/hp-hr. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
17. VOC fugitive emissions from the components in gas service associated with the compressor shall not exceed 0.7 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Permittee shall maintain accurate component count for compressor according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c (Feb 1999), Screening Value Range emission factors < 10,000 ppmv. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
19. The fuel consumption for this engine shall not exceed 114.2 MMscf per calendar year. Compliance with this limit may be shown by a record of the annual fuel usage. [District Rule 2201] Federally Enforceable Through Title V Permit
20. The engine shall only burn natural gas with fuel gas sulfur concentration (as H2S) not exceeding 1.0 grains/100 dscf. [District Rule 2201] Federally Enforceable Through Title V Permit
21. If the IC engine is fired on PUC-regulated natural gas, the permittee shall retain on file, copies of all natural gas bills. [District Rule 2201] Federally Enforceable Through Title V Permit
22. If the engine is fired on any fuel gas other than PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM methods D1072, D3246, D4084, Double GC for H2S and mercaptans, or alternative test method with prior written approval from the APCO. [District Rule 2201] Federally Enforceable Through Title V Permit
23. If the engine is fired on any fuel gas other than PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Source testing to measure natural gas-combustion NOx, CO, and VOC emissions from this engine shall be conducted not less than once every 12 months. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
25. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit
26. 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
27. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25A or 25B, or ARB Method 100. Methane and ethane, which are exempt compounds, shall be excluded from the result of the VOC test. EPA approved alternative test methods may also be used to satisfy the source testing requirements of this permit with prior written approval from the APCO. [District Rule 4702, 6.4] Federally Enforceable Through Title V Permit
28. 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. VOC emissions shall be reported as methane. NOx, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702, 6.3.3] 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.

29. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1080] Federally Enforceable Through Title V Permit
30. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1080] Federally Enforceable Through Title V Permit
31. This engine shall be operated and maintained in proper operating condition according to the manufacturer's specifications and the Rule 4702 Inspection and Monitoring (I&M) plan submitted to the District. [District Rule 4702, 6.5] Federally Enforceable Through Title V Permit
32. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702, 6.5.9] Federally Enforceable Through Title V Permit
33. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂, using a portable emission monitor that meets District specifications, at least once every calendar quarter (in which a source test is not performed and the engine is operated) or, if the engine is operated less than 120 calendar days in a calendar year, at least once during that calendar year (in which a source test is not performed and the engine is operated). Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last calendar quarter. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702] Federally Enforceable Through Title V Permit
34. If either the NO_x or CO concentrations corrected to 15% O₂, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit
35. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702] Federally Enforceable Through Title V Permit
36. The permittee shall maintain records of: (1) the date and time of NO_x CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 15% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit
37. The results of the measurements taken with the District approved analyzer shall be retained on-site at all times. [District Rule 1070]
38. This operation shall comply with the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] 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. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type, quantity (cubic feet of gas) and sulfur content of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 2201 and 4702, 6.2.1] Federally Enforceable Through Title V Permit
40. 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. For units at unstaffed sites or operated remotely, records may be maintained and retained at a District-approved off-site location. [District Rules 1070, 2201 and 4702, 6.2.1 and 6.2.2] Federally Enforceable Through Title V Permit
41. The permittee shall record the O2 sensor reading (in millivolts) on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit
42. The operator shall establish an O2 sensor output voltage range that indicates that the control device(s) on this engine are operating properly at all times. [40 CFR 64] Federally Enforceable Through Title V Permit
43. Permittee shall ensure proper operation of catalyst system by maintaining O2 sensor voltage between 0.5 millivolts and 1.1 millivolts. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit
44. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit
45. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit
46. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit

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

DRAFT

ATTACHMENT B

Authorities to Construct



AUTHORITY TO CONSTRUCT

PERMIT NO: S-2234-207-3

ISSUANCE DATE: 06/13/2012

LEGAL OWNER OR OPERATOR: OCCIDENTAL OF ELK HILLS INC
MAILING ADDRESS: ATTN: DENNIS CHAMPION
PO BOX 1001
TUPMAN, CA 93276

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

SECTION: 26 **TOWNSHIP:** 30S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 1,680 BHP WAUKESHA MODEL L7044GSI NATURAL GAS-FIRED IC ENGINE WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A GAS COMPRESSOR (R-1) OPERATING AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234: DESIGNATE AS A COMPLIANT DORMANT EMISSIONS UNIT

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]
2. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080]
3. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
4. While dormant, normal source testing shall not be required. [District Rule 2080]
5. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080]
6. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080]
7. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]

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

8. Operator shall notify the District by letter or fax at least 48-hours in advance of the re-location of this unit. [District Rule 2201]
9. Operator shall maintain records of compressor skid location and dates spent at each location and make such records available for District inspection upon request. [District Rule 2201]
10. This unit shall not operate within 1,000 feet of a kindergarten through 12 grade school. [CH&SC 42301.6]
11. IC engine shall be equipped with air/fuel ratio controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District Rule 2201]
12. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201]
13. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702]
14. The permittee shall install and operate a nonresettable fuel flow meter. The fuel meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 2201]
15. This IC engine shall only be fired on Public Utility Commission (PUC) quality natural gas. [District Rules 2201 and 4801]
16. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
17. Emissions from this IC engine shall not exceed any of the following limits: NO_x (as NO₂) - 5 ppmv @ 15% O₂, VOC - 25 ppmv @ 15% O₂, CO - 56 ppmv @ 15% O₂, PM₁₀ - 0.02 g/hp-hr, or SO_x (as SO₂) - 0.012 g/hp-hr. [District Rules 2201 and 4702, 5.1]
18. VOC fugitive emissions from the components in gas service associated with the compressor shall not exceed 0.7 lb/day. [District Rule 2201]
19. Permittee shall maintain accurate component count for compressor according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c (Feb 1999), Screening Value Range emission factors < 10,000 ppmv. Permittee shall update such records when new components are approved and installed. [District Rule 2201]
20. The fuel consumption for this engine shall not exceed 241,600 scf/day. Compliance with this limit may be shown by dividing the quantity of fuel used during a calendar month over the number of days operated during that month. [District Rule 2201]
21. The engine shall only burn natural gas with fuel gas sulfur concentration (as H₂S) not exceeding 1.0 grains/100 dscf. [District Rule 2201]
22. If the IC engine is fired on PUC-regulated natural gas, the permittee shall retain on file, copies of all natural gas bills. [District Rule 2201]
23. If the engine is fired on any fuel gas other than PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM methods D1072, D3246, D4084, Double GC for H₂S and mercaptans, or alternative test method with prior written approval from the APCO. [District Rule 2201]
24. If the engine is fired on any fuel gas other than PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2201]
25. Source testing to measure natural gas-combustion NO_x, CO, and VOC emissions from this engine shall be conducted not less than once every 12 months. [District Rules 2201 and 4702]
26. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702, 6.3.3]

CONDITIONS CONTINUE ON NEXT PAGE

27. 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]
28. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25A or 25B, or ARB Method 100. Methane and ethane, which are exempt compounds, shall be excluded from the result of the VOC test. EPA approved alternative test methods may also be used to satisfy the source testing requirements of this permit with prior written approval from the APCO. [District Rule 4702, 6.4]
29. 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. VOC emissions shall be reported as methane. NO_x, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702, 6.3.3]
30. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1080]
31. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1080]
32. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified on the Inspection and Monitoring (I&M) plan submitted to the District. [District Rule 4702]
33. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702]
34. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂, using a portable emission monitor that meets District specifications, at least once every calendar quarter (in which a source test is not performed and the engine is operated) or, if the engine is operated less than 120 calendar days in a calendar year, at least once during that calendar year (in which a source test is not performed and the engine is operated). Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last calendar quarter. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702]
35. If either the NO_x or CO concentrations corrected to 15% O₂, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702]
36. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702, 5.6.1 and 5.6.9]
37. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 15% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702, 6.2.1]

CONDITIONS CONTINUE ON NEXT PAGE

38. The results of the measurements taken with the District approved analyzer shall be retained on-site at all times.
[District Rule 1070]
39. This operation shall comply with the requirements of District Rule 4409, as specified on facility wide permit S-2234-0.
[District Rule 4409]
40. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type, quantity (cubic feet of gas) and sulfur content of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 2201 and 4702]
41. 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. For units at unstaffed sites or operated remotely, records may be maintained and retained at a District-approved off-site location. [District Rules 1070, 2201 and 4702, 6.2.1 and 6.2.2]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-2234-208-3

ISSUANCE DATE: 06/13/2012

LEGAL OWNER OR OPERATOR: OCCIDENTAL OF ELK HILLS INC
MAILING ADDRESS: ATTN: DENNIS CHAMPION
PO BOX 1001
TUPMAN, CA 93276

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

SECTION: 36 **TOWNSHIP:** 30S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 1,680 BHP WAUKESHA MODEL L7044GSI NATURAL GAS-FIRED IC ENGINE WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A GAS COMPRESSOR (R-2) OPERATING AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234: DESIGNATE AS A COMPLIANT DORMANT EMISSIONS UNIT

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]
2. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080]
3. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
4. While dormant, normal source testing shall not be required. [District Rule 2080]
5. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080]
6. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080]
7. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]

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

8. Operator shall notify the District by letter or fax at least 48-hours in advance of the re-location of this unit. [District Rule 2201]
9. Operator shall maintain records of compressor skid location and dates spent at each location and make such records available for District inspection upon request. [District Rule 2201]
10. This unit shall not operate within 1,000 feet of a kindergarten through 12 grade school. [CH&SC 42301.6]
11. IC engine shall be equipped with air/fuel ratio controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District Rule 2201]
12. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201]
13. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702]
14. The permittee shall install and operate a nonresettable fuel flow meter. The fuel meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 2201]
15. This IC engine shall only be fired on Public Utility Commission (PUC) quality natural gas. [District Rules 2201 and 4801]
16. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
17. Emissions from this IC engine shall not exceed any of the following limits: NO_x (as NO₂) - 5 ppmv @ 15% O₂, VOC - 25 ppmv @ 15% O₂, CO - 56 ppmv @ 15% O₂, PM₁₀ - 0.02 g/hp-hr, or SO_x (as SO₂) - 0.012 g/hp-hr. [District Rules 2201 and 4702, 5.1]
18. VOC fugitive emissions from the components in gas service associated with the compressor shall not exceed 0.7 lb/day. [District Rule 2201]
19. Permittee shall maintain accurate component count for compressor according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c (Feb 1999), Screening Value Range emission factors < 10,000 ppmv. Permittee shall update such records when new components are approved and installed. [District Rule 2201]
20. The fuel consumption for this engine shall not exceed 241,600 scf/day. Compliance with this limit may be shown by dividing the quantity of fuel used during a calendar month over the number of days operated during that month. [District Rule 2201]
21. The engine shall only burn natural gas with fuel gas sulfur concentration (as H₂S) not exceeding 1.0 grains/100 dscf. [District Rule 2201]
22. If the IC engine is fired on PUC-regulated natural gas, the permittee shall retain on file, copies of all natural gas bills. [District Rule 2201]
23. If the engine is fired on any fuel gas other than PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM methods D1072, D3246, D4084, Double GC for H₂S and mercaptans, or alternative test method with prior written approval from the APCO. [District Rule 2201]
24. If the engine is fired on any fuel gas other than PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2201]
25. Source testing to measure natural gas-combustion NO_x, CO, and VOC emissions from this engine shall be conducted not less than once every 12 months. [District Rules 2201 and 4702]
26. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702, 6.3.3]

CONDITIONS CONTINUE ON NEXT PAGE

27. 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]
28. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25A or 25B, or ARB Method 100. Methane and ethane, which are exempt compounds, shall be excluded from the result of the VOC test. EPA approved alternative test methods may also be used to satisfy the source testing requirements of this permit with prior written approval from the APCO. [District Rule 4702, 6.4]
29. 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. VOC emissions shall be reported as methane. NO_x, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702, 6.3.3]
30. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1080]
31. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1080]
32. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified on the Inspection and Monitoring (I&M) plan submitted to the District.. [District Rule 4702]
33. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702, 6.5.9]
34. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂, using a portable emission monitor that meets District specifications, at least once every calendar quarter (in which a source test is not performed and the engine is operated) or, if the engine is operated less than 120 calendar days in a calendar year, at least once during that calendar year (in which a source test is not performed and the engine is operated). Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last calendar quarter. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702]
35. If either the NO_x or CO concentrations corrected to 15% O₂, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702]
36. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702]
37. The permittee shall maintain records of: (1) the date and time of NO_x CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 15% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702, 6.2.1]

CONDITIONS CONTINUE ON NEXT PAGE

38. The results of the measurements taken with the District approved analyzer shall be retained on-site at all times.
[District Rule 1070]
39. This operation shall comply with the requirements of District Rule 4409, as specified on facility wide permit S-2234-0.
[District Rule 4409]
40. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type, quantity (cubic feet of gas) and sulfur content of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 2201 and 4702, 6.2.1]
41. 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. For units at unstaffed sites or operated remotely, records may be maintained and retained at a District-approved off-site location. [District Rules 1070, 2201 and 4702, 6.2.1 and 6.2.2]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-2234-209-3

ISSUANCE DATE: 06/13/2012

LEGAL OWNER OR OPERATOR: OCCIDENTAL OF ELK HILLS INC
MAILING ADDRESS: ATTN: DENNIS CHAMPION
PO BOX 1001
TUPMAN, CA 93276

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

SECTION: 27 **TOWNSHIP:** 30S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 1,680 BHP WAUKESHA MODEL L7044GSI NATURAL GAS-FIRED IC ENGINE WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A GAS COMPRESSOR (R-3) OPERATING AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234: DESIGNATE AS A COMPLIANT DORMANT EMISSIONS UNIT

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]
2. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080]
3. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
4. While dormant, normal source testing shall not be required. [District Rule 2080]
5. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080]
6. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080]
7. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]

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

8. Operator shall notify the District by letter or fax at least 48-hours in advance of the re-location of this unit. [District Rule 2201]
9. Operator shall maintain records of compressor skid location and dates spent at each location and make such records available for District inspection upon request. [District Rule 2201]
10. This unit shall not operate within 1,000 feet of a kindergarten through 12 grade school. [CH&SC 42301.6]
11. IC engine shall be equipped with air/fuel ratio controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District Rule 2201]
12. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201]
13. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702]
14. The permittee shall install and operate a nonresettable fuel flow meter. The fuel meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 2201]
15. This IC engine shall only be fired on Public Utility Commission (PUC) quality natural gas. [District Rules 2201 and 4801]
16. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
17. Emissions from this IC engine shall not exceed any of the following limits: NO_x (as NO₂) - 5 ppmv @ 15% O₂, VOC - 25 ppmv @ 15% O₂, CO - 56 ppmv @ 15% O₂, PM₁₀ - 0.02 g/hp-hr, or SO_x (as SO₂) - 0.012 g/hp-hr. [District Rules 2201 and 4702, 5.1]
18. VOC fugitive emissions from the components in gas service associated with the compressor shall not exceed 0.7 lb/day. [District Rule 2201]
19. Permittee shall maintain accurate component count for compressor according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c (Feb 1999), Screening Value Range emission factors < 10,000 ppmv. Permittee shall update such records when new components are approved and installed. [District Rule 2201]
20. The fuel consumption for this engine shall not exceed 241,600 scf/day. Compliance with this limit may be shown by dividing the quantity of fuel used during a calendar month over the number of days operated during that month. [District Rule 2201]
21. The engine shall only burn natural gas with fuel gas sulfur concentration (as H₂S) not exceeding 1.0 grains/100 dscf. [District Rule 2201]
22. If the IC engine is fired on PUC-regulated natural gas, the permittee shall retain on file, copies of all natural gas bills. [District Rule 2201]
23. If the engine is fired on any fuel gas other than PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM methods D1072, D3246, D4084, Double GC for H₂S and mercaptans, or alternative test method with prior written approval from the APCO. [District Rule 2201]
24. If the engine is fired on any fuel gas other than PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2201]
25. Source testing to measure natural gas-combustion NO_x, CO, and VOC emissions from this engine shall be conducted not less than once every 12 months. [District Rules 2201 and 4702]
26. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702, 6.3.3]

CONDITIONS CONTINUE ON NEXT PAGE

27. 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]
28. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25A or 25B, or ARB Method 100. Methane and ethane, which are exempt compounds, shall be excluded from the result of the VOC test. EPA approved alternative test methods may also be used to satisfy the source testing requirements of this permit with prior written approval from the APCO. [District Rule 4702, 6.4]
29. 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. VOC emissions shall be reported as methane. NO_x, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702, 6.3.3]
30. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1080]
31. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1080]
32. This engine shall be operated and maintained in proper operating condition according to the manufacturer's specifications and the Rule 4702 Inspection and Monitoring (I&M) plan submitted to the District. [District Rule 4702, 6.5]
33. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702, 6.5.9]
34. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂, using a portable emission monitor that meets District specifications, at least once every calendar quarter (in which a source test is not performed and the engine is operated) or, if the engine is operated less than 120 calendar days in a calendar year, at least once during that calendar year (in which a source test is not performed and the engine is operated). Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last calendar quarter. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702]
35. If either the NO_x or CO concentrations corrected to 15% O₂, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702]
36. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702, 5.6.1 and 5.6.9]

CONDITIONS CONTINUE ON NEXT PAGE

37. The permittee shall maintain records of: (1) the date and time of NO_x CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 15% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702, 6.2.1]
38. The results of the measurements taken with the District approved analyzer shall be retained on-site at all times. [District Rule 1070]
39. This operation shall comply with the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409]
40. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type, quantity (cubic feet of gas) and sulfur content of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 2201 and 4702, 6.2.1]
41. 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. For units at unstaffed sites or operated remotely, records may be maintained and retained at a District-approved off-site location. [District Rules 1070, 2201 and 4702, 6.2.1 and 6.2.2]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-2234-210-3

ISSUANCE DATE: 06/13/2012

LEGAL OWNER OR OPERATOR: OCCIDENTAL OF ELK HILLS INC
MAILING ADDRESS: ATTN: DENNIS CHAMPION
PO BOX 1001
TUPMAN, CA 93276

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

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

EQUIPMENT DESCRIPTION:

MODIFICATION OF 1,680 BHP WAUKESHA MODEL L7044GSI NATURAL GAS-FIRED IC ENGINE WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A GAS COMPRESSOR (R-4) OPERATING AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234: DESIGNATE AS A COMPLIANT DORMANT EMISSIONS UNIT

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]
2. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080]
3. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
4. While dormant, normal source testing shall not be required. [District Rule 2080]
5. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080]
6. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080]
7. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]

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

8. Operator shall notify the District by letter or fax at least 48-hours in advance of the re-location of this unit. [District Rule 2201]
9. Operator shall maintain records of compressor skid location and dates spent at each location and make such records available for District inspection upon request. [District Rule 2201]
10. This unit shall not operate within 1,000 feet of a kindergarten through 12 grade school. [CH&SC 42301.6]
11. IC engine shall be equipped with air/fuel ratio controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District Rule 2201]
12. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201]
13. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702]
14. The permittee shall install and operate a nonresettable fuel flow meter. The fuel meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 2201]
15. This IC engine shall only be fired on Public Utility Commission (PUC) quality natural gas. [District Rules 2201 and 4801]
16. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
17. Emissions from this IC engine shall not exceed any of the following limits: NO_x (as NO₂) - 5 ppmv @ 15% O₂, VOC - 25 ppmv @ 15% O₂, CO - 56 ppmv @ 15% O₂, PM₁₀ - 0.02 g/hp-hr, or SO_x (as SO₂) - 0.012 g/hp-hr. [District Rules 2201 and 4702, 5.1]
18. VOC fugitive emissions from the components in gas service associated with the compressor shall not exceed 0.7 lb/day. [District Rule 2201]
19. Permittee shall maintain accurate component count for compressor according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c (Feb 1999), Screening Value Range emission factors < 10,000 ppmv. Permittee shall update such records when new components are approved and installed. [District Rule 2201]
20. The fuel consumption for this engine shall not exceed 114.2 MMscf per calendar year. Compliance with this limit may be shown by a record of the annual fuel usage. [District Rule 2201]
21. The engine shall only burn natural gas with fuel gas sulfur concentration (as H₂S) not exceeding 1.0 grains/100 dscf. [District Rule 2201]
22. If the IC engine is fired on PUC-regulated natural gas, the permittee shall retain on file, copies of all natural gas bills. [District Rule 2201]
23. If the engine is fired on any fuel gas other than PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM methods D1072, D3246, D4084, Double GC for H₂S and mercaptans, or alternative test method with prior written approval from the APCO. [District Rule 2201]
24. If the engine is fired on any fuel gas other than PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2201]
25. Source testing to measure natural gas-combustion NO_x, CO, and VOC emissions from this engine shall be conducted not less than once every 12 months. [District Rules 2201 and 4702]
26. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702, 6.3.3]
27. 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]

CONDITIONS CONTINUE ON NEXT PAGE

28. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25A or 25B, or ARB Method 100. Methane and ethane, which are exempt compounds, shall be excluded from the result of the VOC test. EPA approved alternative test methods may also be used to satisfy the source testing requirements of this permit with prior written approval from the APCO. [District Rule 4702, 6.4]
29. 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. VOC emissions shall be reported as methane. NO_x, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702, 6.3.3]
30. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1080]
31. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1080]
32. This engine shall be operated and maintained in proper operating condition according to the manufacturer's specifications and the Rule 4702 Inspection and Monitoring (I&M) plan submitted to the District. [District Rule 4702, 6.5]
33. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702, 6.5.9]
34. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂, using a portable emission monitor that meets District specifications, at least once every calendar quarter (in which a source test is not performed and the engine is operated) or, if the engine is operated less than 120 calendar days in a calendar year, at least once during that calendar year (in which a source test is not performed and the engine is operated). Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last calendar quarter. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702]
35. If either the NO_x or CO concentrations corrected to 15% O₂, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702]
36. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702]
37. The permittee shall maintain records of: (1) the date and time of NO_x CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 15% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702, 6.2.1]
38. The results of the measurements taken with the District approved analyzer shall be retained on-site at all times. [District Rule 1070]

CONDITIONS CONTINUE ON NEXT PAGE

39. This operation shall comply with the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409]
40. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type, quantity (cubic feet of gas) and sulfur content of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 2201 and 4702, 6.2.1]
41. 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. For units at unstaffed sites or operated remotely, records may be maintained and retained at a District-approved off-site location. [District Rules 1070, 2201 and 4702, 6.2.1 and 6.2.2]
42. The permittee shall record the O2 sensor reading (in millivolts) on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR 64]
43. The operator shall establish an O2 sensor output voltage range that indicates that the control device(s) on this engine are operating properly at all times. [40 CFR 64]
44. The operator shall submit a Title V minor modification application by December 29, 2012 to incorporate the O2 sensor output voltage range established for this engine. [District Rule 2520, 9.3.2 and 40 CFR 64]
45. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR 64]
46. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64]
47. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-2234-211-3

ISSUANCE DATE: 06/13/2012

LEGAL OWNER OR OPERATOR: OCCIDENTAL OF ELK HILLS INC
MAILING ADDRESS: ATTN: DENNIS CHAMPION
PO BOX 1001
TUPMAN, CA 93276

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

SECTION: 28 **TOWNSHIP:** 30S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 1,680 BHP WAUKESHA MODEL L7044GSI NATURAL GAS-FIRED IC ENGINE WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A GAS COMPRESSOR (R-6) OPERATING AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234: DESIGNATE AS A COMPLIANT DORMANT EMISSIONS UNIT

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]
2. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080]
3. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
4. While dormant, normal source testing shall not be required. [District Rule 2080]
5. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080]
6. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080]
7. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]

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

8. Operator shall notify the District by letter or fax at least 48-hours in advance of the re-location of this unit. [District Rule 2201]
9. Operator shall maintain records of compressor skid location and dates spent at each location and make such records available for District inspection upon request. [District Rule 2201]
10. This unit shall not operate within 1,000 feet of a kindergarten through 12 grade school. [CH&SC 42301.6]
11. IC engine shall be equipped with air/fuel ratio controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District Rule 2201]
12. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201]
13. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702]
14. The permittee shall install and operate a nonresettable fuel flow meter. The fuel meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 2201]
15. This IC engine shall only be fired on Public Utility Commission (PUC) quality natural gas. [District Rules 2201 and 4801]
16. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
17. Emissions from this IC engine shall not exceed any of the following limits: NO_x (as NO₂) - 5 ppmv @ 15% O₂, VOC - 25 ppmv @ 15% O₂, CO - 56 ppmv @ 15% O₂, PM₁₀ - 0.02 g/hp-hr, or SO_x (as SO₂) - 0.012 g/hp-hr. [District Rules 2201 and 4702, 5.1]
18. VOC fugitive emissions from the components in gas service associated with the compressor shall not exceed 0.7 lb/day. [District Rule 2201]
19. Permittee shall maintain accurate component count for compressor according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c (Feb 1999), Screening Value Range emission factors < 10,000 ppmv. Permittee shall update such records when new components are approved and installed. [District Rule 2201]
20. The fuel consumption for this engine shall not exceed 241,600 scf/day. Compliance with this limit may be shown by dividing the quantity of fuel used during a calendar month over the number of days operated during that month. [District Rule 2201]
21. The engine shall only burn natural gas with fuel gas sulfur concentration (as H₂S) not exceeding 1.0 grains/100 dscf. [District Rule 2201]
22. If the IC engine is fired on PUC-regulated natural gas, the permittee shall retain on file, copies of all natural gas bills. [District Rule 2201]
23. If the engine is fired on any fuel gas other than PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM methods D1072, D3246, D4084, Double GC for H₂S and mercaptans, or alternative test method with prior written approval from the APCO. [District Rule 2201]
24. If the engine is fired on any fuel gas other than PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2201]
25. Source testing to measure natural gas-combustion NO_x, CO, and VOC emissions from this engine shall be conducted not less than once every 12 months. [District Rules 2201 and 4702]
26. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702, 6.3.3]

CONDITIONS CONTINUE ON NEXT PAGE

27. 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]
28. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25A or 25B, or ARB Method 100. Methane and ethane, which are exempt compounds, shall be excluded from the result of the VOC test. EPA approved alternative test methods may also be used to satisfy the source testing requirements of this permit with prior written approval from the APCO. [District Rule 4702, 6.4]
29. 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. VOC emissions shall be reported as methane. NO_x, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702, 6.3.3]
30. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1080]
31. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1080]
32. This engine shall be operated and maintained in proper operating condition according to the manufacturer's specifications and the Rule 4702 Inspection and Monitoring (I&M) plan submitted to the District. [District Rule 4702, 6.5]
33. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702, 6.5.9]
34. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂, using a portable emission monitor that meets District specifications, at least once every calendar quarter (in which a source test is not performed and the engine is operated) or, if the engine is operated less than 120 calendar days in a calendar year, at least once during that calendar year (in which a source test is not performed and the engine is operated). Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last calendar quarter. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702]
35. If either the NO_x or CO concentrations corrected to 15% O₂, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702]
36. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702]

CONDITIONS CONTINUE ON NEXT PAGE

37. The permittee shall maintain records of: (1) the date and time of NO_x CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 15% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702, 6.2.1]
38. The results of the measurements taken with the District approved analyzer shall be retained on-site at all times. [District Rule 1070]
39. This operation shall comply with the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409]
40. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type, quantity (cubic feet of gas) and sulfur content of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 2201 and 4702, 6.2.1]
41. 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. For units at unstaffed sites or operated remotely, records may be maintained and retained at a District-approved off-site location. [District Rules 1070, 2201 and 4702, 6.2.1 and 6.2.2]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-2234-212-3

ISSUANCE DATE: 06/13/2012

LEGAL OWNER OR OPERATOR: OCCIDENTAL OF ELK HILLS INC
MAILING ADDRESS: ATTN: DENNIS CHAMPION
PO BOX 1001
TUPMAN, CA 93276

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

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

EQUIPMENT DESCRIPTION:

MODIFICATION OF 1,680 BHP WAUKESHA MODEL L7044GSI NATURAL GAS-FIRED IC ENGINE WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A GAS COMPRESSOR (R-5) OPERATING AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234: DESIGNATE AS A COMPLIANT DORMANT EMISSIONS UNIT

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]
2. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080]
3. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
4. While dormant, normal source testing shall not be required. [District Rule 2080]
5. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080]
6. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080]
7. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]

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

8. Operator shall notify the District by letter or fax at least 48-hours in advance of the re-location of this unit. [District Rule 2201]
9. Operator shall maintain records of compressor skid location and dates spent at each location and make such records available for District inspection upon request. [District Rule 2201]
10. This unit shall not operate within 1,000 feet of a kindergarten through 12 grade school. [CH&SC 42301.6]
11. IC engine shall be equipped with air/fuel ratio controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District Rule 2201]
12. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201]
13. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702]
14. The permittee shall install and operate a nonresettable fuel flow meter. The fuel meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 2201]
15. This IC engine shall only be fired on Public Utility Commission (PUC) quality natural gas. [District Rules 2201 and 4801]
16. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
17. Emissions from this IC engine shall not exceed any of the following limits: NO_x (as NO₂) - 5 ppmv @ 15% O₂, VOC - 25 ppmv @ 15% O₂, CO - 56 ppmv @ 15% O₂, PM₁₀ - 0.02 g/hp-hr, or SO_x (as SO₂) - 0.012 g/hp-hr. [District Rules 2201 and 4702, 5.1]
18. VOC fugitive emissions from the components in gas service associated with the compressor shall not exceed 0.7 lb/day. [District Rule 2201]
19. Permittee shall maintain accurate component count for compressor according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c (Feb 1999), Screening Value Range emission factors < 10,000 ppmv. Permittee shall update such records when new components are approved and installed. [District Rule 2201]
20. The fuel consumption for this engine shall not exceed 114.2 MMscf per calendar year. Compliance with this limit may be shown by a record of the annual fuel usage. [District Rule 2201]
21. The engine shall only burn natural gas with fuel gas sulfur concentration (as H₂S) not exceeding 1.0 grains/100 dscf. [District Rule 2201]
22. If the IC engine is fired on PUC-regulated natural gas, the permittee shall retain on file, copies of all natural gas bills. [District Rule 2201]
23. If the engine is fired on any fuel gas other than PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM methods D1072, D3246, D4084, Double GC for H₂S and mercaptans, or alternative test method with prior written approval from the APCO. [District Rule 2201]
24. If the engine is fired on any fuel gas other than PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2201]
25. Source testing to measure natural gas-combustion NO_x, CO, and VOC emissions from this engine shall be conducted not less than once every 12 months. [District Rules 2201 and 4702]
26. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702, 6.3.3]
27. 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]

CONDITIONS CONTINUE ON NEXT PAGE

28. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25A or 25B, or ARB Method 100. Methane and ethane, which are exempt compounds, shall be excluded from the result of the VOC test. EPA approved alternative test methods may also be used to satisfy the source testing requirements of this permit with prior written approval from the APCO. [District Rule 4702, 6.4]
29. 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. VOC emissions shall be reported as methane. NO_x, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702, 6.3.3]
30. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1080]
31. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1080]
32. This engine shall be operated and maintained in proper operating condition according to the manufacturer's specifications and the Rule 4702 Inspection and Monitoring (I&M) plan submitted to the District. [District Rule 4702, 6.5]
33. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702, 6.5.9]
34. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂, using a portable emission monitor that meets District specifications, at least once every calendar quarter (in which a source test is not performed and the engine is operated) or, if the engine is operated less than 120 calendar days in a calendar year, at least once during that calendar year (in which a source test is not performed and the engine is operated). Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last calendar quarter. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702]
35. If either the NO_x or CO concentrations corrected to 15% O₂, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702]
36. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702]
37. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 15% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702, 6.2.1]
38. The results of the measurements taken with the District approved analyzer shall be retained on-site at all times. [District Rule 1070]

CONDITIONS CONTINUE ON NEXT PAGE

39. This operation shall comply with the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409]
40. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type, quantity (cubic feet of gas) and sulfur content of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 2201 and 4702, 6.2.1]
41. 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. For units at unstaffed sites or operated remotely, records may be maintained and retained at a District-approved off-site location. [District Rules 1070, 2201 and 4702, 6.2.1 and 6.2.2]
42. The permittee shall record the O2 sensor reading (in millivolts) on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR 64]
43. The operator shall establish an O2 sensor output voltage range that indicates that the control device(s) on this engine are operating properly at all times. [40 CFR 64]
44. The operator shall submit a Title V minor modification application by December 29, 2012 to incorporate the O2 sensor output voltage range established for this engine. [District Rule 2520, 9.3.2 and 40 CFR 64]
45. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR 64]
46. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64]
47. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64]



AUTHORITY TO CONSTRUCT

PERMIT NO: S-2234-214-3

ISSUANCE DATE: 06/13/2012

LEGAL OWNER OR OPERATOR: OCCIDENTAL OF ELK HILLS INC
MAILING ADDRESS: ATTN: DENNIS CHAMPION
PO BOX 1001
TUPMAN, CA 93276

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

SECTION: 29 **TOWNSHIP:** 30S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 1,680 BHP WAUKESHA MODEL L7044GSI NATURAL GAS-FIRED IC ENGINE WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A GAS COMPRESSOR (R-7) OPERATING AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234: DESIGNATE AS A COMPLIANT DORMANT EMISSIONS UNIT

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]
2. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080]
3. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
4. While dormant, normal source testing shall not be required. [District Rule 2080]
5. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080]
6. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080]
7. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]

CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin, Executive Director / APCO

8. Operator shall notify the District by letter or fax at least 48-hours in advance of the re-location of this unit. [District Rule 2201]
9. Operator shall maintain records of compressor skid location and dates spent at each location and make such records available for District inspection upon request. [District Rule 2201]
10. This unit shall not operate within 1,000 feet of a kindergarten through 12 grade school. [CH&SC 42301.6]
11. IC engine shall be equipped with air/fuel ratio controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District Rule 2201]
12. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201]
13. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702]
14. The permittee shall install and operate a nonresettable fuel flow meter. The fuel meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 2201]
15. This IC engine shall only be fired on Public Utility Commission (PUC) quality natural gas. [District Rules 2201 and 4801]
16. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
17. Emissions from this IC engine shall not exceed any of the following limits: NO_x (as NO₂) - 5 ppmv @ 15% O₂, VOC - 25 ppmv @ 15% O₂, CO - 56 ppmv @ 15% O₂, PM₁₀ - 0.02 g/hp-hr, or SO_x (as SO₂) - 0.012 g/hp-hr. [District Rules 2201 and 4702, 5.1]
18. VOC fugitive emissions from the components in gas service associated with the compressor shall not exceed 0.7 lb/day. [District Rule 2201]
19. Permittee shall maintain accurate component count for compressor according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c (Feb 1999), Screening Value Range emission factors < 10,000 ppmv. Permittee shall update such records when new components are approved and installed. [District Rule 2201]
20. The fuel consumption for this engine shall not exceed 114.2 MMscf per calendar year. Compliance with this limit may be shown by a record of the annual fuel usage. [District Rule 2201]
21. The engine shall only burn natural gas with fuel gas sulfur concentration (as H₂S) not exceeding 1.0 grains/100 dscf. [District Rule 2201]
22. If the IC engine is fired on PUC-regulated natural gas, the permittee shall retain on file, copies of all natural gas bills. [District Rule 2201]
23. If the engine is fired on any fuel gas other than PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM methods D1072, D3246, D4084, Double GC for H₂S and mercaptans, or alternative test method with prior written approval from the APCO. [District Rule 2201]
24. If the engine is fired on any fuel gas other than PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2201]
25. Source testing to measure natural gas-combustion NO_x, CO, and VOC emissions from this engine shall be conducted not less than once every 12 months. [District Rules 2201 and 4702]
26. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702, 6.3.3]
27. 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]

CONDITIONS CONTINUE ON NEXT PAGE

28. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25A or 25B, or ARB Method 100. Methane and ethane, which are exempt compounds, shall be excluded from the result of the VOC test. EPA approved alternative test methods may also be used to satisfy the source testing requirements of this permit with prior written approval from the APCO. [District Rule 4702, 6.4]
29. 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. VOC emissions shall be reported as methane. NO_x, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702, 6.3.3]
30. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1080]
31. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1080]
32. This engine shall be operated and maintained in proper operating condition according to the manufacturer's specifications and the Rule 4702 Inspection and Monitoring (I&M) plan submitted to the District. [District Rule 4702, 6.5]
33. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702, 6.5.9]
34. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂, using a portable emission monitor that meets District specifications, at least once every calendar quarter (in which a source test is not performed and the engine is operated) or, if the engine is operated less than 120 calendar days in a calendar year, at least once during that calendar year (in which a source test is not performed and the engine is operated). Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last calendar quarter. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702]
35. If either the NO_x or CO concentrations corrected to 15% O₂, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702]
36. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702]
37. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 15% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702, 6.2.1]
38. The results of the measurements taken with the District approved analyzer shall be retained on-site at all times. [District Rule 1070]

CONDITIONS CONTINUE ON NEXT PAGE

39. This operation shall comply with the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409]
40. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type, quantity (cubic feet of gas) and sulfur content of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 2201 and 4702, 6.2.1]
41. 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. For units at unstaffed sites or operated remotely, records may be maintained and retained at a District-approved off-site location. [District Rules 1070, 2201 and 4702, 6.2.1 and 6.2.2]
42. The permittee shall record the O2 sensor reading (in millivolts) on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR 64]
43. The operator shall establish an O2 sensor output voltage range that indicates that the control device(s) on this engine are operating properly at all times. [40 CFR 64]
44. The operator shall submit a Title V minor modification application by December 29, 2012 to incorporate the O2 sensor output voltage range established for this engine. [District Rule 2520, 9.3.2 and 40 CFR 64]
45. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR 64]
46. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64]
47. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64]

ATTACHMENT C

Emissions Increases

There are no emissions increases related to this project.

ATTACHMENT D

Application

San Joaquin Valley Air Pollution Control District

www.valleyair.org

RECEIVED

MAY 02 2012

Permit Application For:

[] ADMINISTRATIVE AMENDMENT [X] MINOR MODIFICATION [] SIGNIFICANT MODIFICATION

SJVAPCD
Southern Region

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> 9-DIGIT 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 the below ATCs into S-2234 Title V permit: S-2234-207-3 S-2234-211-3 S-2234-208-3 S-2234-212-3 S-2234-209-3 S-2234-214-3 S-2234-210-3	
6. TYPE OR PRINT NAME OF APPLICANT: Raymond Rodriguez	TITLE OF APPLICANT: Sr. Environmental Advisor
7. SIGNATURE OF APPLICANT: 	DATE: <u>4/30/2012</u> PHONE: (661) 412-5263 FAX: (661) 412-5270 EMAIL: Raymond_rodriguez@oxy.com

For APCD Use Only:

no \$

DATE STAMP	FILING FEE RECEIVED: \$ _____ CHECK#: _____
	DATE PAID: _____
	PROJECT NO: <u>5-1121413</u> FACILITY ID: <u>S-2234</u>

Title V - Minor Mod

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

RECEIVED
MAY 02 2012
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:

Armando M. Gonzalez
Signature of Responsible Official

5/2/2012
Date

Armando Gonzalez

Name of Responsible Official (please print)

HES Manager

Title of Responsible Official (please print)

ATTACHMENT E

Previous Title V Operating Permits

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-2234-207-2

EXPIRATION DATE: 10/31/2016

SECTION: 26 **TOWNSHIP:** 30S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

1,680 BHP WAUKESHA MODEL L7044GSI NATURAL GAS-FIRED IC ENGINE WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A GAS COMPRESSOR (R-1) OPERATING AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234

PERMIT UNIT REQUIREMENTS

1. By July 1, 2012, the operator shall submit to the APCO an APCO-approvable emission control plan of all actions to be taken to satisfy the emission requirements of Section 5.2 of District Rule 4702. If there is no change to the previously-approved emission control plan, the operator shall submit a letter to the District indicating that the previously approved plan is still valid. [District Rule 4702, 6.1 and 7.5] Federally Enforceable Through Title V Permit
2. Operator shall notify the District by letter or fax at least 48-hours in advance of the re-location of this unit. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Operator shall maintain records of compressor skid location and dates spent at each location and make such records available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit shall not operate within 1,000 feet of a kindergarten through 12 grade school. [CH&SC 42301.6]
5. IC engine shall be equipped with air/fuel ratio controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
7. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
8. The permittee shall install and operate a nonresettable fuel flow meter. The fuel meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 2201] Federally Enforceable Through Title V Permit
9. This IC engine shall only be fired on Public Utility Commission (PUC) quality natural gas. [District Rules 2201 and 4801] Federally Enforceable Through Title V Permit
10. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
11. Emissions from this IC engine shall not exceed any of the following limits: NOx (as NO2) - 5 ppmv @ 15% O2, VOC - 25 ppmv @ 15% O2, CO - 56 ppmv @ 15% O2, PM10 - 0.02 g/hp-hr, or SOx (as SO2) - 0.012 g/hp-hr. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
12. VOC fugitive emissions from the components in gas service associated with the compressor shall not exceed 0.7 lb/day. [District Rule 2201] 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.

13. Permittee shall maintain accurate component count for compressor according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c (Feb 1999), Screening Value Range emission factors < 10,000 ppmv. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The fuel consumption for this engine shall not exceed 241,600 scf/day. Compliance with this limit may be shown by dividing the quantity of fuel used during a calendar month over the number of days operated during that month. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The engine shall only burn natural gas with fuel gas sulfur concentration (as H₂S) not exceeding 1.0 grains/100 dscf. [District Rule 2201] Federally Enforceable Through Title V Permit
16. If the IC engine is fired on PUC-regulated natural gas, the permittee shall retain on file, copies of all natural gas bills. [District Rule 2201] Federally Enforceable Through Title V Permit
17. If the engine is fired on any fuel gas other than PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM methods D1072, D3246, D4084, Double GC for H₂S and mercaptans, or alternative test method with prior written approval from the APCO. [District Rule 2201] Federally Enforceable Through Title V Permit
18. If the engine is fired on any fuel gas other than PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Source testing to measure natural gas-combustion NO_x, CO, and VOC emissions from this engine shall be conducted not less than once every 12 months. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
20. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit
21. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 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
22. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25A or 25B, or ARB Method 100. Methane and ethane, which are exempt compounds, shall be excluded from the result of the VOC test. EPA approved alternative test methods may also be used to satisfy the source testing requirements of this permit with prior written approval from the APCO. [District Rule 4702, 6.4] 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. VOC emissions shall be reported as methane. NO_x, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit
24. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1080] Federally Enforceable Through Title V Permit
25. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1080] Federally Enforceable Through Title V Permit
26. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified on the Inspection and Monitoring (I&M) plan submitted to the District. [District Rule 4702] 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.

27. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
28. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂, using a portable emission monitor that meets District specifications, at least once every calendar quarter (in which a source test is not performed and the engine is operated) or, if the engine is operated less than 120 calendar days in a calendar year, at least once during that calendar year (in which a source test is not performed and the engine is operated). Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last calendar quarter. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702] Federally Enforceable Through Title V Permit
29. If either the NO_x or CO concentrations corrected to 15% O₂, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit
30. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit
31. The permittee shall maintain records of: (1) the date and time of NO_x CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 15% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit
32. The results of the measurements taken with the District approved analyzer shall be retained on-site at all times. [District Rule 1070] Federally Enforceable Through Title V Permit
33. This operation shall comply with the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit
34. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type, quantity (cubic feet of gas) and sulfur content of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
35. 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. For units at unstaffed sites or operated remotely, records may be maintained and retained at a District-approved off-site location. [District Rules 1070, 2201 and 4702, 6.2.1 and 6.2.2] Federally Enforceable Through Title V Permit

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-2234-208-2

EXPIRATION DATE: 10/31/2016

SECTION: 36 **TOWNSHIP:** 30S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

1,680 BHP WAUKESHA MODEL L7044GSI NATURAL GAS-FIRED IC ENGINE WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A GAS COMPRESSOR (R-2) OPERATING AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234

PERMIT UNIT REQUIREMENTS

1. By July 1, 2012, the operator shall submit to the APCO an APCO-approvable emission control plan of all actions to be taken to satisfy the emission requirements of Section 5.2 of District Rule 4702. If there is no change to the previously-approved emission control plan, the operator shall submit a letter to the District indicating that the previously approved plan is still valid. [District Rule 4702, 6.1 and 7.5] Federally Enforceable Through Title V Permit
2. Operator shall notify the District by letter or fax at least 48-hours in advance of the re-location of this unit. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Operator shall maintain records of compressor skid location and dates spent at each location and make such records available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit shall not operate within 1,000 feet of a kindergarten through 12 grade school. [CH&SC 42301.6]
5. IC engine shall be equipped with air/fuel ratio controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
7. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
8. The permittee shall install and operate a nonresettable fuel flow meter. The fuel meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 2201] Federally Enforceable Through Title V Permit
9. This IC engine shall only be fired on Public Utility Commission (PUC) quality natural gas. [District Rules 2201 and 4801] Federally Enforceable Through Title V Permit
10. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
11. Emissions from this IC engine shall not exceed any of the following limits: NO_x (as NO₂) - 5 ppmv @ 15% O₂, VOC - 25 ppmv @ 15% O₂, CO - 56 ppmv @ 15% O₂, PM₁₀ - 0.02 g/hp-hr, or SO_x (as SO₂) - 0.012 g/hp-hr. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
12. VOC fugitive emissions from the components in gas service associated with the compressor shall not exceed 0.7 lb/day. [District Rule 2201] 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.

13. Permittee shall maintain accurate component count for compressor according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c (Feb 1999), Screening Value Range emission factors < 10,000 ppmv. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The fuel consumption for this engine shall not exceed 241,600 scf/day. Compliance with this limit may be shown by dividing the quantity of fuel used during a calendar month over the number of days operated during that month. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The engine shall only burn natural gas with fuel gas sulfur concentration (as H₂S) not exceeding 1.0 grains/100 dscf. [District Rule 2201] Federally Enforceable Through Title V Permit
16. If the IC engine is fired on PUC-regulated natural gas, the permittee shall retain on file, copies of all natural gas bills. [District Rule 2201] Federally Enforceable Through Title V Permit
17. If the engine is fired on any fuel gas other than PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM methods D1072, D3246, D4084, Double GC for H₂S and mercaptans, or alternative test method with prior written approval from the APCO. [District Rule 2201] Federally Enforceable Through Title V Permit
18. If the engine is fired on any fuel gas other than PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Source testing to measure natural gas-combustion NO_x, CO, and VOC emissions from this engine shall be conducted not less than once every 12 months. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
20. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit
21. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 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
22. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25A or 25B, or ARB Method 100. Methane and ethane, which are exempt compounds, shall be excluded from the result of the VOC test. EPA approved alternative test methods may also be used to satisfy the source testing requirements of this permit with prior written approval from the APCO. [District Rule 4702, 6.4] 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. VOC emissions shall be reported as methane. NO_x, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit
24. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1080] Federally Enforceable Through Title V Permit
25. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1080] Federally Enforceable Through Title V Permit
26. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified on the Inspection and Monitoring (I&M) plan submitted to the District.. [District Rule 4702] 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.

27. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702, 6.5.9] Federally Enforceable Through Title V Permit
28. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂, using a portable emission monitor that meets District specifications, at least once every calendar quarter (in which a source test is not performed and the engine is operated) or, if the engine is operated less than 120 calendar days in a calendar year, at least once during that calendar year (in which a source test is not performed and the engine is operated). Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last calendar quarter. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702] Federally Enforceable Through Title V Permit
29. If either the NO_x or CO concentrations corrected to 15% O₂, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit
30. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702] Federally Enforceable Through Title V Permit
31. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 15% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit
32. The results of the measurements taken with the District approved analyzer shall be retained on-site at all times. [District Rule 1070]
33. This operation shall comply with the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit
34. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type, quantity (cubic feet of gas) and sulfur content of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 2201 and 4702, 6.2.1] Federally Enforceable Through Title V Permit
35. 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. For units at unstaffed sites or operated remotely, records may be maintained and retained at a District-approved off-site location. [District Rules 1070, 2201 and 4702, 6.2.1 and 6.2.2] Federally Enforceable Through Title V Permit

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-2234-209-2

EXPIRATION DATE: 10/31/2016

SECTION: 27 **TOWNSHIP:** 30S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

1,680 BHP WAUKESHA MODEL L7044GSI NATURAL GAS-FIRED IC ENGINE WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A GAS COMPRESSOR (R-3) OPERATING AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234

PERMIT UNIT REQUIREMENTS

1. By July 1, 2012, the operator shall submit to the APCO an APCO-approvable emission control plan of all actions to be taken to satisfy the emission requirements of Section 5.2 of District Rule 4702. If there is no change to the previously-approved emission control plan, the operator shall submit a letter to the District indicating that the previously approved plan is still valid. [District Rule 4702, 6.1 and 7.5] Federally Enforceable Through Title V Permit
2. Operator shall notify the District by letter or fax at least 48-hours in advance of the re-location of this unit. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Operator shall maintain records of compressor skid location and dates spent at each location and make such records available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit shall not operate within 1,000 feet of a kindergarten through 12 grade school. [CH&SC 42301.6]
5. IC engine shall be equipped with air/fuel ratio controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
7. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
8. The permittee shall install and operate a nonresettable fuel flow meter. The fuel meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 2201] Federally Enforceable Through Title V Permit
9. This IC engine shall only be fired on Public Utility Commission (PUC) quality natural gas. [District Rules 2201 and 4801] Federally Enforceable Through Title V Permit
10. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
11. Emissions from this IC engine shall not exceed any of the following limits: NO_x (as NO₂) - 5 ppmv @ 15% O₂, VOC - 25 ppmv @ 15% O₂, CO - 56 ppmv @ 15% O₂, PM₁₀ - 0.02 g/hp-hr, or SO_x (as SO₂) - 0.012 g/hp-hr. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
12. VOC fugitive emissions from the components in gas service associated with the compressor shall not exceed 0.7 lb/day. [District Rule 2201] 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.

13. Permittee shall maintain accurate component count for compressor according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c (Feb 1999), Screening Value Range emission factors < 10,000 ppmv. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The fuel consumption for this engine shall not exceed 241,600 scf/day. Compliance with this limit may be shown by dividing the quantity of fuel used during a calendar month over the number of days operated during that month. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The engine shall only burn natural gas with fuel gas sulfur concentration (as H₂S) not exceeding 1.0 grains/100 dscf. [District Rule 2201] Federally Enforceable Through Title V Permit
16. If the IC engine is fired on PUC-regulated natural gas, the permittee shall retain on file, copies of all natural gas bills. [District Rule 2201] Federally Enforceable Through Title V Permit
17. If the engine is fired on any fuel gas other than PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM methods D1072, D3246, D4084, Double GC for H₂S and mercaptans, or alternative test method with prior written approval from the APCO. [District Rule 2201] Federally Enforceable Through Title V Permit
18. If the engine is fired on any fuel gas other than PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Source testing to measure natural gas-combustion NO_x, CO, and VOC emissions from this engine shall be conducted not less than once every 12 months. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
20. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit
21. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 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
22. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25A or 25B, or ARB Method 100. Methane and ethane, which are exempt compounds, shall be excluded from the result of the VOC test. EPA approved alternative test methods may also be used to satisfy the source testing requirements of this permit with prior written approval from the APCO. [District Rule 4702, 6.4] 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. VOC emissions shall be reported as methane. NO_x, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit
24. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1080] Federally Enforceable Through Title V Permit
25. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1080] Federally Enforceable Through Title V Permit
26. This engine shall be operated and maintained in proper operating condition according to the manufacturer's specifications and the Rule 4702 Inspection and Monitoring (I&M) plan submitted to the District. [District Rule 4702, 6.5] 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.

27. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702, 6.5.9] Federally Enforceable Through Title V Permit
28. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂, using a portable emission monitor that meets District specifications, at least once every calendar quarter (in which a source test is not performed and the engine is operated) or, if the engine is operated less than 120 calendar days in a calendar year, at least once during that calendar year (in which a source test is not performed and the engine is operated). Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last calendar quarter. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702] Federally Enforceable Through Title V Permit
29. If either the NO_x or CO concentrations corrected to 15% O₂, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit
30. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit
31. The permittee shall maintain records of: (1) the date and time of NO_x CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 15% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit
32. The results of the measurements taken with the District approved analyzer shall be retained on-site at all times. [District Rule 1070]
33. This operation shall comply with the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit
34. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type, quantity (cubic feet of gas) and sulfur content of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 2201 and 4702, 6.2.1] Federally Enforceable Through Title V Permit
35. 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. For units at unstaffed sites or operated remotely, records may be maintained and retained at a District-approved off-site location. [District Rules 1070, 2201 and 4702, 6.2.1 and 6.2.2] Federally Enforceable Through Title V Permit

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-2234-210-5

EXPIRATION DATE: 10/31/2016

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

EQUIPMENT DESCRIPTION:

1,680 BHP WAUKESHA MODEL L7044GSI NATURAL GAS-FIRED IC ENGINE WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A GAS COMPRESSOR (R-46) OPERATING AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234

PERMIT UNIT REQUIREMENTS

1. Operator shall notify the District by letter or fax at least 48-hours in advance of the re-location of this unit. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Operator shall maintain records of compressor skid location and dates spent at each location and make such records available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This unit shall not operate within 1,000 feet of a kindergarten through 12 grade school. [CH&SC 42301.6]
4. IC engine shall be equipped with air/fuel ratio controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
7. The permittee shall install and operate a nonresettable fuel flow meter. The fuel meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 2201] Federally Enforceable Through Title V Permit
8. This IC engine shall only be fired on Public Utility Commission (PUC) quality natural gas. [District Rules 2201 and 4801] Federally Enforceable Through Title V Permit
9. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
10. Emissions from this IC engine shall not exceed any of the following limits: NO_x (as NO₂) - 5 ppmv @ 15% O₂, VOC - 25 ppmv @ 15% O₂, CO - 56 ppmv @ 15% O₂, PM₁₀ - 0.02 g/hp-hr, or SO_x (as SO₂) - 0.012 g/hp-hr. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
11. VOC fugitive emissions from the components in gas service associated with the compressor shall not exceed 0.7 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Permittee shall maintain accurate component count for compressor according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c (Feb 1999), Screening Value Range emission factors < 10,000 ppmv. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The fuel consumption for this engine shall not exceed 114.2 MMscf per calendar year. Compliance with this limit may be shown by a record of the annual fuel usage. [District Rule 2201] 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.

14. The engine shall only burn natural gas with fuel gas sulfur concentration (as H₂S) not exceeding 1.0 grains/100 dscf. [District Rule 2201] Federally Enforceable Through Title V Permit
15. If the IC engine is fired on PUC-regulated natural gas, the permittee shall retain on file, copies of all natural gas bills. [District Rule 2201] Federally Enforceable Through Title V Permit
16. If the engine is fired on any fuel gas other than PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM methods D1072, D3246, D4084, Double GC for H₂S and mercaptans, or alternative test method with prior written approval from the APCO. [District Rule 2201] Federally Enforceable Through Title V Permit
17. If the engine is fired on any fuel gas other than PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Source testing to measure natural gas-combustion NO_x, CO, and VOC emissions from this engine shall be conducted not less than once every 12 months. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
19. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit
20. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 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
21. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25A or 25B, or ARB Method 100. Methane and ethane, which are exempt compounds, shall be excluded from the result of the VOC test. EPA approved alternative test methods may also be used to satisfy the source testing requirements of this permit with prior written approval from the APCO. [District Rule 4702, 6.4] Federally Enforceable Through Title V Permit
22. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC emissions shall be reported as methane. NO_x, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit
23. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1080] Federally Enforceable Through Title V Permit
24. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1080] Federally Enforceable Through Title V Permit
25. This engine shall be operated and maintained in proper operating condition according to the manufacturer's specifications and the Rule 4702 Inspection and Monitoring (I&M) plan submitted to the District. [District Rule 4702, 6.5] Federally Enforceable Through Title V Permit
26. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702, 6.5.9] 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.

27. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂, using a portable emission monitor that meets District specifications, at least once every calendar quarter (in which a source test is not performed and the engine is operated) or, if the engine is operated less than 120 calendar days in a calendar year, at least once during that calendar year (in which a source test is not performed and the engine is operated). Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last calendar quarter. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702] Federally Enforceable Through Title V Permit
28. If either the NO_x or CO concentrations corrected to 15% O₂, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit
29. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702] Federally Enforceable Through Title V Permit
30. The permittee shall maintain records of: (1) the date and time of NO_x CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 15% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit
31. The results of the measurements taken with the District approved analyzer shall be retained on-site at all times. [District Rule 1070]
32. This operation shall comply with the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit
33. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type, quantity (cubic feet of gas) and sulfur content of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 2201 and 4702, 6.2.1] Federally Enforceable Through Title V Permit
34. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. For units at unstaffed sites or operated remotely, records may be maintained and retained at a District-approved off-site location. [District Rules 1070, 2201 and 4702, 6.2.1 and 6.2.2] Federally Enforceable Through Title V Permit
35. The permittee shall record the O₂ sensor reading (in millivolts) on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit
36. The operator shall establish an O₂ sensor output voltage range that indicates that the control device(s) on this engine are operating properly at all times. [40 CFR 64] Federally Enforceable Through Title V Permit
37. Permittee shall ensure proper operation of catalyst system by maintaining O₂ sensor voltage between 0.5 millivolts and 1.1 millivolts. [District Rule 2520, 9.3.2 and 40 CFR 64] 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.

38. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit
39. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit
40. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-2234-211-2

EXPIRATION DATE: 10/31/2016

SECTION: 28 **TOWNSHIP:** 30S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

1,680 BHP WAUKESHA MODEL L7044GSI NATURAL GAS-FIRED IC ENGINE WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A GAS COMPRESSOR (R-6) OPERATING AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234

PERMIT UNIT REQUIREMENTS

1. By July 1, 2012, the operator shall submit to the APCO an APCO-approvable emission control plan of all actions to be taken to satisfy the emission requirements of Section 5.2 of District Rule 4702. If there is no change to the previously-approved emission control plan, the operator shall submit a letter to the District indicating that the previously approved plan is still valid. [District Rule 4702, 6.1 and 7.5] Federally Enforceable Through Title V Permit
2. Operator shall notify the District by letter or fax at least 48-hours in advance of the re-location of this unit. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Operator shall maintain records of compressor skid location and dates spent at each location and make such records available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This unit shall not operate within 1,000 feet of a kindergarten through 12 grade school. [CH&SC 42301.6]
5. IC engine shall be equipped with air/fuel ratio controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
7. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
8. The permittee shall install and operate a nonresettable fuel flow meter. The fuel meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 2201] Federally Enforceable Through Title V Permit
9. This IC engine shall only be fired on Public Utility Commission (PUC) quality natural gas. [District Rules 2201 and 4801] Federally Enforceable Through Title V Permit
10. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
11. Emissions from this IC engine shall not exceed any of the following limits: NOx (as NO2) - 5 ppmv @ 15% O2, VOC - 25 ppmv @ 15% O2, CO - 56 ppmv @ 15% O2, PM10 - 0.02 g/hp-hr, or SOx (as SO2) - 0.012 g/hp-hr. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
12. VOC fugitive emissions from the components in gas service associated with the compressor shall not exceed 0.7 lb/day. [District Rule 2201] 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.

13. Permittee shall maintain accurate component count for compressor according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c (Feb 1999), Screening Value Range emission factors < 10,000 ppmv. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The fuel consumption for this engine shall not exceed 241,600 scf/day. Compliance with this limit may be shown by dividing the quantity of fuel used during a calendar month over the number of days operated during that month. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The engine shall only burn natural gas with fuel gas sulfur concentration (as H₂S) not exceeding 1.0 grains/100 dscf. [District Rule 2201] Federally Enforceable Through Title V Permit
16. If the IC engine is fired on PUC-regulated natural gas, the permittee shall retain on file, copies of all natural gas bills. [District Rule 2201] Federally Enforceable Through Title V Permit
17. If the engine is fired on any fuel gas other than PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM methods D1072, D3246, D4084, Double GC for H₂S and mercaptans, or alternative test method with prior written approval from the APCO. [District Rule 2201] Federally Enforceable Through Title V Permit
18. If the engine is fired on any fuel gas other than PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Source testing to measure natural gas-combustion NO_x, CO, and VOC emissions from this engine shall be conducted not less than once every 12 months. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
20. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit
21. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 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
22. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25A or 25B, or ARB Method 100. Methane and ethane, which are exempt compounds, shall be excluded from the result of the VOC test. EPA approved alternative test methods may also be used to satisfy the source testing requirements of this permit with prior written approval from the APCO. [District Rule 4702, 6.4] 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. VOC emissions shall be reported as methane. NO_x, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit
24. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1080] Federally Enforceable Through Title V Permit
25. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1080] Federally Enforceable Through Title V Permit
26. This engine shall be operated and maintained in proper operating condition according to the manufacturer's specifications and the Rule 4702 Inspection and Monitoring (I&M) plan submitted to the District. [District Rule 4702, 6.5] 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.

27. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702, 6.5.9] Federally Enforceable Through Title V Permit
28. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂, using a portable emission monitor that meets District specifications, at least once every calendar quarter (in which a source test is not performed and the engine is operated) or, if the engine is operated less than 120 calendar days in a calendar year, at least once during that calendar year (in which a source test is not performed and the engine is operated). Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last calendar quarter. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702] Federally Enforceable Through Title V Permit
29. If either the NO_x or CO concentrations corrected to 15% O₂, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit
30. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702] Federally Enforceable Through Title V Permit
31. The permittee shall maintain records of: (1) the date and time of NO_x CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 15% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit
32. The results of the measurements taken with the District approved analyzer shall be retained on-site at all times. [District Rule 1070]
33. This operation shall comply with the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit
34. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type, quantity (cubic feet of gas) and sulfur content of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 2201 and 4702, 6.2.1] Federally Enforceable Through Title V Permit
35. 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. For units at unstaffed sites or operated remotely, records may be maintained and retained at a District-approved off-site location. [District Rules 1070, 2201 and 4702, 6.2.1 and 6.2.2] Federally Enforceable Through Title V Permit

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-2234-212-5

EXPIRATION DATE: 10/31/2016

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

EQUIPMENT DESCRIPTION:

1,680 BHP WAUKESHA MODEL L7044GSI NATURAL GAS-FIRED IC ENGINE WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A GAS COMPRESSOR (R-47) OPERATING AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234

PERMIT UNIT REQUIREMENTS

1. Operator shall notify the District by letter or fax at least 48-hours in advance of the re-location of this unit. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Operator shall maintain records of compressor skid location and dates spent at each location and make such records available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This unit shall not operate within 1,000 feet of a kindergarten through 12 grade school. [CH&SC 42301.6]
4. IC engine shall be equipped with air/fuel ratio controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
7. The permittee shall install and operate a nonresettable fuel flow meter. The fuel meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 2201] Federally Enforceable Through Title V Permit
8. This IC engine shall only be fired on Public Utility Commission (PUC) quality natural gas. [District Rules 2201 and 4801] Federally Enforceable Through Title V Permit
9. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
10. Emissions from this IC engine shall not exceed any of the following limits: NOx (as NO2) - 5 ppmv @ 15% O2, VOC - 25 ppmv @ 15% O2, CO - 56 ppmv @ 15% O2, PM10 - 0.02 g/hp-hr, or SOx (as SO2) - 0.012 g/hp-hr. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
11. VOC fugitive emissions from the components in gas service associated with the compressor shall not exceed 0.7 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Permittee shall maintain accurate component count for compressor according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c (Feb 1999), Screening Value Range emission factors < 10,000 ppmv. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The fuel consumption for this engine shall not exceed 114.2 MMscf per calendar year. Compliance with this limit may be shown by a record of the annual fuel usage. [District Rule 2201] 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.

14. The engine shall only burn natural gas with fuel gas sulfur concentration (as H₂S) not exceeding 1.0 grains/100 dscf. [District Rule 2201] Federally Enforceable Through Title V Permit
15. If the IC engine is fired on PUC-regulated natural gas, the permittee shall retain on file, copies of all natural gas bills. [District Rule 2201] Federally Enforceable Through Title V Permit
16. If the engine is fired on any fuel gas other than PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM methods D1072, D3246, D4084, Double GC for H₂S and mercaptans, or alternative test method with prior written approval from the APCO. [District Rule 2201] Federally Enforceable Through Title V Permit
17. If the engine is fired on any fuel gas other than PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Source testing to measure natural gas-combustion NO_x, CO, and VOC emissions from this engine shall be conducted not less than once every 12 months. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
19. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit
20. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 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
21. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25A or 25B, or ARB Method 100. Methane and ethane, which are exempt compounds, shall be excluded from the result of the VOC test. EPA approved alternative test methods may also be used to satisfy the source testing requirements of this permit with prior written approval from the APCO. [District Rule 4702, 6.4] Federally Enforceable Through Title V Permit
22. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC emissions shall be reported as methane. NO_x, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit
23. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1080] Federally Enforceable Through Title V Permit
24. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1080] Federally Enforceable Through Title V Permit
25. This engine shall be operated and maintained in proper operating condition according to the manufacturer's specifications and the Rule 4702 Inspection and Monitoring (I&M) plan submitted to the District. [District Rule 4702, 6.5] Federally Enforceable Through Title V Permit
26. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702, 6.5.9] 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.

27. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂, using a portable emission monitor that meets District specifications, at least once every calendar quarter (in which a source test is not performed and the engine is operated) or, if the engine is operated less than 120 calendar days in a calendar year, at least once during that calendar year (in which a source test is not performed and the engine is operated). Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last calendar quarter. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702] Federally Enforceable Through Title V Permit
28. If either the NO_x or CO concentrations corrected to 15% O₂, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit
29. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702] Federally Enforceable Through Title V Permit
30. The permittee shall maintain records of: (1) the date and time of NO_x CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 15% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit
31. The results of the measurements taken with the District approved analyzer shall be retained on-site at all times. [District Rule 1070]
32. This operation shall comply with the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit
33. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type, quantity (cubic feet of gas) and sulfur content of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 2201 and 4702, 6.2.1] Federally Enforceable Through Title V Permit
34. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. For units at unstaffed sites or operated remotely, records may be maintained and retained at a District-approved off-site location. [District Rules 1070, 2201 and 4702, 6.2.1 and 6.2.2] Federally Enforceable Through Title V Permit
35. The permittee shall record the O₂ sensor reading (in millivolts) on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit
36. The operator shall establish an O₂ sensor output voltage range that indicates that the control device(s) on this engine are operating properly at all times. [40 CFR 64] Federally Enforceable Through Title V Permit
37. Permittee shall ensure proper operation of catalyst system by maintaining O₂ sensor voltage between 0.5 millivolts and 1.1 millivolts. [District Rule 2520, 9.3.2 and 40 CFR 64] 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.

38. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit
39. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit
40. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-2234-214-5

EXPIRATION DATE: 10/31/2016

SECTION: 29 **TOWNSHIP:** 30S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

1,680 BHP WAUKESHA MODEL L7044GSI NATURAL GAS-FIRED IC ENGINE WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A GAS COMPRESSOR (R-42) OPERATING AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234

PERMIT UNIT REQUIREMENTS

1. Operator shall notify the District by letter or fax at least 48-hours in advance of the re-location of this unit. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Operator shall maintain records of compressor skid location and dates spent at each location and make such records available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This unit shall not operate within 1,000 feet of a kindergarten through 12 grade school. [CH&SC 42301.6]
4. IC engine shall be equipped with air/fuel ratio controller which readily indicates air/fuel ratio setting within tolerance limits as recommended by the catalyst system supplier. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
7. The permittee shall install and operate a nonresettable fuel flow meter. The fuel meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 2201] Federally Enforceable Through Title V Permit
8. This IC engine shall only be fired on Public Utility Commission (PUC) quality natural gas. [District Rules 2201 and 4801] Federally Enforceable Through Title V Permit
9. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
10. Emissions from this IC engine shall not exceed any of the following limits: NOx (as NO₂) - 5 ppmv @ 15% O₂, VOC - 25 ppmv @ 15% O₂, CO - 56 ppmv @ 15% O₂, PM₁₀ - 0.02 g/hp-hr, or SOx (as SO₂) - 0.012 g/hp-hr. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
11. VOC fugitive emissions from the components in gas service associated with the compressor shall not exceed 0.7 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Permittee shall maintain accurate component count for compressor according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c (Feb 1999), Screening Value Range emission factors < 10,000 ppmv. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The fuel consumption for this engine shall not exceed 114.2 MMscf per calendar year. Compliance with this limit may be shown by a record of the annual fuel usage. [District Rule 2201] 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.

14. The engine shall only burn natural gas with fuel gas sulfur concentration (as H₂S) not exceeding 1.0 grains/100 dscf. [District Rule 2201] Federally Enforceable Through Title V Permit
15. If the IC engine is fired on PUC-regulated natural gas, the permittee shall retain on file, copies of all natural gas bills. [District Rule 2201] Federally Enforceable Through Title V Permit
16. If the engine is fired on any fuel gas other than PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM methods D1072, D3246, D4084, Double GC for H₂S and mercaptans, or alternative test method with prior written approval from the APCO. [District Rule 2201] Federally Enforceable Through Title V Permit
17. If the engine is fired on any fuel gas other than PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Source testing to measure natural gas-combustion NO_x, CO, and VOC emissions from this engine shall be conducted not less than once every 12 months. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
19. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit
20. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 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
21. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25A or 25B, or ARB Method 100. Methane and ethane, which are exempt compounds, shall be excluded from the result of the VOC test. EPA approved alternative test methods may also be used to satisfy the source testing requirements of this permit with prior written approval from the APCO. [District Rule 4702, 6.4] Federally Enforceable Through Title V Permit
22. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC emissions shall be reported as methane. NO_x, CO and VOC concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit
23. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1080] Federally Enforceable Through Title V Permit
24. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1080] Federally Enforceable Through Title V Permit
25. This engine shall be operated and maintained in proper operating condition according to the manufacturer's specifications and the Rule 4702 Inspection and Monitoring (I&M) plan submitted to the District. [District Rule 4702, 6.5] Federally Enforceable Through Title V Permit
26. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702, 6.5.9] 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.

27. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂, using a portable emission monitor that meets District specifications, at least once every calendar quarter (in which a source test is not performed and the engine is operated) or, if the engine is operated less than 120 calendar days in a calendar year, at least once during that calendar year (in which a source test is not performed and the engine is operated). Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last calendar quarter. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702] Federally Enforceable Through Title V Permit
28. If either the NO_x or CO concentrations corrected to 15% O₂, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit
29. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702] Federally Enforceable Through Title V Permit
30. The permittee shall maintain records of: (1) the date and time of NO_x CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 15% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit
31. The results of the measurements taken with the District approved analyzer shall be retained on-site at all times. [District Rule 1070]
32. This operation shall comply with the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit
33. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type, quantity (cubic feet of gas) and sulfur content of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 2201 and 4702, 6.2.1] Federally Enforceable Through Title V Permit
34. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. For units at unstaffed sites or operated remotely, records may be maintained and retained at a District-approved off-site location. [District Rules 1070, 2201 and 4702, 6.2.1 and 6.2.2] Federally Enforceable Through Title V Permit
35. The permittee shall record the O₂ sensor reading (in millivolts) on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit
36. The operator shall establish an O₂ sensor output voltage range that indicates that the control device(s) on this engine are operating properly at all times. [40 CFR 64] Federally Enforceable Through Title V Permit
37. Permittee shall ensure proper operation of catalyst system by maintaining O₂ sensor voltage between 0.5 millivolts and 1.1 millivolts. [District Rule 2520, 9.3.2 and 40 CFR 64] 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.

38. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit
39. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit
40. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit

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