San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

NOV 0 3 2011

Dennis Champion, P.E.
Occidental of Elk Hills Inc.
10800 Stockdale Highway
Bakersfield, CA 93311

Re: Notice of Preliminary Decision - Title V Permit Renewal
District Facility # S-2234
Project # S-1100349

Dear Mr. Champion, P.E.:

Enclosed for your review and comment is the District's analysis of the application to renew the Federally Mandated Operating Permit for Occidental of Elk Hills Inc. for its natural gas processing plant in Tupman, California.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 30-day comment period which begins on the date of publication of the public notice.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Sincerely,

David Warner
Director of Permit Services

Attachments
C: Jerry Sandhu, Permit Services Engineer

Seyed Sadredin
Executive Director/Air Pollution Control Officer

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4800 Enterprise Way
Modesto, CA 95356-8718
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Central Region (Main Office)
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AIR POLLUTION CONTROL DISTRICT

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NOV 0 3 2011

Gerardo C. Rios, Chief
Permits Office (AIR-3)
U.S. EPA - Region IX
75 Hawthorne St.
San Francisco, CA 94105

Re: Notice of Preliminary Decision – Title V Permit Renewal
District Facility # S-2234
Project # S-1100349

Dear Mr. Rios:

Enclosed for your review and comment is the District's analysis of the application to renew the Federally Mandated Operating Permit for Occidental of Elk Hills Inc. for its natural gas processing plant in Tupman, California.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 45-day comment period which begins on the date of publication of the public notice.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Sincerely,

David Warner
Director of Permit Services

Attachments
C: Jerry Sandhu, Permit Services Engineer

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NOV 0 3 2011

Mike Tollstrup, Chief
Project Assessment Branch
Air Resources Board
P O Box 2815
Sacramento, CA 95812-2815

Re: Notice of Preliminary Decision - Title V Permit Renewal
District Facility # S-2234
Project # S-1100349

Dear Mr. Tollstrup:

Enclosed for your review and comment is the District's analysis of the application to renew the Federally Mandated Operating Permit for Occidental of Elk Hills Inc. for its natural gas processing plant in Tupman, California.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 30-day comment period which begins on the date of publication of the public notice.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Sincerely,

David Warner
Director of Permit Services

Attachments
C: Jerry Sandhu, Permit Services Engineer

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Bakersfield Californian

NOTICE OF PRELIMINARY DECISION
FOR THE PROPOSED RENEWAL OF
THE FEDERALLY MANDATED OPERATING PERMIT

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Air Pollution Control District solicits public comment on the proposed renewal of the Federally Mandated Operating Permit to Occidental of Elk Hills Inc. for its natural gas processing plant in Tupman, California.

The District's analysis of the legal and factual basis for this proposed action, project #S-1100349, is available for public inspection at http://www.valleyair.org/notices/public_notices_idx.htm and the District office at the address below. There are no emission changes associated with this proposed action. This will be the public's only opportunity to comment on the specific conditions of the proposed renewal of the Federally Mandated Operating permit. If requested by the public, the District will hold a public hearing regarding issuance of this renewed permit. For additional information, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900. Written comments on the proposed renewed permit must be submitted within 30 days of the publication date of this notice to DAVID WARNER, DIRECTOR OF PERMIT SERVICES, SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT, 1990 E. GETTYSBURG AVE, FRESNO, CALIFORNIA 93726-0244.

SAN JOAQUIN VALLEY
AIR POLLUTION CONTROL DISTRICT

Final Title V Permit Renewal Evaluation
Occidental of Elk Hills, Inc.
S-2234

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TITLE V PERMIT RENEWAL EVALUATION

Natural Gasoline Processing Facility

Engineer: Jerry Sandhu
Date: October 24, 2011

Facility Number: S-2234
Facility Name: Occidental of Elk Hills, Inc.
Mailing Address: P O Box 1001
Tupman, CA 93276

Contact Name: Dennis J. Champion
Phone: (661) 763-6068

Responsible Official: John Allen
Title: President and General Manager

Project # : S-1100349
Deemed Complete: February 2, 2010

I. PROPOSAL

Occidental of Elk Hills, Inc. (OEHI) was issued a Title V permit on August 31, 1999. As required by District Rule 2520, the applicant is requesting a permit renewal.

The existing Title V permit shall be reviewed and modified to reflect all applicable District and federal rules updated, removed, or added since the issuance of the initial Title V permit.

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

II. FACILITY LOCATION

OEHI is located in Tupman, CA – Section NE-35, T-30S, R-24E.

III. EQUIPMENT LISTING

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

IV. GENERAL PERMIT TEMPLATE USAGE

The applicant is not proposing to use any model general permit templates as a part of this Title V renewal project.

V. SCOPE OF EPA AND PUBLIC REVIEW

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

VI. FEDERALLY ENFORCEABLE REQUIREMENTS

A. Rules Updated

- District Rule 2020, Exemptions
  (amended December 20, 2007 ⇒ amended August 18, 2011)
- District Rule 2201, New and Modified Stationary Source Review Rule
  (amended September 21, 2006 ⇒ amended April 21, 2011)
- District Rule 4306, Boilers, Steam Generators and Process Heaters – Phase 3
  (amended March 17, 2005 ⇒ amended October 16, 2008)
- District Rule 4311, Flares
  (adopted June 20, 2002 ⇒ amended June 18, 2009)
- District Rule 4601, Architectural Coatings
  (amended October 31, 2001 ⇒ amended December 17, 2009)
- District Rule 4624, Organic Liquid Loading
  (amended December 17, 1992 ⇒ amended December 20, 2007)

- District Rule 4702, Internal Combustion Engines – Phase 2 *(amended January 18, 2007 ⇒ amended August 18, 2011)*

- District Rule 4703, Stationary Gas Turbines *(amended April 25, 2002 ⇒ amended September 20, 2007)*

- 40 CFR Part 60, Subpart KKKK, Standards of Performance for Stationary Combustion Turbines (amended March 20, 2009)

- 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners (amended August 11, 2011)

- 40 CFR Part 82, Subpart F, Recycling and Emissions Reduction (amended June 18, 2008)

- 40 CFR Part 64, Compliance Assurance Monitoring (CAM)

B. Rules Removed

- District Rule 4351, Boilers, Steam Generators and Process Heaters – Phase 1

  This rule does not apply to units located west of Interstate Highway 5 located in Fresno, Kern, or Kings County. All references have been removed.

- District Rule 4701, Internal Combustion Engines – Phase 1 (amended August 21, 2003)

  This rule was removed on August 21, 2003 and was replaced with District Rule 4702.

C. Rules Added

- District Rule 4320, Advanced Emission Reduction Options for Boilers, Steam Generators, and Process Heaters Greater Than 5.0 MMBtu/hr *(adopted October 16, 2008)*

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

- 40 CFR Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (amended March 9, 2011)

- 40 CFR Part 60, Subpart IIII, New Source Performance Standards (NSPS) for Stationary Compression Ignition Internal Combustion Engines (amended June 28, 2011)

- 40 CFR Part 60, Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (amended June 28, 2011)

D. Rules Not Updated

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

- District Rule 1081, Source Sampling
(amended December 16, 1993)

- District Rule 1100, Equipment Breakdown (Non-SIP replacement for Kern County Rule 111)
(amended December 17, 1992)

- District Rule 2010, Permits Required
(amended December 17, 1992)

- District Rule 2031, Transfer of Permits
(amended December 17, 1992)

- District Rule 2080, Conditional Approval
(amended December 17, 1992)

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

- District Rule 4101, Visible Emissions
(amended February 17, 2005)

- District Rule 4201, Particulate Matter Concentration
(amended December 17, 1992)

- District Rule 4301, Fuel Burning Equipment
(amended December 17, 1992)

- District Rule 4305, Boilers, Steam Generators and Process Heaters – Phase 2
  (amended August 21, 2003)

- District Rule 4408, Glycol Dehydration Systems
  (adopted December 19, 2002)

- District Rule 4409, Components at Light Crude Oil Production Facilities, Natural Gas Production Facilities and Natural Gas Processing Facilities
  (adopted April 20, 2005)

- District Rule 4623, Storage of Organic Liquids
  (amended May 19, 2005)

- District Rule 4801, Sulfur Compounds (Non-SIP replacement for Kern County Rule 108.1)
  (amended December 17, 1992)

- District Rule 8011, General Requirements
  (amended August 19, 2004)

- District Rule 8021, Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities
  (amended August 19, 2004)

- District Rule 8031, Bulk Materials
  (amended August 19, 2004)

- District Rule 8041, Carryout and Trackout
  (amended August 19, 2004)

- District Rule 8051, Open Areas
  (amended August 19, 2004)

- District Rule 8061, Paved and Unpaved Roads
  (amended August 19, 2004)

- District Rule 8071, Unpaved Vehicle/Equipment Traffic Areas
  (amended August 19, 2004)

- 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines

- 40 CFR 60, Subpart KKK, Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plants

- 40 CFR Part 61, Subpart M, National Emissions Standards for Asbestos (amended July 20, 2004)

VII. REQUIREMENTS NOT FEDERALLY ENFORCEABLE

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

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

A. Rules Added

- 17 CCR 93115, California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 7.5, Measure 93115 (amended May 19, 2011)

  The purpose of this airborne toxic control measure (ATCM) is to reduce diesel particulate matter and criteria pollutant emissions from stationary diesel-fueled compression ignition (CI) engines.

  The facility operates seven CI engines: S-2234-38, -39, -43, -45, -104, -170, and -206. All seven engines are operated at the facility as emergency engines which power either an electrical generator or water pumps.

  For the diesel-fired emergency standby IC engines powering electrical generators, the following conditions ensure compliance with the ATCM requirements:

S-2234-43-4	Conditions 5, 7, 8, 12, 13
S-2234-104-3	Conditions 8, 9, 11, 12, 16, 17
S-2234-170-2	Conditions 3, 5, 6, 7, 8, 10, 11
S-2234-206-2	Conditions 3, 4, 5, 6, 8, 12, 13

  For the diesel-fired emergency firewater pump engines, the following conditions ensure compliance with the ATCM requirements:

S-2234-38-4	Conditions 5, 6, 7, 9, 10
S-2234-39-4	Conditions 5, 6, 7, 9, 10
S-2234-45-5	Conditions 5, 6, 7, 9, 10

B. Rules Not Updated

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

- District Rule 1070, Inspections
  (*amended December 17, 1992*)

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

- District Rule 7012, Hexavalent Chromium - Cooling Towers
  (amended December 17, 1992)

VIII. PERMIT REQUIREMENTS

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

A. District Rule 2020 – Exemptions

District Rule 2020 lists equipment which are specifically exempt from obtaining permits, and specifies recordkeeping requirements to verify such exemptions. The rule was amended on August 18, 2011. The amendments to this rule do not have any effect on current permit requirements and will therefore not be addressed in this evaluation.

Condition 46 of permit -0-3 ensures compliance.

B. District Rule 2201– New and Modified Stationary Source Review Rule

District Rule 2201 was amended on April 21, 2011, after this facility's Title V permit was last renewed. This Title V permit renewal does not constitute a modification per section 3.25, defined as an action including at least one of the following items:

1) Any change in hours of operation, production rate, or method of operation of an existing emissions unit, which would necessitate a change in permit conditions.
2) Any structural change or addition to an existing emissions unit which would necessitate a change in permit conditions. Routine replacement shall not be considered to be a structural change.
3) An increase in emissions from an emissions unit caused by a modification of the Stationary Source when the emissions unit is not subject to a daily emissions limitation.
4) Addition of any new emissions unit which is subject to District permitting requirements.
5) A change in a permit term or condition proposed by an applicant to obtain an exemption from an applicable requirement to which the source would otherwise be subject.

Therefore, the updated requirements of this rule are not applicable to the permits being renewed as a part of this project.

C. District Rule 2520 – Federally Mandated Operating Permits

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

D. District Rule 4306 – Boilers, Steam Generators, and Process Heaters – Phase 3

The purpose of this rule is to limit emissions oxides of nitrogen (NOx) and carbon monoxide (CO) from the operation of boilers, steam generators, and process heaters.

The facility has two units subject to the requirements of District Rule 4306: S-2234-1 and S-2234-3.

Conditions Removed:

S-2234-1: Condition 18 was removed from current PTO S-2234-1-17 and was not added to the draft PTO because it is a start-up condition that is no longer applicable.

Compliance:

Section 5.1.1 requires that except for units subject to Sections 5.2, NO_X and carbon monoxide (CO) emissions shall not exceed the limits specified in the following table. All ppmv emission limits specified in this section are referenced at dry stack gas conditions and 3.00 percent by volume stack gas oxygen. Emission concentrations shall be corrected to 3.00 percent oxygen in accordance with Section 8.1.

The process heaters from these units fall under Category B shown in the following table.

Rule 4306 Emissions Limits					
Category	**Operated on gaseous fuel**			**Operated on liquid fuel**	
	NO_X Limit Standard Option	**NO_X Limit Enhanced Option**	**CO Limit**	**NO_X Limit**	**CO Limit**
B. Units with a rated heat input greater than 20.0 MMBtu/hr, except for Categories C, D, E, F, G, H, and I units	9 ppmv or 0.011 lb/MMBtu	6 ppmv or 0.007 lb/MMBtu	400 ppmv	40 ppmv or 0.052 lb/MMBtu	400 ppmv

Compliance with the emissions limits is ensured with the following condition:

S-2234-1-15	Condition 14
S-2234-3-15	Condition 14

Section 5.1.2 applies to units operated on combinations of gaseous fuel and liquid fuel. The process heaters are not permitted to operate on combinations of gaseous and liquid fuels. Therefore, this section is not applicable.

Section 5.2 applies to units that are limited to less than 9 billion Btu per calendar year heat input. The process heaters are not limited to less than 9 billion Btu per calendar year heat input. Therefore, this section is not applicable.

Section 5.3 states that on and after the full compliance schedule specified in Section 7.1, the applicable emission limits of Sections 5.1, 5.2.2 and 5.2.3 shall not apply during start-up or shutdown provided an operator complies with the following requirements.

5.3.1 The duration of each start-up or each shutdown shall not exceed two hours, except as provided in Section 5.3.3.
5.3.2 The emission control system shall be in operation and emissions shall be minimized insofar as technologically feasible during start-up or shutdown.
5.3.3 An operator may submit an application for a Permit to Operate condition to allow more than two hours of each start-up or each shutdown provided the operator meets all of the conditions in specified Sections 5.3.3.1 through 5.3.3.3.

Start-up and shutdown periods have been proposed for the process heaters.

Compliance is ensured with the following conditions:

S-2234-1-15	Conditions 11, 12, and 13
S-2234-3-15	Conditions 11, 12, and 13

Section 5.4.1 applies to any unit which simultaneously fires gaseous and liquid fuels, and is subject to the requirements of Section 5.1. No units fire simultaneously on gaseous and liquid fuels. Therefore, this section is not applicable.

Section 5.4.2 requires the operator of any unit subject to the emissions limits specified in Section 5.1 to install and maintain Continuous Emissions Monitoring (CEMS) for NO_x, CO and O_2, or implements an APCO-approved Alternate Monitoring System. An APCO approved CEMS shall comply with the requirements of 40 CFR Part 51, 40 CFR Parts 60.7 and 60.13 (except subsection h), 40 CFR Park 60 Appendix B (Performance Specifications) and 40 CFR Part 60 Appendix F (Quality Assurance Procedures, and applicable provisions of Rule 1080 (Stack Monitoring).

Both units are equipped with CEMS.

Compliance is ensured with the following conditions:

S-2234-1-15	Conditions 20 and 21
S-2234-3-15	Conditions 22 and 23

Section 5.4.3 applies to units subject to Section 5.2. No units are subject to Section 5.2. Therefore, this section does not apply.
Section 5.4.4 states that the operator of any Category H unit listed in Section 5.1.1 Table 1 and any unit subject to Section 5.2.1 or 5.2.2 shall install and maintain an operational non-resettable, totalizing mass or volumetric flow meter in each fuel line to each unit. Volumetric flow

measurements shall be periodically compensated for temperature and pressure. A master meter, which measures fuel to all units in a group of similar units, may satisfy these requirements if approved by the APCO in writing. The cumulative annual fuel usage may be verified from utility service meters, purchase or tank fill records, or other acceptable methods, as approved by the APCO.

The units are not subject to Category H or Sections 5.2.1 or 5.2.2. Therefore, this section does not apply.

Section 5.5.1 requires that the operator of any unit shall have the option of complying with either the applicable heat input (lb/MMBtu) emission limits or the concentration (ppmv) emission limits specified in Section 5.1. The emission limits selected to demonstrate compliance shall be specified in the source test proposal pursuant to Rule 1081 (Source Sampling).

Compliance is ensured with the following condition:

S-2234-1-15	Condition 15
S-2234-3-15	Condition 15

Section 5.5.2 requires that all emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Unless otherwise specified in the Permit to Operate, no determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0.

Compliance is ensured with the following conditions:

S-2234-1-15	Conditions 31
S-2234-3-15	Conditions 32

Section 5.5.3 states all CEMS emissions measurements shall be averaged over a period of 15 consecutive minutes to demonstrate compliance with the applicable emission limits of this rule. Any 15-consecutive-minute block average CEMS measurement exceeding the applicable emission limits of this rule shall constitute a violation of this rule.

Compliance is ensured with the following conditions:

S-2234-1-15	Conditions 32
S-2234-3-15	Conditions 33

Section 5.5.4 applies to units conducting emissions monitoring using a portable NOx analyzer as part of an APCO approved Alternate Emissions Monitoring System. This section does not apply.

Section 5.5.5 requires that for emissions source testing performed pursuant to Section 6.3.1 for the purpose of determining compliance with an applicable standard or numerical limitation of this rule, the arithmetic average of three (3) 30-consecutive-minute test runs shall apply. If two (2) of three (3) runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit.

Compliance is ensured with the following condition:

S-2234-1-15	Condition 19
S-2234-3-15	Condition 20

Section 6.1 requires that the records required by Sections 6.1.1 through 6.1.4 shall be maintained for five calendar years and shall be made available to the APCO upon request. Failure to maintain records or information contained in the records that demonstrate noncompliance with the applicable requirements of this rule shall constitute a violation of this rule.

Condition 48 on current permit -1-17 required records to be maintained for five years. This condition was removed and not carried over to draft permit -1-15 because a similar condition is already on the facility-wide permit.

A condition satisfying the five year recordkeeping requirement listed on the facility-wide permit will ensure compliance for units -1 and -3:

S-2234-0-3	Condition 131

Section 6.1.1 applies to units operated under the exemption of Section 4.2. No units operate under the exemption in Section 4.2. Therefore the requirements in this section are not applicable.

Section 6.1.2 requires that the operator of any Category H unit listed in Section 5.1.1 Table 1 and any unit subject to Section 5.2 shall record the amount of fuel use at least on a monthly basis. The units do not have a fuel limit. Therefore, this section does not apply.

Section 6.1.3 requires that the operator of a unit subject to Section 5.2.1 or 6.3.1 shall maintain records to verify that the required tune-up and the required monitoring of the operational characteristics have been performed. These requirements do not apply to units that operate and maintain an APCO approved CEMS. Therefore, this section does not apply.

Section 6.1.4 requires that the operator performing start-up or shutdown of a unit shall keep records of the duration of start-up or shutdown.

Compliance is ensured with the following condition:

S-2234-1-15	Condition 13
S-2234-3-15	Condition 13

Section 6.2 identifies the following test methods as District-approved source testing methods for the pollutants listed:

Pollutant	Units	Test Method Required
NO_X	ppmv	EPA Method 7E or ARB Method 100
NO_X	lb/MMBtu	EPA Method 19
CO	ppmv	EPA Method 10 or ARB Method 100
Stack Gas O_2	%	EPA Method 3 or 3A, or ARB Method 100
Stack Gas Velocities	ft/min	EPA Method 2
Stack Gas Moisture Content	%	EPA Method 4

Compliance is ensured with the following conditions:

S-2234-1-15	Conditions 38-40
S-2234-3-15	Conditions 34-36

Section 6.3.1 requires that each unit subject to the requirements of Sections 5.1 or 5.2.3 shall be source tested to determine compliance with the applicable emission limits at least once every 12 months. Units that demonstrate compliance on two consecutive 12-month source tests may defer the following 12-month source test up to 36 months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits specified in Sections 5.1 or 5.2.3, the source testing frequency shall revert to at least once every 12 months.

Compliance is ensured with the following condition:

S-2234-1-15	Condition 18
S-2234-3-15	Condition 18

Section 6.3.2 states that in lieu of compliance with Section 6.3.1, compliance with the applicable limits in Sections 5.1 or 5.2.3 shall be demonstrated by submittal of annual emissions test results to the District from a unit or units that represents a group of units. The facility has not proposed representative testing. Therefore this section is not applicable.

E. District Rule 4311 – Flares

The rule was amended in June 18, 2009 but has not been SIP approved. The stringency analysis in Attachment D shows that the amended rule is as stringent as the SIP approved version of the rule (June 20, 2002).

The facility has four units subject to the requirements of District Rule 4311: S-2234-8, -14, -204, and -205.

The purpose of this rule is to limit the emissions of volatile organic compounds (VOC), oxides of nitrogen (NOx), and sulfur oxides (SOx) from the operation of flares.

Section 5.1 states that flares that are permitted to operate only during an emergency are not subject to the requirements of Sections 5.6 and 5.7. The flares at this facility are used only during emergency purposes. Therefore, Sections 5.6 and 5.7 do not apply.

Compliance that the flares are operated for emergency purposes is ensured with the following condition:

S-2234-8-3	Condition 3
S-2234-14-3	Condition 3
S-2234-204-2	Condition 2
S-2234-205-2	Condition 2

Additionally, current PTOs S-2234-204-1 and -205-1 allow each permitted flare to be operated for non-emergency purposes. At the time the flares were initially permitted, the facility proposed for the flares to be used only for emergency purposes, and conditions allowing non-emergency operation were added in error. Therefore, the following permit changes have been made for units -204 and -205:

- Condition 2 on current PTOs -204-1 and -205-1 has been modified to remove authorized operation for maintenance, testing, and required regulatory purposes. The modified condition has been carried over to draft PTOs -204-2 and -205-2 as Condition 2, which only authorizes use for emergency purposes.

- Condition 3 on current PTOs -204-1 and -205-1, which allowed the flare to be operated up to 25 hours per year for non-emergency purposes has been removed.

- Condition 4 on PTOs -204-1 and -205-1, which lists emissions rates for the flare, has been modified. The condition references operation of the flare for maintenance and testing purposes. The modified condition no longer references operation for maintenance and testing purposes, and has been carried over to draft PTOs -204-2 and -205-2 as Condition 3.

- Condition 9 on current PTOs -204-1 and -205-1, which required recordkeeping for emergency and non-emergency operations, has been modified to remove references to non-emergency use. The modified condition has been carried over to draft PTOs -204-2 and -205-2 as Condition 20.

Section 5.2 requires a flame to be present at all times when combustible gases are vented through the flare.

Compliance is ensured with the following condition:

S-2234-8-3	Condition 4
S-2234-14-3	Condition 4
S-2234-204-2	Condition 4
S-2234-205-2	Condition 4

Section 5.3 requires the flare outlet to be equipped with an automatic ignition system, or, to operate with a pilot flame present at all times when combustible gases are vented through the flare, except during purge periods for automatic-ignition equipped flares.

Compliance is ensured with the following condition:

S-2234-8-3	Condition 5
S-2234-14-3	Condition 5
S-2234-204-2	Condition 5
S-2234-205-2	Condition 5

Section 5.4 states that except for flares equipped with a flow-sensing ignition system, a heat sensing device such as a thermocouple, ultraviolet beam sensor, infrared sensor, or an alternative equivalent device, capable of continuously detecting at least one pilot flame or the flare flame is present, to be installed and operated.
Compliance is ensured with the following condition:

S-2234-8-3	Condition 6
S-2234-14-3	Condition 6
S-2234-204-2	Condition 6
S-2234-205-2	Condition 6

Section 5.5 requires flares that use flow-sensing automatic ignition systems and which do not use a continuous flame pilot shall use purge gas for purging.

Compliance is ensured with the following condition:

S-2234-8-3	Condition 7
S-2234-14-3	Condition 7
S-2234-204-2	Condition 7
S-2234-205-2	Condition 7

As previously stated, Sections 5.6 and 5.7 do not apply to flares operated only during an emergency. Therefore, these sections do not apply.

Section 5.8 states that effective on and after July 1, 2011, flaring is prohibited unless it is consistent with an approved flare minimization plan (FMP), pursuant to Section 6.5, and all commitments listed in that plan have been met. This standard shall not apply if the APCO determines that the flaring is caused by an emergency as defined by Section 3.7 and is necessary to prevent an accident, hazard or release of vent gas directly to the atmosphere.

As discussed under Section 5.1 of this rule, the flares are permitted to operate only during emergency situations. Therefore, this section is not applicable.

Section 5.9 applies only to petroleum refineries. This facility is not a petroleum refinery. Therefore, this section does not apply.

Section 5.10 states that effective on and after July 1, 2011, the operator of a flare subject to flare minimization requirements pursuant to Section 5.8 shall monitor the vent gas flow to the flare with a flow measuring device or other parameters as specified in the Permit to Operate.

Since the flares are used for emergency purposes, they are not subject to the FMP requirements of Section 5.8. Therefore, this section does not apply.
Section 5.11 states that on and after July 1, 2011, the operator of a petroleum refinery or a flare with a flaring capacity equal to or greater than 50 MMBtu/hr shall monitor the flare pursuant to Sections 6.6 through 6.10.

Each of the four flares at this facility has a flaring capacity greater than 50 MMBtu/hr. Therefore, this section applies. The monitoring requirements will be discussed under each individual section.

Section 6.1 states the following records shall be maintained, retained on-site for a minimum of five years, and made available to the APCO, ARB, and EPA upon request:

- 6.1.1 Copy of the compliance determination conducted pursuant to Section 6.4.1.
- 6.1.2 Copy of the source testing result conducted pursuant to Section 6.4.2.
- 6.1.3 For flares used during an emergency, record of the duration of flare operation, amount of gas burned, and the nature of the emergency situation.
- 6.1.4 Operators claiming an exemption pursuant to Section 4.3 shall record annual throughput, material usage, or other information necessary to demonstrate an exemption under that section.
- 6.1.5 Effective on and after July 1, 2011, a copy of the approved flare minimization plan pursuant to Section 6.5.
- 6.1.6 Effective on and after July 1, 2012, where applicable, a copy of annual reports submitted to the APCO pursuant to Section 6.2.
- 6.1.7 Effective on and after July 1, 2011, where applicable, monitoring data collected pursuant to Sections 5.10 and 6.6 through 6.10.

Sections 6.1.1 and 6.1.2 apply to units subject to Sections 5.6 and 5.7. Therefore these sections do not apply.

Section 6.1.3 applies to these units because they will be operated during emergency situations.

Compliance with Section 6.1.3 is ensured with the following condition:

S-2234-8-3	Condition 20
S-2234-14-3	Condition 20
S-2234-204-2	Condition 20
S-2234-205-2	Condition 20

Section 6.1.4 applies to operators claiming an exemption pursuant to Section 4.3. Therefore, this section does not apply

Section 6.1.5 requires the operator to maintain a copy of the approved FMP. An FMP is not required for emergency flares. Therefore, this section does not apply.

Compliance with Section 6.1.6 is ensured with the following condition:

S-2234-8-3	Condition 19
S-2234-14-3	Condition 19
S-2234-204-2	Condition 19
S-2234-205-2	Condition 19

Compliance with Section 6.1.7 is ensured with the following condition:

S-2234-8-3	Condition 22
S-2234-14-3	Condition 22
S-2234-204-2	Condition 21
S-2234-205-2	Condition 21

Additionally, a condition satisfying the requirement that records be maintained for 5 years is already on the facility-wide permit:

S-2234-0-3	Condition 131

Furthermore, Condition 10 on existing PTOs -204-1 and -205-1 required five year recordkeeping per District Rule 2201. However, since non-emergency operation for the units has been removed, and the units will only be permitted to operate for emergency purposes as allowed by District Rule 4311, recordkeeping per District Rule 2201 is no longer necessary. Therefore, Condition 10 has been removed and will not be carried over to

the draft PTOs. The five year recordkeeping requirement for these two units will still be enforced by Condition 131 on facility-wide PTO -0-3.

Section 6.2.1 states effective on and after July 1, 2011, the operator of a flare subject to flare minimization plans pursuant to Section 5.8 of this rule shall notify the APCO of an unplanned flaring event within 24 hours after the start of the next business day or within 24 hours of their discovery, whichever occurs first. The notification shall include the flare source identification, the start date and time, and the end date and time.

The flares are not subject to the FMP requirements of Section 5.8. Therefore, this section does not apply.

Section 6.2.2 states effective on and after July 1, 2012, and annually thereafter, the operator of a flare subject to flare minimization plan pursuant to Section 5.8 shall submit an annual report to the APCO that summarizes all Reportable Flaring Events as defined in Section 3.0 that occurred during the previous 12 month period. The report shall be submitted within 30 days following the end of the twelve month period of the previous year.
The flares are not subject to the FMP requirements of Section 5.8. Therefore, this section does not apply.

Section 6.2.3 states effective on and after July 1, 2012, and annually thereafter, the operator of a flare subject to flare monitoring requirements pursuant to Sections 5.10 and 6.6 through 6.10, as appropriate, shall submit an annual report to the APCO within 30 days following the end of each 12 month period.

Compliance is ensured with the following condition:

S-2234-8-3	Condition 8
S-2234-14-3	Condition 8
S-2234-204-2	Condition 8
S-2234-205-2	Condition 8

Section 6.3 lists test methods to be used to demonstrate compliance with this rule. Alternate equivalent test methods may be used provided the test methods have been approved by the APCO and EPA.

Compliance is ensured with the following condition:

S-2234-8-3	Conditions 9, 10, 11
S-2234-14-3	Conditions 9, 10, 11
S-2234-204-2	Conditions 9, 10, 11
S-2234-205-2	Conditions 9, 10, 11

Section 6.4 applies to units subject to Sections 5.6 and 5.7. Therefore, this section does not apply.

Section 6.5 pertains to flares subject to a flare minimization plan (FMP). An FMP is not required for emergency flares. Therefore, this section does not apply.

Section 6.6 states that effective on and after July 1, 2011, the operator of a petroleum refinery flare or any flare that has a flaring capacity equal to or greater than 50 MMBtu per hour shall monitor vent gas composition using one of the five methods pursuant to Section 6.6.1 through Section 6.6.5 as appropriate.

Compliance is ensured with the following condition:

S-2234-8-3	Condition 12
S-2234-14-3	Condition 12
S-2234-204-2	Condition 12
S-2234-205-2	Condition 12

Section 6.7 states that effective on and after July 1, 2011, the operator of a petroleum refinery flare or any other flare that has a flaring capacity equal to or greater than 50 MMBtu per hour shall monitor volumetric flows of purge and pilot gases with flow measuring devices or other parameters as specified on the Permit to Operate so that volumetric flows of pilot and purge gas may be calculated based on pilot design and the parameters monitored.

Compliance is ensured with the following condition:

S-2234-8-3	Condition 13
S-2234-14-3	Condition 13
S-2234-204-2	Condition 13
S-2234-205-2	Condition 13

Section 6.8 states that effective on and after July 1, 2011, the operator of a petroleum refinery flare or any other flare that has a flaring capacity equal to or greater than 50 MMBtu per hour with a water seal shall monitor and

record the water level and pressure of the water seal that services each flare daily or as specified on the Permit to Operate.

Compliance is ensured with the following condition:

S-2234-8-3	Condition 14
S-2234-14-3	Condition 14
S-2234-204-2	Condition 14
S-2234-205-2	Condition 14

Section 6.9 states the operator of a petroleum refinery flare or any other flare that has a flaring capacity equal to or greater than 50 MMBtu per hour shall comply with the following, as applicable:

6.9.1 Periods of flare monitoring system inoperation greater than 24 continuous hours shall be reported by the following working day, followed by notification of resumption of monitoring. Periods of inoperation of monitoring equipment shall not exceed 14 days per any 18-consecutive-month period. Periods of flare monitoring system inoperation do not include the periods when the system feeding the flare is not operating.

6.9.2. During periods of inoperation of continuous analyzers or auto-samplers installed pursuant to Section 6.6, operators responsible for monitoring shall take one sample within 30 minutes of the commencement of flaring, from the flare header or from an alternate location at which samples are representative of vent gas composition and have samples analyzed pursuant to Section 6.3.4. During periods of inoperation of flow monitors required by Section 5.10, flow shall be calculated using good engineering practices.

6.9.3 Maintain and calibrate all required monitors and recording devices in accordance with the applicable manufacturer's specifications. In order to claim that a manufacturer's specification is not applicable, the person responsible for emissions must have, and follow, a written maintenance policy that was developed for the device in question. The written policy must explain and justify the difference between the written procedure and the manufacturer's procedure.

6.9.4 All in-line continuous analyzer and flow monitoring data must be continuously recorded by an electronic data acquisition system capable of one-minute averages. Flow monitoring data shall be recorded as one-minute averages.

Compliance is ensured with the following conditions:

S-2234-8-3	Conditions 15, 16, 17, 18
S-2234-14-3	Conditions 15, 16, 17, 18
S-2234-204-2	Conditions 15, 16, 17, 18
S-2234-205-2	Conditions 15, 16, 17, 18

Section 6.10 applies only to petroleum refinery flares. Therefore, this section does not apply.

Section 7.0 applies to flares that are exempt under Section 4.0 and that lose exemption status. These flares are not exempt under Section 4.0. Therefore, this section does not apply.

F. District Rule 4320 – Advanced Emission Reduction Options for Boilers, Steam Generators, and Process Heaters Greater Than 5.0 MMBtu/hr

This rule limits NOx, CO, SO_2, and PM_{10} emissions from boilers, steam generators and process heaters rated greater than 5 MMBtu/hr. This rule also provides a compliance option of payment of fees in proportion to the actual amount of NOx emitted over the previous year.

The facility has two units subject to the requirements of District Rule 4306: S-2234-1 and S-2234-3.

Conditions Removed:

S-2234-1: Condition 18 was removed from the current PTO S-2234-1-17 and was not added to the draft PTO because it is a start-up condition that is no longer applicable.

Compliance:

Section 5.1 states that an operator of a unit(s) subject to this rule shall comply with all applicable requirements of the rule and one of the following, on a unit-by-unit basis:

5.1.1 Operate the unit to comply with the emission limits specified in Sections 5.2 and 5.4; or
5.1.2 Pay an annual emissions fee to the District as specified in Section 5.3 and comply with the control requirements specified in Section 5.4; or
5.1.3 Comply with the applicable Low-use Unit requirements of Section 5.5.

The facility complies with and will continue to comply with the emission limits specified in Sections 5.2 and 5.4. Therefore, Sections 5.3 and 5.5 will not be discussed.

Section 5.2.1 states that on and after the indicated Compliance Deadline, units shall not be operated in a manner which exceeds the applicable NOx limit specified in Table 1 of this rule. Additionally, on and after October 1, 2008, units shall not be operated in a manner to which exceeds a carbon monoxide (CO) emissions limit of 400 ppmv.

The process heaters at this facility fall under Category B shown in the following table.

Rule 4320 NOx Emission Limits			
	NOx Limit	**Authority to Construct**	**Compliance Deadline**
B. Units with a total rated heat input > 20.0 MMBtu/hr, except for Categories C through G	a) Standard Schedule 7 ppmv or 0.008 lb/MMBtu ; or	July 1, 2009	July 1, 2010
	b) Enhanced Schedule 5 ppmv or 0.0062 lb/MMBtu	January 1, 2013	January 1, 2014

Both units already comply with the Rule 4320 emission standards.

Compliance is ensured with the following conditions:

S-2234-1-15	Condition 14
S-2234-3-15	Condition 14

Section 5.2.4 applies to units operated on combinations of gaseous fuel and liquid fuel. The process heaters are not permitted to operate on combinations of gaseous and liquid fuels. Therefore, this section is not applicable.

Section 5.4 lists the control requirements for particulate matter. Section 5.4.1 states that to limit particulate matter emissions, an operator shall comply with one of the following requirements:

5.4.1.1 On and after the applicable NOx Compliance Deadline specified in Section 5.2 Table 1, operators shall fire units exclusively on PUC-quality natural gas, commercial propane, butane, or liquefied petroleum gas, or a combination of such gases;

5.4.1.2 On and after the applicable NOx Compliance Deadline specified in Section 5.2 Table 1, operators shall limit fuel sulfur content to no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet; or

5.4.1.3 On and after the applicable NOx Compliance Deadline specified in Section 5.2 Table 1, operators shall install and properly operate an emission control system that reduces SO2 emissions by at least 95% by weight, or limit exhaust SO2 to less than or equal to 9 ppmv corrected to 3.0% O2.

5.4.1.4 Notwithstanding the compliance deadlines indicated in Sections 5.4.1.1 through 5.4.1.3, refinery units, which require modification of refinery equipment to reduce sulfur emissions, shall be in compliance with the applicable requirement in Section 5.4.1 no later than July 1, 2013.

The heaters meet the requirement of Section 5.4.1.1 listed above, as they are permitted to be fired exclusively on PUC quality natural gas.

Compliance is ensured with the following condition:

S-2234-1-15	Condition 8
S-2234-3-15	Condition 8

Section 5.4.2 states that liquid fuel shall be used only during PUC quality natural gas curtailment periods, provided the requirements of Sections 4.2 and 6.1.5 are met and the fuel contains no more than 15 ppm sulfur, as determined by the test method specified in Section 6.2.
Liquid fuel is not used for these units. Therefore, this section does not apply.

Section 5.5 applies only to low use units installed prior to January 1, 2009 and are limited to less than or equal to 1.8 billion Btu per calendar year. No units have a heat input limit. Therefore, this section does not apply.

Section 5.6 states that on and after the Compliance Deadline specified in Section 5.0, the applicable emission limits of Sections 5.2 Table 1 and 5.5.2 shall not apply during start-up or shutdown, provided an operator complies with the following requirements.

5.61 The duration of each start-up or each shutdown shall not exceed two hours, except as provided in Section 5.6.3.
5.6.2 The emission control system shall be in operation and emissions shall be minimized insofar as technologically feasible during start-up or shutdown.
5.6.3 An operator may submit an application for a Permit to Operate condition to allow more than two hours of each start-up or each shutdown provided the operator meets all of the conditions in specified Sections 5.6.3.1 through 5.6.3.3.

Start-up and shutdown periods have been proposed for the process heaters.

Compliance is ensured with the following conditions:

S-2234-1-15	Conditions 11, 12, and 13
S-2234-3-15	Conditions 11, 12, and 13

Section 5.7.1 requires that permit units subject to the emission limits specified in Section 5.2 shall install and maintain Continuous Emissions Monitoring (CEMS) for NO_x, CO and O_2, or implements an APCO-approved Alternate Monitoring System. An APCO approved CEMS shall comply with the requirements of 40 CFR Part 51, 40 CFR Parts 60.7 and 60.13 (except subsection h), 40 CFR Park 60 Appendix B (Performance Specifications) and 40 CFR Part 60 Appendix F (Quality Assurance Procedures, and applicable provisions of Rule 1080 (Stack Monitoring).

Both units are equipped with CEMS.

Compliance is ensured with the following conditions:

S-2234-1-15	Conditions 20 and 21
S-2234-3-15	Conditions 22 and 23

Sections 5.7.2 and 5.7.3 apply to units subject to the requirements of Section 5.5. The units are not subject to Section 5.5; therefore Sections 5.7.2 and 5.7.3 do not apply.

Section 5.7.4 applies to seasonal sources. The facility is not a seasonal source. Therefore, this section does not apply.

Section 5.7.5 states that the APCO shall not approve an alternative monitoring system or parametric monitoring system unless it is documented that continued operation within ranges of specified emissions-related performance indicators or operational characteristics provides a reasonable assurance of compliance with applicable emission limits.

The facility uses an approved APCO monitoring system (CEMS). Therefore, this section does not apply.

Section 5.7.6 outlines requirements for monitoring SO_x emissions. Section 5.7.6.1 requires the operator of any unit that proposes to comply with Section 5.4.1.1 (fire exclusively on PUC-quality natural gas, commercial propane, butane, LPG, or a combination of these fuel gases) or Section 5.4.1.2 (fuel sulfur content limit of 5 grains/100 scf) to provide an annual fuel analysis.

The units comply with Section 5.4.1.1. Therefore, this section applies.

Compliance is ensured with the following condition:

S-2234-1-15	Condition 30
S-2234-3-15	Condition 31

Section 5.8.1 states that the operator of any unit shall have the option of complying with either the applicable heat input, in lb/MMBtu, emission limits or the concentration, in ppmv, emission limits specified in Section 5.2. The emission limits selected to demonstrate compliance shall be specified in the source test proposal pursuant to Rule 1081 (Source Sampling).

Compliance is ensured with the following condition:

S-2234-1-15	Condition 15
S-2234-3-15	Condition 15

Section 5.8.2 states that all emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Unless otherwise specified in the Permit to Operate, no determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0.

Compliance is ensured with the following condition:

S-2234-1-15	Condition 31
S-2234-3-15	Condition 32

Section 5.8.3 states all CEMS emissions measurements shall be averaged over a period of 15 consecutive minutes to demonstrate compliance with the applicable emission limits of this rule. Any 15-consecutive-minute block average CEMS measurement exceeding the applicable emission limits of this rule shall constitute a violation of this rule.

Compliance is ensured with the following conditions:

S-2234-1-15	Conditions 32
S-2234-3-15	Conditions 33

Section 5.8.4 applies to units conducting emissions monitoring using a portable NOx analyzer as part of an APCO approved Alternate Emissions Monitoring System. This section does not apply.

Section 5.8.5 states that for emissions source testing performed pursuant to Section 6.3.1 for the purpose of determining compliance with an applicable standard or numerical limitation of this rule, 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.

Compliance is ensured with the following condition:

S-2234-1-15	Condition 19
S-2234-3-15	Condition 20

Section 6.1 states that the records required by Sections 6.1.1 through 6.1.5 shall be maintained for five calendar years and shall be made available to the APCO and EPA upon request. Failure to maintain records or information contained in the records that demonstrate noncompliance with the applicable requirements of this rule shall constitute a violation of this rule.

Condition 48 on current permit -1-17 required records to be maintained for five years. This condition was removed and not carried over to draft permit -1-15 because a similar condition is already on the facility-wide permit.

A condition satisfying the five year recordkeeping requirement listed on the facility-wide permit will ensure compliance:

S-2234-0-3	Condition 89

Section 6.1.1 applies to units operated under the exemption of Section 4.2. No units operate under the exemption in Section 4.2. Therefore the requirements in this section are not applicable.

Section 6.1.2 applies to any unit that is subject to the requirements of Section 5.5. The units are not subject to the requirements of Section 5.5. Therefore, this section does not apply.

Section 6.1.3 requires that the operator of a unit subject to Section 5.2.1 or 6.3.1 shall maintain records to verify that the required tune-up and the required monitoring of the operational characteristics have been performed. These requirements do not apply to units that operate and maintain an APCO approved CEMS. Therefore, this section does not apply.

Section 6.1.4 requires that the operator performing start-up or shutdown of a unit shall keep records of the duration of start-up or shutdown.

Compliance is ensured with the following condition:

S-2234-1-15	Condition 13
S-2234-3-15	Condition 13

Section 6.1.5 applies to any unit firing on liquid fuel during a PUC-quality natural gas curtailment period. The units do not fire on liquid fuel. Therefore, this section does not apply.

Section 6.2 identifies the following test methods as District-approved source testing methods for the pollutants listed:

Pollutant	Units	Test Method Required
NO_X	ppmv	EPA Method 7E or ARB Method 100
NO_X	lb/MMBtu	EPA Method 19
CO	ppmv	EPA Method 10 or ARB Method 100
SO_X	ppmv	EPA Method 6C, EPA Method 8, or ARB Method 100
Stack Gas O_2	%	EPA Method 3 or 3A, or ARB Method 100
Stack Gas Velocities	ft/min	EPA Method 2
Stack Gas Moisture Content	%	EPA Method 4

Compliance is ensured with the following conditions:

S-2234-1-15	Conditions 38-42
S-2234-3-15	Conditions 34-38

Section 6.3.1 requires that units be tested to determine compliance with the applicable requirements of Section 5.2 not less than once every 12 months. Upon demonstrating compliance on two consecutive compliance source tests, the following source test may be deferred for up to 36 months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits specified in Section 5.2, the source testing frequency shall revert to at least once every 12 months.

Compliance is ensured with the following condition:

S-2234-1-15	Condition 18
S-2234-3-15	Condition 18

Section 6.3.2 states that in lieu of compliance with Section 6.3.1, compliance with the applicable emission limits in Section 5.2 shall be demonstrated by submittal of annual emissions test results to the District from a unit or units that represents a group of units. The facility does not conduct representative testing. Therefore, this section does not apply.

Section 6.4 states that no later than January 1, 2010, the operator of any unit shall submit to the APCO for approval an Emissions Control Plan. The compliance deadline for this requirement has already passed, and the facility has already submitted their Emissions Control Plan. Therefore, this section is no longer applicable.

G. District Rule 4409 – Components at Light Crude Oil Production Facilities, Natural Gas Production Facilities and Natural Gas Processing Facilities

This rule limits VOC emissions from leaking components at light crude oil production facilities, natural gas production facilities, and natural gas processing facilities.

This rule has not been amended since the previous Title V permit renewal. As such, there are no changes as required by the rule to any permits at this time.

However, conditions as required by this rule are listed on the current permit for multiple units. The same conditions are already listed on the facility-wide permit. Therefore, the following updates will be applied:

S-2234-3: Conditions 33, 36, 40, and 42 on current PTO -3-18 have been removed because they are already listed on the facility-wide permit. The conditions have been carried over to the draft facility-wide permit, S-2234-0-3.

S-2234-175: Conditions 4, 7, and 11 on current PTO -175-1 have been removed because they are already listed on the facility-wide permit. The conditions have been carried over to the draft facility-wide permit, S-2234-0-3.

S-2234-176: Conditions 4, 6, 8, 14, and 19 on current PTO -176-1 have been removed because they are already listed on the facility-wide permit. The conditions have been carried over to the draft facility-wide permit, S-2234-0-3.

No additional changes have been made to any permit units subject to this rule.

H. District Rule 4601 – Architectural Coatings

This rule limits the emissions of VOCs from architectural coatings. It requires limiting the application of any architectural coating to no more than what is listed in the Table of Standards (Section 5.0). This rule further specifies labeling requirements, coatings thinning recommendations and storage requirements. See conditions 65, 66, 67, and 82 on facility-wide permit S-2234-0-3 which ensure compliance with Rule 4601 requirements.

The latest version of District Rule 4601 has not been SIP approved. Attachment E contains the streamlining of the SIP approved District Rule 4601 (10/31/01) to the current District Rule 4601 to show the current rule is as stringent if not more than the SIP approved version.

I. District Rule 4624 – Transfer of Organic Liquid

The purpose of this rule is to limit VOC emissions from the transfer of organic liquids.

The facility has one unit subject to the requirements of District Rule 4624: S-2234-4.

Section 3.8 defines a "Class 1 Organic Liquid Transfer Facility" as any location transferring 20,000 gallons or more on any one day of organic liquids with a TVP of 1.5 psia or greater to or from tank trucks, trailers, or railroad tank cars. The facility, as defined in Section 3.8, is a Class 1 Organic Liquid Transfer Facility.

Section 5.1 states that for a Class 1 organic liquid transfer facility, the emission of VOC from the transfer operation shall not exceed 0.08 pounds per 1,000 gallons of organic liquid transferred and use one of the following systems:

- 5.1.1 An organic liquid loading operation shall be bottom loaded.
- 5.1.2 The VOC from the transfer operation shall be routed to:
  - 5.1.2.1 A vapor collection and control system;
  - 5.1.2.2 A fixed roof container that meets the control requirements specified in Rule 4623;
  - 5.1.2.3 A floating roof container that meets the control requirements specified in Rule 4623; or
  - 5.1.2.4 A pressure vessel equipped with an APCO-approved vapor recovery system that meets the control requirements specified in Rule 4623; or
  - 5.1.2.5 A closed VOC emission control system.

Compliance is ensured with the following condition:

S-2234-4-7	Condition 5

Section 5.2 applies to Class 2 organic liquid transfer facilities. Therefore, this section does not apply.

Section 5.3 states that a transfer operation utilizing a closed VOC emission control system or utilizing a container that meets the control requirements

of Rule 4623 (Storage of Organic Liquids) to meet the emission control requirements of this rule shall demonstrate compliance with Sections 5.1 and 5.2 by complying with the leak inspection requirements of Section 5.9

This section applies, and the requirements will be discussed under Section 5.9.

Section 5.4 states the vapor collection and control system shall operate such that the pressure in the delivery tank being loaded does not exceed 18 inches water column pressure and 6 inches water column vacuum. This section shall not apply to the transfer of liquefied petroleum gas.

Compliance is ensured with the following condition:

S-2234-4-7	Condition 6

Section 5.5 states all delivery tanks which previously contained organic liquids with a TVP of 1.5 psia or greater at the storage container's maximum organic liquid storage temperature shall be filled only at transfer facilities satisfying Sections 5.1, 5.2, and 5.4, as applicable.

Compliance is ensured with the following condition:

S-2234-4-7	Condition 7

Section 5.6 states the transfer rack and vapor collection equipment shall be designed, installed, maintained and operated such that there are no leaks and no excess organic liquid drainage at disconnections.

Compliance is ensured with the following condition:

S-2234-4-7	Condition 8

Section 5.7 states that the construction of any new top loading facility or the reconstruction, as defined in 40 CFR 60.15, or the expansion of any existing to loading facility with top loading equipment shall not be allowed.

Compliance is ensured with the following condition:

S-2234-4-7	Condition 9

Section 5.8 applies to organic liquid transfer facilities exclusively handling liquefied petroleum gas. This facility does not exclusively handle liquefied petroleum gas. Therefore, this section does not apply.

Section 5.9 lists leak inspection requirements. However, Section 4.4 states the requirements of Section 5.9 shall not apply to equipment or components subject to Rule 4409 (Components at Light Crude Oil Production Facilities, Natural Gas Production Facilities, and Natural Gas Processing Facilities). This unit is subject to Rule 4409. Therefore, Section 5.9 does not apply.

Sections 6.1.1 and 6.1.2 apply to operators claiming an exemption under Sections 4.1 and 4.3. No exemptions under these sections are claimed for this unit. Therefore, these sections do not apply.

Section 6.1.3 states an operator subject to any part of Section 5.0 shall keep records of daily liquid throughput and the results of any required leak inspections.

Compliance is ensured with the following condition:

S-2234-4-7	Condition 19

Section 6.1.4 states records shall be retained for a minimum of five years and shall be made readily available to the APCO, ARB, or EPA during normal business hours and submitted upon request to the APCO, ARB, or EPA.

A condition satisfying this requirement is already on the facility-wide permit:

S-2234-0-3	Condition 131

Section 6.1.5 applies only to operators of vacuum trucks claiming exemption under Section 4.5 of this rule. Therefore, this section does not apply.

Section 6.2.1 requires initial source testing of the VOC emission control system by July 20, 2009. This deadline has passed, and is no longer applicable.

Section 6.2.2 states the operator of any Class 1 or Class 2 organic liquid transfer facility shall perform the source test requirements once every 60 months, but no more than 30 days before or after the initial source test anniversary date.

Compliance is ensured with the following condition:

S-2234-4-7	Condition 15

Section 6.3 lists approvable test methods to show compliance with the emissions requirements of this rule.

Compliance is ensured with the following conditions:

S-2234-4-7	Conditions 16, 17

J. District Rule 4702 – Internal Combustion Engines – Phase 2

The rule was amended on August 18, 20011 but has not been SIP approved. The stringency analysis in Attachment F shows that the amended rule is as stringent as the SIP approved version of the rule (January 18, 2007).

The purpose of this rule is to limit the emissions of nitrogen oxides (NO_x), carbon monoxide (CO), volatile organic compounds (VOC), and sulfur oxides (SOx) from internal combustion engines rated at 25 brake horsepower or greater.

Emergency IC Engines:

Section 4.2.1 states that except for the requirements of Section 5.9 and Section 6.2.3, the requirements of this rule shall not apply to emergency standby IC engine or a low-use engine, and provided that it is operated with a properly maintained and operated nonresettable elapsed operating time meter, or an alternative device, method, or technique, in determining operating time provided that the alternative is approved by the APCO.

The facility operates eight IC engines that operate as emergency standby engines, as defined in Rule 4702. The following conditions will ensure that the engines meet the requirements of emergency standby engines as defined in the rule.

S-2234-43-4	Conditions 5, 8, 9, 10
S-2234-44-5	Conditions 6, 11, 12, 13
S-2234-46-6	Conditions 6, 11, 12, 13
S-2234-47-6	Conditions 6, 11, 12, 13
S-2234-87-6	Conditions 6, 11, 12, 13
S-2234-104-3	Conditions 9, 12, 13, 14
S-2234-170-2	Conditions 3, 8, 9, 10
S-2234-206-2	Conditions 3, 8, 9, 10

Note: The existing permits for units -44, -46, -47, -87 allowed for up to 200 hours per year of non-emergency operation, per District Rule 4701 (which

has been superseded by District Rule 4702). Since District Rule 4702 limits emergency standby engines to 100 hours per year of non-emergency operation, the hours of non-emergency operation for these units has been corrected to 100 hours per year to show continued compliance.

Section 4.3.1 states that except for the administrative requirements of Section 6.2.3, the requirements of this rule shall not apply to IC engines that are operated exclusively to preserve or protect property, human, life, or public health during a disaster or state of emergency and operates no more than 100 hours per year for non-emergency purposes as determined by a non-resettable elapsed operating time meter.

The facility operates five IC engines that operate in this manner. The following conditions will ensure that the engines meet the requirements of Section 4.3.1:

S-2234-38-4	Conditions 5, 7, 8
S-2234-39-4	Conditions 5, 7, 8
S-2234-45-5	Conditions 5, 7, 8

Section 5.9.1 states that engines subject to Section 4.2 shall comply with the requirements specified in Section 5.9.2 through 5.9.5.

5.9.2 Properly operate and maintain each engine as recommended by the engine manufacturer or emission control supplier system.

5.9.3 Monitor the operational characteristics of each engine as recommended by the engine manufacturer or emission control supplier.

5.9.4 Install and operate a nonresettable elapsed time meter, or an alternative device, method, or technique, in determining operating time provided that the alternative is approved by the APCO and EPA. The operator shall properly maintain and operate the nonresettable elapsed time meter or alternative device in accordance with the manufacturer's instructions.

The facility operates eight emergency standby IC engines subject to these requirements. The following conditions will ensure compliance for these engines:

S-2234-43-4	Conditions 5, 6, 11
S-2234-44-5	Conditions 3, 6, 14
S-2234-46-6	Conditions 3, 6, 14
S-2234-47-6	Conditions 3, 6, 14
S-2234-87-6	Conditions 3, 6, 14
S-2234-104-3	Conditions 9, 10, 15
S-2234-170-2	Conditions 3, 4, 11
S-2234-206-2	Conditions 3, 7, 11

Section 6.2.3 states that an operator claiming an exemption under Section 4.2 or Section 4.3 shall maintain annual operating records. This information shall be retained for at least five years, shall be readily available, and provided to the APCO upon request. The records shall include, but are not limited to, the following: total hours of operation, type of fuel used, the purpose for operating the engine, for emergency standby engines – all hours of non-emergency and emergency operation shall be reported, and other support documentation necessary to demonstrate claim to the exemption.

The 11 emergency engines at the facility that claim exemption under Sections 4.2 and 4.3 are all subject to this requirement. The following conditions will ensure compliance:

S-2234-38-4	Condition 9
S-2234-39-4	Condition 9
S-2234-43-4	Condition 12
S-2234-44-5	Condition 15
S-2234-45-5	Condition 9
S-2234-46-6	Condition 15
S-2234-47-6	Condition 15
S-2234-87-6	Condition 15
S-2234-104-3	Condition 16
S-2234-170-2	Condition 12
S-2234-206-2	Condition 12

The requirement to maintain records for at least five years is satisfied by Condition 131 on facility-wide permit S-2234-0-3.

Non-Emergency Engines:

Section 5.1 applies to non-agricultural engines rated between 25 and 50 bhp. The engines at this facility are rated greater than 50 bhp. Therefore, this section does not apply.

Section 5.2.1 states the operator of a spark-ignited IC engine rated greater than 50 bhp that is used exclusively in non-agricultural operations (AO) shall not operate it in such a manner that results in emissions exceeding the limits in Table 1 for the appropriate engine type until such time that the engine has demonstrated compliance with Table 2 emission limits pursuant to the compliance deadlines in Section 7.5. In lieu of complying with Table 1 emission limits, the operator of a spark-ignited engine shall comply with the applicable emissions limits pursuant to Section 8.0.

Table 1: Rule 4702 Emission Limits

Engine Type	NO_x Emission Limit (ppmv @ 15% O_2, dry)	CO Emission Limit (ppmv @ 15% O_2, dry)	VOC Emission Limit (ppmv @ 15% O_2, dry)
1. Rich-Burn			
a. Waste Gas Fueled	50 ppmv or 90% reduction	2000	250
b. Cyclic Loaded, Field Gas Fueled	50	2000	250
c. All other engines	25 ppmv or 96% reduction	2000	250
2. Lean-Burn Engines			
a. Two-Stroke, Gaseous Fueled, < 100 hp	75 ppmv or 85% reduction	2000	750
b. All other engines	65 ppmv or 90% reduction	2000	750

Section 5.2.2 states on and after the compliance schedule specified in Section 7.5, the operator of a spark-ignited engine > 50 bhp that is used in non-AO shall comply with all of the applicable requirements of the rule and one of the following, on an engine-by-engine basis:

5.2.2.1 On and after the compliance schedule specified in Section 7.5, the operator of a spark-ignited engine that is used exclusively in non-AO shall comply with the following requirements on an engine-by-engine basis:

5.2.2.1.1 NOx, CO, and VOC emission limits pursuant to Table 2;

5.2.2.1.2 SOx control requirements of Section 5.7, pursuant to the deadlines specified in Section 7.5; and

5.2.2.1.3 Monitoring requirements of Section 5.10, pursuant to the deadlines specified in Section 7.5.

5.2.2.2 In lieu of complying with the NOx emission limit requirement of Section 5.2.2.1.1, an operator may pay an annual fee to the District, as specified in Section 5.6, pursuant to Section 7.6.

5.2.2.3 In lieu of complying with the NOx, CO, and VOC limits of Table 2 on an engine-by-engine basis, an operator may elect to implement an alternative emission control plan pursuant to Section 8.0. An operator electing this option shall not be eligible to participate in the fee payment option outlined in Section 5.2.2.2 and Section 5.6.

Table 2: Rule 4702 Emission Limits			
Engine Type	NO_x Emission Limit (ppmv @ 15% O_2, dry)	CO Emission Limit (ppmv @ 15% O_2, dry)	VOC Emission Limit (ppmv @ 15% O_2, dry)
1. Rich-Burn			
d. Waste Gas Fueled	50	2000	250
e. Cyclic Loaded, Field Gas Fueled	50	2000	250
f. Lirnited Use	25	2000	250
g. Rich-Burn Engine, not listed above	11	2000	250
2. Lean-Burn Engines			
c. Two-Stroke, Gaseous Fueled, > 50 bhp and < 100 hp	75	2000	750
d. Lirnited Use	65	2000	750
e. Lean-Burn Engine used for gas compression	65 ppmv or 93% reduction	2000	750
h. Lean-Burn Engine, not listed above	11	2000	750

The following engines are currently in compliance with the requirements of Section 5.2.1, but not the future emission requirements of Section 5.2.2:

S-2234-9-8, -10-8, -11-8, -12-8, -15-8, -16-8, -17-8, -18-8, -27-7, -28-8, -29-11, -30-11, -31-11, -48-6, -57-11, -58-13, -59-12, -60-7, -61-11, -62-8, -63-11, -64-9, -65-9, -66-9, -67-11, -68-11, -69-11, -70-12, -71-12, -72-11, -73-11, -74-11, -75-8, -76-8, -77-8, -78-10, -79-10, -80-7, -81-7, -82-11, -83-10, -84-7, -85-7, -86-7, -126-4, -127-2, -129-3, -130-2, -131-2, -132-2, -133-2, -134-2, -135-2, -136-2, -137-2, -207-2, -208-2, -209-2, -210-2, -213-2, and -214-2

Per the compliance schedules in Section 7.5, the earliest compliance date for an engine subject to Section 5.2.2 emission limits is January 1, 2014. Therefore, operation of these engines after the applicable compliance date will not be authorized until the facility applies for and is issued an Authority to

Construct permit approving all necessary retrofits and permit changes required to comply with this rule. Compliance with Table 2 emissions limits for these engines will be shown at that time.

The following condition ensures present compliance with Table 1 emissions limits for the aforementioned engines:

Unit	Condition
-9-8	6
-10-8	6
-11-8	6
-12-8	7
-15-8	6
-16-8	6
-17-8	6
-18-8	7
-27-7	6
-28-8	6
-29-11	6
-30-11	6
-31-11	6
-48-6	7
-57-11	6
-58-13	6

Unit	Condition
-59-12	6
-60-7	6
-61-11	6
-62-8	7
-63-11	6
-64-9	6
-65-9	6
-66-9	6
-67-11	6
-68-11	6
-69-11	6
-70-12	6
-71-12	6
-72-11	6
-73-11	6
-74-11	6

Unit	Condition
-75-8	7
-76-8	7
-77-8	7
-78-10	6
-79-10	6
-80-7	6
-81-7	6
-82-11	6
-83-10	6
-84-7	6
-85-7	6
-86-7	6
-126-4	12
-127-2	9
-129-3	9
-130-2	9

Unit	Condition
-131-2	9
-132-2	9
-133-2	9
-134-2	9
-135-2	9
-136-2	9
-137-2	12
-207-2	11
-208-2	11
-209-2	11
-210-2	11
-211-2	11
-212-2	11
-214-2	11

The following engines already comply with the emissions requirements of Section 5.2.2 (Table 2 emissions limits *and* SOx control requirements of Section 5.7 as specified in Section 5.2.2.1):

S-2234-182-2, -183-2, -184-2, -185-2, and -186-2

Since the emissions standards in Section 5.2.2 are equal to or more stringent than the emission standards of Section 5.1.1, compliance with Section 5.2.2 will show compliance with Section 5.2.1.

The engines listed above are four-stroke rich-burn engines fired on natural gas. Therefore, the engines fall under category 1.c of Table 2 (Rich-Burn Engine, not listed above).

Compliance with the emission limits is satisfied with the following condition.

Unit	Condition
-182-2	8
-183-2	8
-184-2	8
-185-2	8
-186-2	8

Section 5.2.3 applies to spark-ignited engines used exclusively in agricultural operations (AO). The engines at the facility are not used for AO. Therefore, this section does not apply.

Section 5.2.4 applies to certified compression-ignited engines. The engines are not compression-ignited. Therefore, this section does not apply.

Section 5.2.5 applies to non-certified compression-ignited engines. The engines are not compression-ignited. Therefore, this section does not apply.

Section 5.3 applies to engines equipped with a continuous emission monitoring system (CEMS). The engines are not equipped with CEMS. Therefore, this section does not apply.

Sections 5.4 states that percent emission reductions, if used to comply with the NOx emission limits of Section 5.2, shall be calculated as follows:

5.4.1 For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device.

5.4.2 For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. In this situation, the engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure that the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a

manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine.

Section 5.5 states that the operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits of Section 5.2 shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO.

The engines listed in the following tables use a percent emission reduction to comply with NOx emissions limits, and the conditions listed will ensure compliance with Sections 5.4 and 5.5:

Unit	Condition
-9-8	7, 8
-10-8	7, 8
-11-8	7, 8
-12-8	8, 9
-15-8	7, 8
-16-8	7, 8
-17-8	7, 8
-18-8	8, 9
-27-7	7, 8
-28-8	7, 8
-29-11	7, 8

Unit	Condition
-30-10	7, 8
-31-0	7, 8
-48-5	8. 9
-57-10	7, 8
-58-12	7, 8
-59-11	7, 8
-60-6	7, 8
-61-10	7, 8
-62-7	8, 9
-63-10	7, 8
-64-8	7, 8

Unit	Condition
-65-8	7, 8
-66-8	7, 8
-67-10	7, 8
-68-10	7, 8
-69-10	7, 8
-70-11	7, 8
-71-11	7, 8
-72-10	7, 8
-73-10	7, 8
-74-10	7, 8
-75-7	8, 9

Unit	Condition
-76-7	8, 9
-77-7	8, 9
-78-9	7, 8
-79-9	7, 8
-80-6	7, 8
-81-6	7, 8
-82-10	7, 8
-83-9	7, 8
-84-6	7, 8
-85-6	7, 8
-86-7	7, 8

Section 5.6 applies to operators who elect to pay an annual fee in lieu of complying with the NOx emission limit requirements of Section 5.2.2.1.1. The engines previously listed above that already meet Section 5.2.2 requirements will comply with the NOx emission limit requirement of Section 5.2.2.1.1, and therefore will not be required to pay an annual fee. The remaining engines are not subject to Section 5.2.2, and thus Section 5.6, until January 1, 2014, at the earliest. Therefore, this section does not apply to any of the engines at the present time.

Section 5.7 states that on and after the compliance schedule specified in Section 7.5, operators of non-AO spark-ignited engines and non-AO compression-ignited engines shall comply with one of the following requirements:

5.7.1 Operate the engine exclusively on PUC-quality natural gas, commercial propane, butane, or liquefied petroleum gas, or a combination of such gases; or
5.7.2 Limit gaseous fuel sulfur content to no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet; or
5.7.3 Use California Reformulated Gasoline for all gasoline-fired spark-ignited engines; or
5.7.4 Use California Reformulated Diesel for all compression-ignited engines; or
5.7.5 Operate the engine on liquid fuel that contains no more than 15 ppm sulfur, as determined by the test method specified in Section 6.4.6; or
5.7.6 Install and properly operate an emission control system that reduces SO2 emissions by at least 95% by weight as determined by the test method specified in Section 6.4.6.

Per the compliance schedules in Section 7.5, the earliest compliance date for an engine subject to SOx emission control requirements is January 1, 2014. For the following engines, the facility will need to select which option listed above in Section 5.7 to comply with:

S-2234-9-8, -10-8, -11-8, -12-8, -15-8, -16-8, -17-8, -18-8, -27-7, -28-8, -29-11, -30-11, -31-11, -48-6, -57-11, -58-13, -59-12, -60-7, -61-11, -62-8, -63-11, -64-9, -65-9, -66-9, -67-11, -68-11, -69-11, -70-12, -71-12, -72-11, -73-11, -74-11, -75-8, -76-8, -77-8, -78-10, -79-10, -80-7, -81-7, -82-11, -83-10, -84-7, -85-7, -86-7, -126-4, -127-2, -129-3, -130-2, -131-2, -132-2, -133-2, -134-2, -135-2, -136-2, -137-2, -207-2, -208-2, -209-2, -210-2, -213-2, and -214-2

Beginning January 1, 2014, the engines listed above will not be authorized to operate until the facility complies with the requirements of Section 5.7.

The following engines listed below are currently permitted to be fired exclusively on PUC-quality natural gas, and thus already satisfy Section 5.7.1:

S-2234-182-2, -183-2, -184-2, -185-2, and -186-2

Therefore, compliance with this section will be ensured with the following condition:

Unit	Condition
-182-2	1
-183-2	1
-184-2	1
-185-2	1
-186-2	1

Section 5.8.1 states that for each engine with a rated brake horsepower of 1,000 hp or greater and which is permitted to operate more than 2,000 hours per calendar year, or with an external emission control device, shall either install, operate, and maintain continuous monitoring equipment for NOx, CO, and oxygen, as identified in Rule 1080 (Stack Monitoring), or install, operate, and maintain APCO-approved alternate monitoring. The monitoring system may be a continuous emissions monitoring system (CEMS), a parametric emissions monitoring system (PEMS), or an alternative monitoring system approved by the APCO. APCO-approved alternate monitoring shall consist of one or more of the following:

- Periodic NOx and CO emission concentrations,
- Engine exhaust oxygen concentration,
- Air-to-fuel ratio,
- Flow rate of reducing agents added to engine exhaust,
- Catalyst inlet and exhaust temperature,
- Catalyst inlet and exhaust oxygen concentration,
- Other operational characteristics.

All of the engines each have an external emission control device, therefore this section applies. The engines currently meet the requirements of Section 5.8.1 by following pre-approved alternate monitoring procedure "A", Monitoring of NOx, CO, and O2 Concentrations, as given in District Policy SSP 1810, Emissions Monitoring for Rules 4701 and 4702.

Compliance is ensured with the following conditions:

Unit	Condition
-9-8	25-28
-10-8	25-28
-11-8	25-28
-12-8	23-26
-15-8	25-28
-16-8	25-28
-17-8	25-28
-18-8	23-26
-27-7	24-27
-28-8	24-27
-29-11	23-26
-30-11	23-26
-31-11	23-26
-48-6	23-26
-57-11	23-26
-58-13	23-26
-59-12	23-26

Unit	Condition
-60-7	23-26
-61-11	23-26
-62-8	23-26
-63-11	23-26
-64-9	23-26
-65-9	23-26
-66-9	23-26
-67-11	23-26
-68-11	23-26
-69-11	23-26
-70-12	23-26
-71-12	23-26
-72-11	23-26
-73-11	23-26
-74-11	23-26
-75-8	23-26
-76-8	23-26

Unit	Condition
-77-8	23-26
-78-10	23-26
-79-10	23-26
-80-7	23-26
-81-7	24-27
-82-11	24-27
-83-10	24-27
-84-7	23-26
-85-7	23-26
-86-7	23-26
-126-4	30-33
-127-2	26-29
-129-3	26-29
-130-2	26-29
-131-2	26-29
-132-2	26-29
-133-2	26-29

Unit	Condition
-134-2	26-29
-135-2	26-29
-136-2	26-29
-137-2	30-33
-182-2	9-12
-183-2	9-12
-184-2	9-12
-185-2	9-12
-186-2	9-12
-207-2	28-31
-208-2	28-31
-209-2	28-31
-210-2	28-31
-211-2	28-31
-212-2	28-31
-214-2	28-31

Section 5.8.2 requires engines not subject to 5.8.1 to have their operational characteristics monitored as recommended by the engine manufacturer or emission control system supplier, and approved by the APCO. The engines are subject to Section 5.8.1; therefore, Section 5.8.2 is not applicable.

Section 5.8.3 requires each engine using an alternative monitoring system to submit to and receive approval from the APCO adequate verification of the alternative monitoring system's acceptability. The applicant has satisfied the requirements of Section 5.8.3 by using a District pre-approved alternate monitoring procedure as indicated in Section 5.8.1 above.

Section 5.8.4 requires IC engines equipped with CEMS to operate the CEMS in compliance with the requirements of 40 Code of Federal Regulations (CFR) Part 51, 40 CFR Parts 60.7 and 60.13 (except subsection h), 40 CFR Appendix B (Performance Specifications), 40 CFR Appendix F (Quality Assurance Procedures), and applicable provisions of Rule 1080 (Stack Monitoring). The engines at the facility are not equipped with CEMS; therefore, Section 5.8.4 is not applicable.

Section 5.8.5 requires that the APCO approve the data gathering and retrieval capabilities of an installed monitoring system. Section 5.8.5 is not applicable since the applicant is not using an installed monitoring system on the engines.

Section 5.8.6 requires the operator to install and operate a nonresettable elapsed operating time meter. In lieu of installing a nonresettable time meter, the owner or operator may use an alternative device, method, or technique in determining operating time provided that the alternative is approved by the APCO and is allowed by Permit-to-Operate or Stationary Equipment Registration condition. The owner of the engine shall properly maintain and operate the time meter or alternative device in accordance with the manufacturer's instructions.

Compliance for all engines is ensured with the following condition:

Unit	Condition
-9-8	5
-10-8	5
-11-8	5
-12-8	6
-15-8	5
-16-8	5
-17-8	5
-18-8	6
-27-7	5
-28-8	5
-29-11	5
-30-11	5
-31-11	5
-48-6	6
-57-11	5
-58-13	5
-59-12	5

Unit	Condition
-60-7	5
-61-11	5
-62-8	6
-63-11	5
-64-9	5
-65-9	5
-66-9	5
-67-11	5
-68-11	5
-69-11	5
-70-12	5
-71-12	5
-72-11	5
-73-11	5
-74-11	5
-75-8	6
-76-8	6

Unit	Condition
-77-8	6
-78-10	5
-79-10	5
-80-7	5
-81-7	5
-82-11	5
-83-10	5
-84-7	5
-85-7	5
-86-7	5
-126-4	19
-127-2	16
-129-3	16
-130-2	16
-131-2	16
-132-2	16
-133-2	16

Unit	Condition
-134-2	16
-135-2	16
-136-2	16
-137-2	19
-182-2	6
-183-2	6
-184-2	6
-185-2	6
-186-2	6
-207-2	7
-208-2	7
-209-2	7
-210-2	7
-211-2	7
-212-2	7
-214-2	7

Section 5.8.7 requires that for each engine, the permittee implement the Inspection and Monitoring (I&M) plan, if any, submitted to and approved by

the APCO pursuant to Section 6.5. The pre-approved alternate emissions monitoring procedure used in Section 5.8.1 above will satisfy the requirements of Section 5.8.7. Therefore, compliance with Section 5.8.7 is expected.

Section 5.8.8 requires the operator to collect data through the I&M plan in a form approved by the APCO. By following the pre-approved alternate emissions monitoring procedure proposed in Section 5.8.1 above, the applicant will be collecting data in a form approved by the APCO. Therefore, compliance with Section 5.8.8 is expected.

Section 5.8.9 requires that the operator use a portable NOx analyzer to take NOx emission readings to verify compliance with the emission requirements of Section 5.2 or Section 8.0 during each calendar quarter in which a source test is not performed.

5.8.9.1 If an engine is operated less than 120 calendar days per calendar year, take one NOx emission reading during the calendar year in which a source test is not performed and the engine is operated.

5.8.9.2 All emission readings shall be taken with the engine operating either at conditions representative of normal operations or conditions specified in the Permit-to-Operate or Permit-Exempt Equipment Registration.

5.8.9.3 The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO.

5.8.9.4 All NOx emissions readings shall be reported to the APCO in a manner approved by the APCO.

5.8.9.5 NOx emission readings taken pursuant to this section 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.

The alternate monitoring procedure proposed in Section 5.8.1 above, and all related permit conditions, will satisfy the requirements of Section 5.8.9. Therefore, compliance with Section 5.8.9 is expected.

Section 5.8.10 requires documentation that an alternative monitoring system provides a reasonable assurance of compliance with applicable emission limits. By following the pre-approved alternate emissions monitoring procedure proposed in Section 5.8.1 above, the applicant has satisfied the requirement of Section 5.8.10.

Section 5.8.11 requires that for each engine subject to Section 8.0, a nonresettable fuel meter be installed and operated. The engines are not subject to Section 8.0. However, as previously discussed in Section 5.8.6, the engines are already required to have a nonresettable fuel meter.

Section 5.9 lists monitoring requirements for all other engines not subject to the monitoring requirements of Section 5.8. The engines are subject to the monitoring requirements of Section 5.8. Therefore, this section does not apply.

Section 5.10 lists SOx emissions monitoring requirements for engines that satisfy the SOx emission control requirements of Section 5.7 by complying with either sub-sections 5.7.2, 5.7.5, or 5.7.6. Only engines S-2234-182-2, -183-2, -184-2, -185-2, and -186-2 currently already comply with Section 5.7. However, these engines comply with Section 5.7 by meeting the requirements of sub-section 5.7.1 (fired exclusively on PUC-quality natural gas). No additional monitoring is required for engines complying with sub-section 5.7.1. Furthermore, the remaining engines do not have to meet the requirements of Section 5.7 until January 1, 2014, at the earliest. Therefore, Section 5.10 currently does not apply to any of the engines.

Section 5.11 applies to engines used in AO subject to Permit-Exempt Equipment Registration. The engines are not used in AO. Therefore, this section does not apply.

Section 6.1 requires that the operator of an engine subject to the requirements of Section 5.2 shall submit to the APCO an emission control plan of all actions to be taken to satisfy the emission requirements of Section 5.2 and the compliance schedules of Section 7.0.

The following engines currently comply with the requirements of Section 5.2.1, but presently do not comply with the future requirements of Section 5.2.2 (which requires compliance with Sections 5.7 and 5.10 as well):

> S-2234-9-8, -10-8, -11-8, -12-8, -15-8, -16-8, -17-8, -18-8, -27-7, -28-8, -29-11, -30-11, -31-11, -48-6, -57-11, -58-13, -59-12, -60-7, -61-11, -62-8, -63-11, -64-9, -65-9, -66-9, -67-11, -68-11, -69-11, -70-12, -71-12, -72-11, -73-11, -74-11, -75-8, -76-8, -77-8, -78-10, -79-10, -80-7, -81-7, -82-11, -83-10, -84-7, -85-7, -86-7, -126-4, -127-2, -129-3, -130-2, -131-2, -132-2, -133-2, -134-2, -135-2, -136-2, -137-2, -207-2, -208-2, -209-2, -210-2, -213-2, and -214-2

For the engines listed above, the facility will have until July 1, 2012 to submit an emission control plan of all actions to be taken to show compliance with Table 2 emission limits and SOx control and monitoring requirements.

Compliance with Section 6.1 is ensured with the following condition:

Unit	Condition
-9-8	3
-10-8	3
-11-8	3
-12-8	3
-15-8	3
-16-8	3
-17-8	3
-18-8	3
-27-7	3
-28-8	3
-29-11	3
-30-11	3
-31-11	3
-48-6	3
-57-11	3
-58-13	3

Unit	Condition
-59-12	3
-60-7	3
-61-11	3
-62-8	3
-63-11	3
-64-9	3
-65-9	3
-66-9	3
-67-11	3
-68-11	3
-69-11	3
-70-12	3
-71-12	3
-72-11	3
-73-11	3
-74-11	3

Unit	Condition
-75-8	3
-76-8	3
-77-8	3
-78-10	3
-79-10	3
-80-7	3
-81-7	3
-82-11	3
-83-10	3
-84-7	3
-85-7	3
-86-7	3
-126-4	2
-127-2	2
-129-3	2
-130-2	2

Unit	Condition
-131-2	2
-132-2	2
-133-2	2
-134-2	2
-135-2	2
-136-2	2
-137-2	2
-207-2	1
-208-2	1
-209-2	1
-210-2	1
-211-2	1
-212-2	1
-214-2	1

Engines S-2234-182-2, -183-2, -184-2, -185-2, and -186-2, as previously discussed, already comply with the emission requirements of Section 5.2, the SOx control requirements of Section 5.7, and the SOx monitoring requirements of Section 5.10 ahead of the compliance schedules of Section 7.0. Therefore, an emission control plan for these engines is not required.

Section 6.2.1 states the operator of an engine subject to the requirements of Section 5.2 of this rule shall maintain an engine operating log to demonstrate compliance with this rule. This information shall be retained for a period of at least five years, shall be readily available, and be made available to the APCO upon request. The engine operating log shall include, on a monthly basis, the following information:

- Total hours of operation,

- Type of fuel used,
- Maintenance or modifications performed,
- Monitoring data,
- Compliance source test results, and
- Any other information necessary to demonstrate compliance with this rule.

Compliance for all engines is ensured with the following conditions:

Unit	Condition
-9-8	30
-10-8	30
-11-8	30
-12-8	28
-15-8	30
-16-8	30
-17-8	30
-18-8	27
-27-7	29
-28-8	29
-29-11	28
-30-11	28
-31-11	28
-48-6	27
-57-11	27
-58-13	28
-59-12	28

Unit	Condition
-60-7	27
-61-11	27
-62-8	27
-63-11	28
-64-9	27
-65-9	27
-66-9	27
-67-11	27
-68-11	28
-69-11	28
-70-12	28
-71-12	28
-72-11	28
-73-11	28
-74-11	28
-75-8	27
-76-8	27

Unit	Condition
-77-8	27
-78-10	28
-79-10	28
-80-7	27
-81-7	29
-82-11	29
-83-10	29
-84-7	27
-85-7	27
-86-7	27
-126-4	36
-127-2	32
-129-3	32
-130-2	32
-131-2	32
-132-2	32
-133-2	32

Unit	Condition
-134-2	32
-135-2	32
-136-2	32
-137-2	36
-182-2	19
-183-2	19
-184-2	19
-185-2	19
-186-2	19
-207-2	34
-208-2	34
-209-2	34
-210-2	34
-211-2	34
-212-2	34
-214-2	34

Section 6.2.2 requires that the data collected pursuant to the requirements of Section 5.8 and Section 5.9 shall be maintained for at least five years, shall be readily available, and made available to the APCO upon request.

A condition satisfying this requirement is already on the facility-wide permit:

S-2234-0-3	Condition 131

On a few select permits, five year recordkeeping is required by District Rule 2201. Five year recordkeeping conditions that have District Rule 2201 as a rule reference we carried over to the draft permits. Compliance with Section 6.2.2 for these units is ensured with the following condition:

Unit	Condition
-126-4	37
-127-2	33
-129-3	33
-130-2	33
-131-2	33

Unit	Condition
-132-2	33
-133-2	33
-134-2	33
-135-2	33
-136-1	33

Unit	Condition
-207-2	35
-208-2	35
-209-2	35
-210-2	35
-211-2	35

Unit	Condition
-212-2	35
-214-2	35

Section 6.2.3 applies to operators claiming an exemption under Section 4.2 or Section 4.3. The engines are not exempt from any requirements under Sections 4.2 or 4.3. Therefore, this section does not apply.

Section 6.3.1 states the requirements of Section 6.3.2 through 6.3.4 shall apply to the following engines:

- Engines that have been retrofitted with an exhaust control device, except those certified per Section 9.0;
- Engines subject to Section 8.0;
- An AO spark-ignited engine that is subject to the requirements of Section 8.0;
- An AO spark-ignited engine that has been retrofitted with a catalytic emission control and is not subject to the requirements of Section 8.0.

The engines have an exhaust control device. Therefore, Sections 6.3.2 through 6.3.4 apply.

Section 6.3.2 requires owners to demonstrate compliance with applicable limits in accordance with the test methods in Section 6.4 by the applicable date specified in Section 5.2, and at least once every 24 months thereafter.

Section 6.3.3 requires owners to conduct emissions source testing with the engine operating either at conditions representative of normal operations or conditions specified in the Permit-to-Operate or Stationary Equipment Registration. For emissions source testing performed pursuant to Section 6.3.2 for the purpose of determining compliance with an applicable standard or numerical limitation, the arithmetic average of three (3) 30-consecutive minute test runs shall apply. If two (2) of three (3) runs are above an

applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC shall be reported as methane. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15 percent oxygen. For engines that comply with a percent reduction limit, the percent reduction of NOx emissions shall also be reported.

Section 6.3.4 states that in addition to other information, the source test protocol shall describe which critical parameters will be measured and how the appropriate range for these parameters shall be established. The range for these parameters shall be incorporated into the I&M plan.

Section 6.3.5 states engines that are limited by Permit-to-Operate or Permit-Exempt Equipment Registration condition to be fueled exclusively with PUC quality natural gas shall not be subject to the reoccurring source test requirements of Section 6.3.2 for VOC emissions.

Engines -182, -183, -184, -185, and -186 are fired exclusively on PUC-quality natural gas and, per Section 6.3.5, will not be required to source test for VOC emissions.

Compliance with Section 6.3 requirements for all engines is ensured with the following conditions:

Unit	Condition
-9-8	16, 19, 23
-10-8	16, 19, 23
-11-8	16, 19, 23
-12-8	15, 16, 19
-15-8	16, 19, 23
-16-8	16*, 19, 23
-17-8	16, 18, 23
-18-8	15, 16, 19
-27-7	15, 18, 22
-28-8	15, 18, 22
-29-11	15, 16, 22
-30-11	15, 16, 22
-31-11	15, 16, 22
-48-6	15, 16, 19
-57-11	15, 17, 18
-58-13	15, 16, 22
-59-12	15, 16, 22

Unit	Condition
-60-7	15, 16, 19
-61-11	15, 16, 19
-62-8	15, 16, 19
-63-11	15, 16, 22
-64-9	15, 16, 19
-65-9	15, 16, 19
-66-9	15, 16, 19
-67-11	15, 16, 19
-68-11	15, 16, 22
-69-11	15, 16, 22
-70-12	15, 16, 22
-71-12	15, 16, 22
-72-11	15, 16, 19
-73-11	15, 16, 22
-74-11	15, 16, 22
-75-8	15, 16, 19
-76-8	15, 16, 19

Unit	Condition
-77-8	15, 16, 19
-78-10	15, 16, 22
-79-10	15, 16, 22
-80-7	15, 16, 19
-81-7	15, 16, 19
-82-11	15, 16, 19
-83-10	15, 16, 19
-84-7	15, 16, 19
-85-7	15, 16, 19
-86-7	15, 16, 19
-126-4	20, 21, 24
-127-2	17, 18, 21
-129-3	17, 18, 21
-130-2	17, 18, 21
-131-2	17, 18, 21
-132-2	17, 18, 21
-133-2	17, 18, 21

Unit	Condition
-134-2	17, 18, 21
-135-2	17, 18, 21
-136-2	17, 18, 21
-137-3	20, 21, 24
-182-2	13, 14, 15
-183-2	13, 14, 15
-184-2	13, 14, 15
-185-2	13, 14, 15
-186-2	13, 14, 15
-207-2	19, 20, 23
-208-2	19, 20, 23
-209-2	19, 20, 23
-210-2	19, 20, 23
-211-2	19, 20, 23
-212-2	19, 20, 23
-214-2	19, 20, 23

*Condition 12 on current PTO S-2234-16-7 states that for emissions testing, the arithmetic mean of 3 **forty-minute** test runs shall be used. The current PTOs for all other spark-ignited engines require 3 **thirty-minute tests**, as required in District Rule 4702. Therefore, Condition 12 on PTO -16-7 was corrected to state 3 thirty-minute tests, to be consistent with all other engine permits at the facility. The corrected condition was carried over to draft PTO -16-8 as Condition 16.

Section 6.3.6 allows for representative testing from a unit or units that represents a specified group of units. The facility does not conduct representative testing for these engines. Therefore, this section does not apply.

Section 6.4 requires that the compliance with the requirements of Section 5.2 shall be determined in accordance with the following test procedures or any other method approved by EPA and the APCO:

- Oxides of nitrogen - EPA Method 7E, or ARB Method 100.
- Carbon monoxide - EPA Method 10, or ARB Method 100.
- Stack gas oxygen - EPA Method 3 or 3A, or ARB Method 100.

- Volatile organic compounds - EPA Method 25A or 25B, or ARB Method 100. Methane and ethane, which are exempt compounds, shall be excluded from the result of the test.
- Operating horsepower determination - any method approved by EPA and the APCO.
- Oxides of sulfur – EPA Method 6C or 8, or ARB Method 100.

For engines fired exclusively on PUC-quality natural gas, source testing for VOC is not required.

Compliance for all engines is ensured with the following conditions:

Unit	Condition
-9-8	17
-10-8	17
-11-8	17
-12-8	18
-15-8	17
-16-8	17
-17-8	17
-18-8	18
-27-7	16
-28-8	16
-29-11	17
-30-11	17
-31-11	17
-48-6	18
-57-11	16
-58-13	17
-59-12	17

Unit	Condition
-60-7	18
-61-11	18
-62-8	18
-63-11	17
-64-9	18
-65-9	18
-66-9	18
-67-11	18
-68-11	17
-69-11	17
-70-12	17
-71-12	17
-72-11	18
-73-11	17
-74-11	17
-75-8	18
-76-8	18

Unit	Condition
-77-8	18
-78-10	17
-79-10	17
-80-7	18
-81-7	18
-82-11	18
-83-10	18
-84-7	18
-85-7	18
-86-7	18
-126-4	23
-127-2	20
-129-3	20
-130-2	20
-131-2	20
-132-2	20
-133-2	20

Unit	Condition
-134-2	20
-135-2	20
-136-2	20
-137-2	23
-182-2	16
-183-2	16
-184-2	16
-185-2	16
-186-2	16
-207-2	22
-208-2	22
-209-2	22
-210-2	22
-211-2	22
-212-2	22
-214-2	22

Section 6.5 requires that the operator of an engine subject to the requirements of Section 5.2 or the requirements of Section 8.0 shall submit to the APCO for approval an I&M plan that specifies all actions to be taken to satisfy the following requirements and the requirements of Section 5.8. The actions to be identified in the I&M plan shall include, but are not limited to, the following requirements listed in Sections 6.5.2 through 6.5.9. If there is not

change to the previously approved I&M plan, the operator shall submit a letter to the District indicating that previously approved plan is still valid.

Section 6.5.1 states the requirements of Section 6.5.2 through 6.5.9 shall apply to the following engines:

- Engines that have been retrofitted with an exhaust control device, except those certified per Section 9.0;
- Engines subject to Section 8.0;
- An AO spark-ignited engine that is subject to the requirements of Section 8.0;
- An AO spark-ignited engine that has been retrofitted with a catalytic emission control and is not subject to the requirements of Section 8.0.

The engines have an exhaust control device. Therefore, Sections 6.5.2 through 6.5.9 apply.

Section 6.5.2 requires procedures for establishing ranges for control equipment parameters, engine operating parameters, and engine exhaust oxygen concentrations that source testing has shown result in pollutant concentrations within the rule limits.

Section 6.5.3 requires procedures for monthly inspections as approved by the APCO. The applicable control equipment parameters and engine operating parameters will be inspected and monitored weekly (proposed by the applicant) in conformance with a regular inspection schedule listed in the I&M plan. Such weekly inspection and monitoring of the control equipment and engine operating parameters will be accompanied by quarterly emissions monitoring as specified in the approved alternate monitoring plan.

Section 6.5.4 requires procedures for the corrective actions on the noncompliant parameter(s) that the owner or operator will take when an engine is found to be operating outside the acceptable range for control equipment parameters, engine operating parameters, and engine exhaust NOx, CO, VOC, or oxygen concentrations.

Section 6.5.5 requires procedures for the owner or operator to notify the APCO when an engine is found to be operating outside the acceptable range for control equipment parameters, engine operating parameters, and engine exhaust NOx, CO, VOC, or oxygen concentrations.

The alternate monitoring scheme proposed in Section 5.8.1 above will satisfy the requirements of Sections 6.5.2, 6.5.3, 6.5.4 and 6.5.5 of the rule.

Therefore, compliance with Sections 6.5.2, 6.5.3, 6.5.4, and 6.5.5 is expected.

Section 6.5.6 requires procedures for preventive and corrective maintenance performed for the purpose of maintaining an engine in proper operating condition. The alternate monitoring procedure proposed in Section 5.6.1 above will satisfy the requirements of Section 6.5.6. Moreover, the applicant will operate and maintain engine according to the manufacturer's specifications.

Compliance for all engines is ensured with the following condition:

Unit	Condition
-9-8	21
-10-8	21
-11-8	21
-12-8	21
-15-8	21
-16-8	21
-17-8	21
-18-8	21
-27-7	20
-28-8	20
-29-11	20
-30-11	20
-31-11	20
-48-6	21
-57-11	21
-58-13	20
-59-12	20

Unit	Condition
-60-7	21
-61-11	21
-62-8	21
-63-11	20
-64-9	21
-65-9	21
-66-9	21
-67-11	21
-68-11	20
-69-11	20
-70-12	20
-71-12	20
-72-11	21
-73-11	20
-74-11	20
-75-8	21
-76-8	21

Unit	Condition
-77-8	21
-78-10	20
-79-10	20
-80-7	21
-81-7	21
-82-11	21
-83-10	21
-84-7	21
-85-7	21
-86-7	21
-126-4	27
-127-2	24
-129-3	24
-130-2	24
-131-2	24
-132-2	24
-133-2	24

Unit	Condition
-134-2	24
-135-2	24
-136-2	24
-137-2	27
-182-2	7
-183-2	7
-184-2	7
-185-2	7
-186-2	7
-207-2	26
-208-2	26
-209-2	26
-210-2	26
-211-2	26
-212-2	26
-214-2	26

Section 6.5.7 requires procedures and a schedule for using a portable NOx analyzer to take NOx emission readings pursuant to Section 5.8.9. The alternate monitoring procedure proposed in Section 5.8.1 above will ensure compliance with the requirements of Section 6.5.7.

Section 6.5.8 requires procedures for collecting and recording required data and other information in a form approved by the APCO including, but not

limited to, data collected through the I&M plan and the monitoring systems described in Sections 5.8.1 and 5.8.2. Data collected through the I&M plan shall have retrieval capabilities as approved by the APCO.

The data collection and recordkeeping requirement described in Section 6.2.1 above will satisfy the requirements of Section 6.5.8.

Section 6.5.9 specifies procedures for revising the I&M plan. The owner of an engine may request a change to the I&M plan at any time. The I&M plan shall be updated to reflect any change in operation and prior to any planned change in operation. An engine owner that changes significant I&M plan elements must notify the District no later than seven days after the change and must submit an updated I&M plan to the APCO no later than 14 days after the change for approval. The date and time of the change to the I&M plan shall be recorded in the engine operating log. For new engines and modifications to existing engines, the I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit-to-Operate.

Compliance for all engines is ensured with the following conditions:

Unit	Condition
-9-8	22
-10-8	22
-11-8	22
-12-8	22
-15-8	22
-16-8	22
-17-8	22
-18-8	22
-27-7	21
-28-8	21
-29-11	21
-30-11	21
-31-11	21
-48-6	22
-57-11	22
-58-13	21
-59-12	21

Unit	Condition
-60-7	22
-61-11	22
-62-8	22
-63-11	21
-64-9	22
-65-9	22
-66-9	22
-67-11	22
-68-11	21
-69-11	21
-70-12	21
-71-12	21
-72-11	22
-73-11	21
-74-11	21
-75-8	22
-76-8	22

Unit	Condition
-77-8	22
-78-10	21
-79-10	21
-80-7	22
-81-7	22
-82-11	22
-83-10	22
-84-7	22
-85-7	22
-86-7	22
-126-4	28
-127-2	25
-129-3	25
-130-2	25
-131-2	25
-132-2	25
-133-2	25

Unit	Condition
-134-2	25
-135-2	25
-136-2	25
-137-2	28
-182-2	20
-183-2	20
-184-2	20
-185-2	20
-186-2	20
-207-2	27
-208-2	27
-209-2	27
-210-2	27
-211-2	27
-212-2	27
-214-2	27

Section 8.0 allows an operator to comply with the NOx emission requirements of Section 5.2 for a group of engines by aggregating their NOx emissions.

The facility has not requested to comply with an Alternative Emission Control Plan in lieu of the requirements of Section 5.2. Therefore, this section will not be addressed.

K. District Rule 4703 - <u>Stationary Gas Turbines</u>

The purpose of this rule is to limit NO_x emissions from stationary gas turbine systems. Pursuant to Section 2.0, the provisions of this rule apply to all stationary gas turbine systems, which are subject to District permitting requirements, and with ratings equal to or greater than 0.3 megawatt (MW) and/or a maximum heat input rating of more than 3,000,000 Btu per hour, except as provided in Section 4.0.

The facility operates two units subject to this rule: S-2234-52 and -53.

Section 5.1 requires that NO_x emissions concentrations measured for compliance with Section 5.0 be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance with either the applicable test method in Section 6.4, or, if continuous emission monitors are used, all applicable requirements of 40 CFR Part 60, as detailed in Section 6.2. Any variations from these measurement requirements are subject to APCO and EPA approval prior to implementation.

Compliance is ensured with the following condition:

S-2234-52	Condition 50
S-2234-53	Condition 50

Section 5.1.1 specifies the Tier 1 NO_X compliance limits. As discussed below, the stationary gas turbines operate in compliance with the Tier 2 NO_X emission limits specified in section 5.1.2. The Tier 2 NO_X emission limits are more stringent than the Tier 1 NO_X emissions limits. Therefore, compliance with the Tier 1 NO_X emission limits will be demonstrated with compliance of the Tier 2 NO_X emission limits and no further discussion is required.

Section 5.1.2 requires that the owner or operator of any stationary gas turbine system shall not operate such unit under load conditions, except as allowed by Section 5.3, which results in the measured emissions concentration exceeding the applicable emission limits specified in this section, according to the Tier 2 Compliance Schedules listed in Section 7.2. Section 5.1.2 lists a Tier 2 NOx emission limit of 5 ppmvd @ 15% O_2 for units greater than 10 MW and operating greater than 877 hr/yr.

Compliance with Tier 2 NOx limits is ensured with the following condition:

S-2234-52	Condition 31
S-2234-53	Condition 31

Condition 40 of the current permits, which listed Tier 1 requirements and is less stringent, has been removed.

Section 5.1.3 specifies the Tier 3 NOx compliance limits. This section applies only to turbines rated up to 10 MW, or greater than 10 MW but operating no more than 877 hours per year. The turbines at this facility are rated greater than 10 MW and are permitted to operate more than 877 hours per year. Therefore, the requirements of this section do not apply.

Section 5.2 requires that the owner or operator of gas turbines (All units except General Electric Frame 7, General Electric Frame 7 with Quiet

Combustors, and < 2.0 MW Solar Saturn gas turbine powering a centrifugal compressor) shall not operate such unit under load conditions, except as allowed by Section 5.3, which results in the measured CO emissions concentration exceeding 200 ppmvd @ 15% O_2.

Compliance is ensured with the following condition:

S-2234-52	Condition 31
S-2234-53	Condition 31

Section 5.3 states that the applicable emission limits of Section 5.2 shall not apply during a transitional operation period, as defined in Section 3.0, provided an operator complies with the applicable requirements specified in Sections 5.3.1 and 5.3.2.

Section 5.3.1 states except as provided in Section 5.3.3, the operator shall meet the following conditions:

- The duration of each start-up or each shutdown shall not exceed two hours.
- For each bypass transition period, the requirements specified in Section 3.2 shall be met.
- For each primary re-ignition period, the requirements specified in Section 3.20 shall be met.
- Each reduced load period shall not exceed one hour.

Section 5.3.2 states the emission control system shall be in operation and emissions shall be minimized insofar as technologically feasible during each transitional operation period.

Compliance with Section 5.3 is ensured with the following conditions:

S-2234-52	Conditions 5, 17, 18, 20
S-2234-53	Conditions 5, 17, 18, 20

Section 6.1 requires that the owner or operator of any existing stationary gas turbine system, unless exempted in Section 6.1.5, shall submit, to the APCO for approval, an emissions control plan of all actions, including a schedule of increments of progress, which will be taken to comply with the requirements of the applicable NO_x Compliance Limit in Section 5.0 and Compliance Schedule in Section 7.0. The Emission Control Plan was required to be submitted by April 30, 2003. This is now an obsolete requirement.

Section 6.2.1 requires that except for units subject to Section 6.2.3, for turbines with exhaust gas NO_x control devices, the owner or operator shall either install, operate, and maintain continuous emissions monitoring equipment for NO_x and oxygen, as identified in Rule 1080 (Stack Monitoring), or install and maintain APCO-approved alternate monitoring consisting of one or more of the following:

- periodic NO_x emission concentrations,
- turbine exhaust oxygen concentration,
- air-to-fuel ratio,
- flow rate of reducing agents added to turbine exhaust,
- catalyst inlet and exhaust temperature,
- catalyst inlet and exhaust oxygen concentration,
- other operational characteristics.

The units are equipped with continuous emissions monitoring equipment.

Compliance is ensured with the following condition:

S-2234-52	Condition 4
S-2234-53	Condition 4

Section 6.2.2 requires that except for units subject to Section 6.2.3, for turbines without exhaust-gas NO_x control devices and without continuous emissions monitoring equipment, the owner or operator shall monitor operational characteristics recommended by the turbine manufacturer or emission control system supplier, and approved by the APCO.

The units are equipped with continuous emissions monitoring equipment. Therefore, this section does not apply.

Section 6.2.3 requires that for units 10 MW and greater that operated an average of more than 4,000 hours per year over the last three years before August 18, 1994, the owner or operator shall monitor the exhaust gas NO_x emissions. The NO_x monitoring system shall meet EPA requirements as specified in 40 CFR Part 60 App. B, Spec. 2, 40 CFR Part 60 App. F, and 40 CFR Part 60.7 (c), 60.7 (d), and 60.13, or other systems that are acceptable to the EPA. The owner or operator shall submit to the APCO information demonstrating that the emission monitoring system has data gathering and retrieval capability.

These units were not operating prior to August 18, 1994. Therefore, this section does not apply.

Section 6.2.4 requires that the owner or operator shall maintain all records for a period of five years from the date of data entry and shall make such records available to the APCO upon request.

A condition satisfying this requirement is already on the facility-wide permit:

S-2234-0-3	Condition 131

Section 6.2.5 requires that the owner or operator shall submit to the APCO, before issuance of the Permit to Operate, information correlating the control system operating parameters to the associated measured NO_x output. This information may be used by the APCO to determine compliance when there is no continuous emission monitoring system for NO_x available or when the continuous emission monitoring system is not operating properly.

The turbines at the facility are already permitted. The information required in Section 6.2.5 has previously been collected.

Section 6.2.6 requires that the owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local time start-up and stop time, length and reason for reduced load periods, total hours of operation, type and quantity of fuel used (liquid/gas).

Compliance is ensured with the following condition:

S-2234-52	Condition 59
S-2234-53	Condition 59

Section 6.2.7 requires that the owner or operator shall maintain a stationary gas turbine system operating log for units exempt under Section 4.2 that includes, on a daily basis, the actual local time start-up and stop time, total hours of operation, and cumulative hours of operation to date for the calendar year.

The turbines are not exempt under Section 4.2. Therefore, this section does not apply.

Section 6.2.8 states the operator performing start-up or shutdown on a unit shall keep records of the duration of start-up or shutdown.

Compliance is ensured with the following condition:

S-2234-52	Condition 54
S-2234-53	Condition 54

Section 6.2.9 applies to units subject to Section 5.1.3.3. These turbines are not subject the requirements of Section 5.1.3.3. Therefore, this section does not apply.

Section 6.2.10 states the operator of a unit subject to Section 6.5.2 (Exempt and Emergency Standby Units) shall identify in the stationary gas turbine system operating log the date and start time and end time the unit was operated pursuant to Section 6.5.2 and keep a copy of the emergency declaration.

These turbines are not subject to Section 6.5.2. Therefore, Section 6.2.10 does not apply.

Section 6.2.11 states the operator of a unit shall keep records of the date, time and duration of each bypass transition period and each primary re-ignition period.

Compliance is ensured with the following condition:

S-2234-52	Condition 56
S-2234-53	Condition 56

Section 6.2.12 applies only to units subject to Tier 3 emission limits. The turbines at this facility are not subject to Tier 3 emission limits. Therefore, this section does not apply.

Section 6.3.1 requires that the owner or operator of any stationary gas turbine systems subject to the provisions of Section 5.0 of this rule shall provide source test information annually regarding the exhaust gas NO_x and CO concentrations, and, if used as a basis for Tier 1 emission limit calculations, the demonstrated percent efficiency (EFF) of the stationary gas turbine, or, for turbines complying with Section 5.1.2.2 or Section 5.1.3.2, the control efficiency of the emission control device.

Compliance is ensured with the following condition:

S-2234-52	Condition 57
S-2234-53	Condition 57

Section 6.3.2 applies to stationary gas turbine systems operating less than 877 hours per year. The turbines at this facility operate more than 877 hours per year. Therefore, this section does not apply.

Section 6.3.3 requires that the owner or operator of any unit with an intermittently operated auxiliary burner shall demonstrate compliance with the auxiliary burner both on and off.

Compliance is ensured with the following condition:

S-2234-52	Condition 51
S-2234-53	Condition 51

Section 6.4 requires that the following test measures shall be used unless otherwise approved by the APCO and EPA.

- Oxides of nitrogen emissions for compliance tests shall be determined by using EPA Method 7E or EPA Method 20.
- Carbon monoxide emissions for compliance tests shall be determined by using EPA Test Methods 10 or 10B.
- Oxygen content of the exhaust gas shall be determined by using EPA Methods 3, 3A, or 20.

HHV and LHV of gaseous fuels shall be determined by using:

- ASTM D3588-91, Standard Practice for Calculating Heat Value, Compressibility Factor, and Relative Density (Specific Gravity) of Gaseous Fuels, or
- ASTM 1826-88, Standard Test Method for Calorific (Heating) Value of Gases in Natural Gas Range by Continuous Recording Calorimeter, or
- ASTM 1945-81, Standard Method for Analysis of Natural Gas by Gas Chromatography.

Compliance is ensured with the following conditions:

S-2234-52	Conditions 47, 48
S-2234-53	Conditions 47, 48

Section 6.4.6 requires that the demonstrated percent efficiency of the stationary gas turbine shall be determined using the facility instrumentation for gas turbine fuel consumption and power output. Power output values used to determine gas turbine efficiency shall be either:

- the electrical power output of the gas turbine, provided the gas turbine generates electricity; or

- the mechanical power output of the gas turbine, provided the gas turbine does not generate electricity.

The turbines at this facility do not use percent emission reductions to show compliance with Section 5.1.2. Therefore, this section does not apply.

Section 6.5 applies only to exempt and emergency standby units. The turbines at this facility are not exempt or emergency standby units, as defined in the rule. Therefore, this section does not apply.

L. 40 CFR Part 60, Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing for Which Construction, Reconstruction, or Modification Commenced After January 5, 1981, and on or Before November 7, 2006

§ 60.480 Applicability and designation of affected facility.

(a)(1) The provisions of this subpart apply to affected facilities in the synthetic organic chemicals manufacturing industry.

(2)(b) Any affected facility under paragraph (a) of this section that commences construction, reconstruction, or modification after January 5, 1981, and on or before November 7, 2006, shall be subject to the requirements of this subpart.

The facility operates multiple units subject to the requirements of this subpart, and conditions which satisfy the requirements of this subpart are already listed on the existing facility-wide permit, S-2234-0-2. However, conditions as required by this subpart are listed on the current permit for multiple units. Therefore, the existing applicable conditions on the current permits will be removed and will not be carried over to the proposed draft permits for these units. The existing conditions on facility-wide permit S-2234-0-2 will be carried over to proposed facility-wide permit S-2234-0-3. Therefore, the following updates will be applied:

S-2234-3: Conditions 33, 34, 36 through 41, and 43 through 74 on current PTO -3-18 have been removed because they are already listed on the facility-wide permit. The conditions have been carried over to the draft facility-wide permit, S-2234-0-3.

S-2234-175: Conditions 4, 5, 7 through 35 on current PTO -175-1 have been removed because they are already listed on the facility-wide permit. The

conditions have been carried over to the draft facility-wide permit, S-2234-0-3.

S-2234-176: Conditions 4, 5, 8 through 13, 15 through 18, and 20 through 47 on current PTO -176-1 have been removed because they are already listed on the facility-wide permit. The conditions have been carried over to the draft facility-wide permit, S-2234-0-3.

No additional changes have been made to any permit units subject to this subpart.

The following conditions on the facility-wide permit will ensure compliance with Subpart VV.

S-2234-0-3	Conditions 1 , 2, 4 through 9, and 11 through 42

M. 40 CFR Part 60, Subpart KKK, Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plants

Subpart KKK establishes standards of performance for equipment leaks of VOC from onshore natural gas processing plants.

This subpart has not been amended since the previous Title V permit renewal. As such, there are no changes as required by the subpart to any permits at this time.

However, a condition as required by this subpart is listed on the current permit for multiple units. The same condition is already listed on the facility-wide permit. Therefore, the following updates will be applied:

S-2234-3: Condition 35 on current PTO -3-18 has been removed because it is already listed on the facility-wide permit. The condition has been carried over to the draft facility-wide permit, S-2234-0-3, as Condition 3.

S-2234-175: Condition 6 on current PTO -175-1 has been removed because it is already listed on the facility-wide permit. The condition has been carried over to the draft facility-wide permit, S-2234-0-3, as Condition 3.

S-2234-176: Condition 7 on current PTO -176-1 has been removed because it is already listed on the facility-wide permit. The condition has been carried over to the draft facility-wide permit, S-2234-0-3, as Condition 3.

No additional changes have been made to any permit units subject to this subpart.

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

§ 63.6580 Purpose

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

§ 63.6585 Applicability

You are subject to this subpart if you own or operate a stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand. As such, all IC engines at this facility are subject to this subpart.

§ 63.6590 What parts of my plant does this subpart cover?

This subpart applies to each affected source.

(a) *Affected source.* An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

This facility is an area source of HAP emissions; therefore, this subpart applies.

1. Existing stationary RICE

(iii) For stationary RICE located at an area source of HAP emissions, stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

The following engines are defined as "existing" because they were installed prior to June 12, 2006:

S-2234-9, -10, -11, -12, -15, -16, -17, -18, -27, -28, -29, -30, -31, -38, -39, -43, -44, -45, -46, -47, -48, -57 through -87, -104, -126, -127, -129 through -137, and -170

2. New stationary RICE

(iii) A stationary RICE located at an area source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

The following engines are defined as "new" because they were installed on or after June 12, 2006:

S-2234-182 through -186, -206 through -212, and -214

(3) The following stationary RICE do not have to meet the requirements of this subpart and of subpart A of this part, including initial notification requirements:

(i) Existing spark ignition 2 stroke lean burn (2SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;
(ii) Existing spark ignition 4 stroke lean burn (4SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;
(iii) Existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;
(iv) Existing limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;
(v) Existing stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis;
(vi) Existing residential emergency stationary RICE located at an area source of HAP emissions;
(vii) Existing commercial emergency stationary RICE located at an area source of HAP emissions; or
(viii) Existing institutional emergency stationary RICE located at an area source of HAP emissions.

The existing engines at this facility do not qualify for any of the exemptions listed in (3)(i) thru (3)(viii) above.

(c) *Stationary RICE subject to Regulations under 40 CFR Part 60.* An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.

(1) A new or reconstructed stationary RICE located at an area source;
(2) A new or reconstructed 2SLB stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;
(3) A new or reconstructed 4SLB stationary RICE with a site rating of less than 250 brake HP located at a major source of HAP emissions;
(4) A new or reconstructed spark ignition 4 stroke rich burn (4SRB) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;
(5) A new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis;
(6) A new or reconstructed emergency or limited use stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;
(7) A new or reconstructed compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.

All new engines at this facility fall under (c)(1) shown above. Therefore, no further discussion is required for units S-2234-182 through -186, -206 through -212, and -214.

Unit -206 is compression-ignited and will be evaluated under 40 CFR Part 60, Subpart IIII. The remaining units are spark-ignited and will be evaluated under 40 CFR Part 60, Subpart JJJJ.

§ 63.6595 When do I have to comply with this subpart?

(a) *Affected sources.* (1) If you have an existing stationary RICE, excluding existing non-emergency CI stationary RICE, with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than June 15, 2007. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of

HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than May 3, 2013. If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than October 19, 2013.

The following engines at the facility are full-time spark-ignited engines greater than 500 horsepower:

S-2234-9, -10, -11, -12, -15, -16, -17, -18, -27, -28, -29, -30, -31, -48, -57 through -86, -126, -127, and -129 through -137

For full-time spark-ignited engines rated greater than 500 horsepower, the operator will be need to submit an Authority to Construct application to modify their permits in order to show compliance with Subpart ZZZZ. However, these requirements do not become applicable until October 13, 2013. Therefore, the facility will be required to modify the permit prior to October 13, 2013 in order to show compliance with this subpart. At that time, requirements to show compliance will be added as permit conditions. Therefore, the requirements of this regulation will not be included in this project for the engines listed above.

The following condition will be added to the draft PTOs for the units listed above in order to ensure that an ATC application will be submitted to show compliance with Subpart ZZZZ.

Unit	Condition
-9-8	2
-10-8	2
-11-8	2
-12-8	2
-15-8	2
-16-8	2
-17-8	2
-18-8	2
-27-7	2
-28-8	2
-29-11	2
-30-11	2
-31-11	2
-48-6	2

Unit	Condition
-57-11	2
-58-13	2
-59-12	2
-60-7	2
-61-11	2
-62-8	2
-63-11	2
-64-9	2
-65-9	2
-66-9	2
-67-11	2
-68-11	2
-69-11	2
-70-12	2

Unit	Condition
-71-12	2
-72-11	2
-73-11	2
-74-11	2
-75-8	2
-76-8	2
-77-8	2
-78-10	2
-79-10	2
-80-7	2
-81-7	2
-82-11	2
-83-10	2
-84-7	2

Unit	Condition
-85-7	2
-86-7	2
-126-4	1
-127-2	1
-129-3	1
-130-2	1
-131-2	1
-132-2	1
-133-2	1
-134-2	1
-135-2	1
-136-2	1
-137-2	1

Units S-2234-38, -39, -43, -45, -104, -170, and -206 are compression-ignited emergency engines. Units S-2234-44, -46, -47, and -87 are spark-ignited emergency engines. For emergency engines, Subpart ZZZZ requirements will not necessitate an Authority to Construct in order to modify the permits to show compliance with Subpart ZZZZ. Therefore, for these emergency engines, compliance with Subpart ZZZZ will be discussed.

§ 63.6603 What emission limitations and operating limitations must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?

(a) If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 1b and Table 2b to this subpart that apply to you. Note, there are no Table 1b or Table 2b operating limitations for emergency engines.

Table 2d to Subpart ZZZZ of Part 63 - Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions.

As stated in §§63.6603 and 63.6640, the following table applies to existing stationary RICE located at area sources of HAP emissions:

For each . . .	You must meet the following requirements, except during periods of startup . . .	During periods of startup you must . . .
4. Emergency stationary CI RICE and black start stationary CI RICE.*	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;	N/A
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and	N/A
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	N/A
5. Emergency stationary SI RICE and black start stationary SI RICE.*	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;	N/A
	b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first; and	N/A
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	N/A

*If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

§ 63.6625 What are my monitoring, installation, collection, operation, and maintenance requirements?

(e) If you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:

(1) An existing stationary RICE with a site rating of less than 100 HP located at a major source of HAP emissions;
(2) An existing emergency or black start stationary RICE with a site rating of less than or equal to 500 HP located at a major source of HAP emissions;
(3) An existing emergency or black start stationary RICE located at an area source of HAP emissions;
(h) If you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply.

§ 63.6640 How do I demonstrate continuous compliance with the emission limitations and operating limitations?

(a) You must demonstrate continuous compliance with each emission limitation and operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart.

(b) You must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in §63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

(f) *Requirements for emergency stationary RICE.*

(1) If you own or operate an existing emergency stationary RICE located at an area source of HAP emissions, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1)(i) through (iii) of this section. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1)(i) through (iii) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1)(i) through (iii) of this section, the engine will not be considered an emergency engine under this subpart and will need to meet all requirements for non-emergency engines.

(i) There is no time limit on the use of emergency stationary RICE in emergency situations.

(ii) You may operate your emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year.

(iii) You may operate your emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not

limited by this paragraph (f)(1)(iii), as long as the power provided by the financial arrangement is limited to emergency power.

Table 6 to Subpart ZZZZ of Part 63 - Continuous Compliance With Emission Limitations, Operating Limitations, Work Practices, and Management Practices

As stated in §63.6640, you must continuously comply with the emissions and operating limitations and work or management practices as required by the following:

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
9. Existing emergency and black start stationary RICE located at an area source of HAP, and Existing non-emergency 4SLB and 4SRB stationary RICE ≤ 500 HP located at an area source of HAP	a. Work or Management practices	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

§ 63.6645 What notifications must I submit and when?

There are no notifications necessary for the existing engines at this facility.

§ 63.6650 What reports must I submit and when?

There are no report submittals necessary for existing engines at this facility.

§ 63.6655 What records must I keep?

(a) If you must comply with the emission and operating limitations, you must keep the records as follows:
(2) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

(3) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).
(4) Records of all required maintenance performed on the air pollution control and monitoring equipment.
(5) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

(d) You must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you.

(e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE:

(2) An existing stationary emergency RICE.
(3) An existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart.

(f) If you own or operate any of the stationary RICE in paragraph (f)(2) below, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.

(2) An existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines.

§ 63.6660 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1).
(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1).

Per the discussion above, the following conditions have been added to the proposed permits to ensure compliance for the compression-ignited emergency engines:

S-2234-38-4	Conditions 5, 7, 13-19
S-2234-39-4	Conditions 5, 7, 13-19
S-2234-43-4	Conditions 5, 8, 16-22
S-2234-44-5	Conditions 6, 11, 17-23
S-2234-45-5	Conditions 5, 7, 13-19
S-2234-46-6	Conditions 6, 11, 17-23
S-2234-47-6	Conditions 6, 11, 17-23
S-2234-87-6	Conditions 6, 11, 17-23
S-2234-104-3	Conditions 9, 12, 18-24
S-2234-170-2	Conditions 3, 8, 14-20

O. 40 CFR 60, Subpart IIII, New Source Performance Standards (NSPS) for Stationary Compression Ignition Internal Combustion Engines

The following discussion applies to "new" compression-ignited engine S-2234-206.

This rule incorporates NSPS from Part 60, Chapter 1, Title 40, Code of Federal Regulations (CFR); and applies to all new sources of air pollution and modifications of existing sources of air pollution listed in 40 CFR Part 60. 40 CFR Part 60, Subpart IIII is the only subpart that applies to compression-ignited internal combustion engines.

There have been no changes to this subpart since the previous Title V modification for this permit unit, project S-110536. As such, there are no changes to the permit per this subpart at this time.

Continued compliance is ensured with the following conditions:

S-2234-206-2	Conditions 3-8

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

The following discussion applies to "new" spark-ignited engines S-2234-182 through -186, -207 through -212, and -214.

§60.4230(a)(4) through (a)(5) specify for owners which stationary spark ignition (SI) internal combustion engines (ICE) are subject to the provisions of this subpart.

Section (a)(4) applies to stationary SI ICE that commence construction after June 12, 2006, where the stationary SI ICE are manufactured:

(i) On or after July 1, 2007 for engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP);
(ii) On or after January 1, 2008, for lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP;
(iii) On or after July 1, 2008, for engines with a maximum engine power less than 500 HP; or
(iv) On or after January 1, 2009, for emergency engines with a maximum engine power greater than 19 KW (25 HP).

All the engines were manufactured in 2006. Therefore, they do not fall under any category listed above.

Section (a)(5) applies to stationary SI ICE that commence modification or reconstruction after June 12, 2006.

None of the engines has commenced modification or reconstruction after June 12, 2006. Therefore, this section does not apply.

None of the engines meet any of the applicability requirements listed in §60.4230(a)(4) through (a)(5). Therefore, no requirements of 40 CFR 60 Subpart JJJJ apply to these engines.

Q. 40 CFR Part 60, Subpart KKKK, Standards of Performance for Stationary Combustion Turbines

This subpart establishes emission standards and compliance schedules for the control of emissions from stationary combustion turbines that commenced construction, modification or reconstruction after February 18, 2005.

Section 60.4305(a) states that if you are the owner or operator of a stationary combustion turbine with a heat input at peak load equal to or greater than 10.7 gigajoules (10 MMBtu) per hour, based on the higher heating value of the fuel, which commenced construction, modification, or reconstruction after February 18, 2005, your turbine is subject to this subpart. Only heat input to the combustion turbine should be included when determining whether or not this subpart is applicable to your turbine. Any additional heat input to associated heat recovery steam generators (HRSG) or duct burners should not be included when determining your peak heat input. However, this subpart does apply to emissions from any associated HRSG and duct burners.

The facility operates two stationary combustion turbines permitted under S-2234-52 and -53.

Section 60.2 of 40 CFR 60 Subpart A defines a modification as "any physical change in, or change in the method of operation of, an existing facility which increases the amount of any air pollutant (to which a standard applies) emitted into the atmosphere by that facility or which results in the emission of any air pollutant (to which a standard applies) into the atmosphere not previously emitted."

The two turbines commenced construction prior to February 18, 2005, and have not been reconstructed or modified, as defined in 40 CFR 60 Subpart A, since. Therefore, the requirements of this NSPS do not apply.

R. 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners

There are applicable requirements from Title VI of the CAA (Stratospheric Ozone) that apply to all sources in general. These requirements pertain to air conditioners, chillers and refrigerators located at a Title V source and to disposal of air conditioners or maintenance/recharging/disposal of motor vehicle air conditioners (MVAC). These requirements are addressed in condition 70 of permit -0-3.

S. 40 CFR Part 82, Subpart F, Recycling and Emissions Reduction

There are applicable requirements from Title VI of the CAA (Stratospheric Ozone) that apply to all sources in general. These requirements pertain to air conditioners, chillers and refrigerators located at a Title V source and to disposal of air conditioners or maintenance/recharging/disposal of motor vehicle air conditioners (MVAC). These requirements are addressed in condition 69 of permit -0-3.

T. 40 CFR Part 64 - CAM

§64.2 – Applicability

This section requires Compliance Assurance Monitoring (CAM) for units that meet the following three criteria:

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

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

a. S-2234-1 and 3 – Low Temperature Separation (LTS) Plants

The LTS plants consist of various process equipment and two 27.5 MMBtu/hr process heaters. The permits do not contain emission limitations for the process equipment. Therefore, the CAM requirements of 40 CFR 64 are not applicable to the process equipment and no further discussion is required.

The 27.5 MMBtu/hr process heaters contain emission limits for NO_X, CO, VOC, PM_{10} and SO_X emissions, but it does not have add-on controls for CO, VOC, PM_{10}, and SO_X. Therefore, the CAM requirements of 40 CFR 64 are not applicable for these pollutants.

This permit may be subject to CAM for NOx since there is a NOx limit and the process heaters are equipped with Selective Catalytic Reduction systems to control NOx emissions.

The permitted NOx emission factor is 0.007 lb/MMBtu, and the SCR system is assumed to decrease NOx emissions by 90%. Therefore, uncontrolled emissions for each unit are calculated as follows:

(0.007 lb-NOx/MMBtu x 27.5 MMBtu/hr x 8,760 hr/yr) ÷ (1 – 0.90) = 16,863 lb-NOx/yr

Since the NOx pre-control potential to emit is below the Major Source Threshold for NOx, CAM is not required for these units.

b. S-2234-4 – Loading Rack

This loading rack contains an emission limit for VOC emissions. However, this loading rack is served by a vapor control system. The vapor control system is a closed system where all of the vapors captured are routed back into the separation plant for processing. Therefore, the vapor recovery system will not be considered an external control device. Since this loading rack is not served by any add on control devices, it is not subject to the CAM requirements of 40 CFR Subpart 64 and no further discussion is required.

c. S-2234-8, -14, -204, and -205 – Emergency Flares Serving LTS Plants 1 and 2

These flares are used to control the VOC emissions from the LTS plants. They are only used during emergency situations. The exhaust for each flare is not equipped with any additional control devices. Therefore, the CAM requirements of 40 CFR 64 are not applicable and no further discussion is required.

d. S-2234-9, -10, -11, -15, -16, and -17 – 5,500 hp Ingersoll-Rand, model 616KVR, lean burn natural gas-fired IC engines

These engines contain daily emission limits for NO_X, CO, VOC, PM_{10} and SO_X emissions. However, these are all lean burn internal combustion engines which are not served by any add on control devices. Since these engines are not served by any add on control devices, they are not subject to the CAM requirements of 40 CFR Subpart 64 and no further discussion is required.

e. S-2234-12, -18, -62, -75, -76, and -77 – 2,000 hp Ingersoll-Rand, model 412KVS, lean burn natural gas-fired IC engines

These engines contain daily emission limits for NO_X, CO, VOC, PM_{10} and SO_X emissions. However, these are all lean burn internal combustion engines which are not served by any add on control devices. Since these engines are not served by any add on control devices, they are not subject to the CAM requirements of 40 CFR Subpart 64 and no further discussion is required.

f. S-2234-19 – 35R Gas Plant

This permit only contains a daily emissions limit for VOC emissions. However, this unit is not served by any add-on control devices. Therefore, the CAM requirements of 40 CFR 64 are not applicable and no further discussion is required.

g. S-2234-27 and -28 – 4,000 hp Delaval, model HVA12, lean burn natural gas-fired IC engines

These engines contain daily emission limits for NO_X, CO, VOC, PM_{10} and SO_X emissions. However, these are lean burn internal combustion engines which are not served by any add on control devices. Since these engines are not served by any add on control devices, they are not subject to the CAM requirements of 40 CFR Subpart 64 and no further discussion is required.

h. S-2234-29, -30, -31, -57, -58, -59, -61, -63, -67, -68, -69, -70, -71, -72, -73, -74, -78 and -79 – 1,000 hp Waukesha, model 7042, rich burn natural gas-fired IC engines

These engines contain emission limits for NO_X, CO, VOC, PM_{10} and SO_X emissions. However, these engines are not equipped with any external control devices for PM_{10} and SO_X emissions. Therefore, the CAM requirements of 40 CFR 64 are not applicable for PM_{10} and SO_X and no further discussion is required.

Each of these engines is equipped with a non-selective catalytic reduction (NSCR) system. The NSCR system provides control for NO_X, CO and VOC emissions. Typically the District assumes that a NSCR system will achieve 90% control for NO_X emissions, 80% control for CO emissions and 50% control for VOC emissions *(Update On Emissions - Form 960, Second Edition, Waukesha Engine Division, Dresser Industries, October,*

1991). Therefore, the uncontrolled emission rates from each of these engines can be determined using the emission limit on the current permit and the control efficiency of the NSCR system.

NO_X Emissions:

Emission Limit = 0.72 grams/hp-hr

Annual Uncontrolled PE = [0.72 grams/hp-hr x 1,000 hp x 8,760 hr/year] / [453.6 gram/lb x (1 – 0.90)]

Annual Uncontrolled PE = 139,048 lb/year

As calculated above, the uncontrolled PE for NOx is greater than the Major Source threshold. Therefore, these engines are subject to the requirements of 40 CFR 64.

In order to determine if a 15-minute monitoring interval is required, we will determine if post-control emissions also exceed the Major Source threshold for NO_X emissions.

Emission Limit = 0.72 grams/hp-hr

Annual Uncontrolled PE = [0.72 grams/hp-hr x 1,000 hp x 8,760 hr/year] / [453.6 gram/lb]

Annual Uncontrolled PE = 13,905 lb/year

Since the post-control annual emissions do not exceed the Major Source threshold for NO_X, a once-daily monitoring interval is sufficient to determine compliance with CAM.

CO Emissions:

Emission Limit = 8.82 lb/hr

Annual Uncontrolled PE = [8.82 lb/hr x 8,760 hr/year] / (1 – 0.80)]

Annual Uncontrolled PE = 386,316 lb/year

As calculated above, the uncontrolled PE for CO is greater than the Major Source threshold. Therefore, these engines are subject to the requirements of 40 CFR 64.

In order to determine if a 15-minute monitoring interval is required, we will determine if post-control emissions also exceed the Major Source threshold for CO missions.

Emission Limit = 8.82 lb/hr

Annual Controlled PE = [8.82 lb/hr x 8,760 hr/year]

Annual Controlled PE = 77,263 lb/year

Since the post-control annual emissions do not exceed the Major Source threshold for CO, a once-daily monitoring interval is sufficient to determine compliance with CAM.

VOC Emissions:

Emission Limit = 250 ppmv @ 15% O_2 (equivalent to 2.33 lb/hr)

Annual Uncontrolled PE = [2.33 lb/hr x 8,760 hr/year] / (1 – 0.50)]

Annual Uncontrolled PE = 40,822 lb/year

As calculated above, the uncontrolled PE for VOC is greater than the Major Source threshold. Therefore, these engines are subject to the requirements of 40 CFR 64.

In order to determine if a 15-minute monitoring interval is required, we will determine if post-control emissions also exceed the Major Source threshold for VOC missions.

Emission Limit = 250 ppmv @ 15% O_2 (equivalent to 2.33 lb/hr)

Annual Controlled PE = [2.33 lb/hr x 8,760 hr/year]

Annual Controlled PE = 20,411 lb/year

Since the post-control annual emissions exceed the Major Source threshold for VOC, a 15-minute monitoring interval is required to determine compliance with CAM. However, the applicant has stated that they intend to submit an Authority to Construct application to modify the VOC emissions rate for these units so post-control VOC emissions do not exceed the Major Source Threshold. A permit condition will be added to the draft permits to ensure that the facility submits an ATC application to

modify the permits, and to implement the ATC within six months of the renewed Title V permit being issued.

Since the pre-control annual emissions exceed the Major Source threshold for NOx, CO, and VOC, a once-daily monitoring interval is still required to satisfy compliance with CAM. The facility proposes to comply with once-daily monitoring intervals by establishing an O_2 sensor output voltage range for the control device, and recording the O_2 sensor reading on a daily basis.

CAM requirements for these engines will be satisfied by the following conditions:

Unit	Conditions
S-2234-29	29-34, 37
S-2234-30	29-34, 37
S-2234-31	29-34, 37
S-2234-57	28-33, 38
S-2234-58	29-34, 37
S-2234-59	29-34, 37
S-2234-61	28-33, 38
S-2234-63	29-34, 37
S-2234-67	28-33, 38

Unit	Conditions
S-2234-68	29-34, 37
S-2234-69	29-34, 37
S-2234-70	29-34, 37
S-2234-71	29-34, 37
S-2234-72	29-34, 37
S-2234-73	29-34, 37
S-2234-74	29-34, 37
S-2234-78	29-34, 37
S-2234-79	29-34, 37

Note: A condition requiring the facility to submit a Title V minor modification application to incorporate the O_2 sensor output voltage range into the permit states that the minor modification application shall be submitted within 12 months from the date the renewed permit is issued. Prior to the final renewed permit being issued, the condition will be modified to state the precise date 12 months from the date the renewed permit is issued.

i. S-2234-38, -39, and -45 – 310 hp Cummins diesel-fired emergency IC engines

These engines do not contain emission limits for NO_X, CO, VOC or PM_{10} emissions. Since these engine permits do not contain emission limits for NO_X, CO, VOC or PM_{10} emissions, they are not subject to the CAM requirements of 40 CFR Subpart 64 and no further discussion is required.

These engines permits contain a SO_X emission limit in the form of a diesel fuel sulfur limitation of 0.0015%, by weight. However, these engines are not equipped with any external control devices for SO_X emissions.

Therefore, the CAM requirements of 40 CFR 64 are not applicable and no further discussion is required.

j. S-2234-43 – 227 hp Caterpillar diesel-fired emergency IC engine

This engine does not contain emission limits for NO_X, CO, VOC or PM_{10} emissions. Since this engine permit does not contain emission limits for NO_X, CO, VOC or PM_{10} emissions, it is not subject to the CAM requirements of 40 CFR Subpart 64 for these pollutants and no further discussion is required.

This engine permit contains a SO_X emission limit in the form of a diesel fuel sulfur limitation of 0.0015%, by weight. However, this engine is not equipped with any external control devices for SO_X emissions. Therefore, the CAM requirements of 40 CFR 64 are not applicable and no further discussion is required.

k. S-2234-44 – 773 hp Waukesha natural gas-fired emergency IC engine

This engine does not contain emission limits for NO_X, CO, VOC or PM_{10} emissions. Since this engine permit does not contain emission limits for NO_X, CO, VOC or PM_{10} emissions, it is not subject to the CAM requirements of 40 CFR Subpart 64 for these pollutants and no further discussion is required.

This engine permit contains a SO_X emission limit in the form of a natural gas fuel sulfur limitation of 0.017%, by weight. However, this engine is not equipped with any external control devices for SO_X emissions. Therefore, the CAM requirements of 40 CFR 64 are not applicable and no further discussion is required.

l. S-2234-46 and -47 – 793 hp Waukesha natural gas-fired emergency IC engines

These engines do not contain emission limits for NO_X, CO, VOC or PM_{10} emissions. Since these engine permits do not contain emission limits for NO_X, CO, VOC or PM_{10} emissions, they are not subject to the CAM requirements of 40 CFR Subpart 64 for these pollutants and no further discussion is required.

These engine permits contain a SO_X emission limit in the form of a natural gas fuel sulfur limitation of 0.017%, by weight. However, these engines

are not equipped with any external control devices for SO_X emissions. Therefore, the CAM requirements of 40 CFR 64 are not applicable and no further discussion is required.

m. S-2234-48, -84, -85, and -86 – 490 hp Caterpillar rich burn natural gas-fired IC engines

These engines contain emission limits for NO_X, CO, VOC, PM_{10} and SO_X emissions. However, these engines are not equipped with any external control devices for PM_{10} and SO_X emissions. Therefore, the CAM requirements of 40 CFR 64 are not applicable for these pollutants and no further discussion is required.

Each of these engines is equipped with a non-selective catalytic (NSCR) reduction system. The NSCR system provides control for NO_X, CO and VOC emissions. Typically the District assumes that a NSCR system will achieve 90% control for NO_X emissions, 80% control for CO emissions and 50% control for VOC emissions *(Update On Emissions - Form 960, Second Edition, Waukesha Engine Division, Dresser Industries, October, 1991)*. Therefore, the uncontrolled emission rates from each of these engines can be determined using the emission limit on the current permit and the control efficiency of the NSCR system.

NO_X Emissions:

Emission Limit = 0.72 grams/hp-hr

Annual Uncontrolled PE = [0.72 grams/hp-hr x 490 hp x 8,760 hr/year] / [453.6 gram/lb x (1 – 0.90)]

Annual Uncontrolled PE = 68,133 lb/year

As calculated above, the uncontrolled PE for NOx is greater than the Major Source threshold. Therefore, these engines are subject to the requirements of 40 CFR 64.

In order to determine if a 15-minute monitoring interval is required, we will determine if post-control emissions also exceed the Major Source threshold for NO_X emissions.

Emission Limit = 0.72 grams/hp-hr

Annual Controlled PE = [0.72 grams/hp-hr x 490 hp x 8,760 hr/year] / [453.6 gram/lb]

Annual Controlled PE = 6,813 lb/year

Since the post-control annual emissions do not exceed the Major Source threshold for NO_X, a once-daily monitoring interval is sufficient to determine compliance with CAM.

CO Emissions:

Emission Limit = 11.6 grams/hp-hr

Annual Uncontrolled PE = [11.6 grams/hp-hr x 490 hp x 8,760 hr/year] / [453.6 gram/lb x (1 – 0.80)]

Annual Uncontrolled PE = 548,852 lb/year

As calculated above, the uncontrolled PE for CO is greater than the Major Source threshold. Therefore, these engines are subject to the requirements of 40 CFR 64.

In order to determine if a 15-minute monitoring interval is required, we will determine if post-control emissions also exceed the Major Source threshold for CO missions.

Emission Limit = 11.6 grams/hp-hr

Annual Controlled PE = [11.6 grams/hp-hr x 490 hp x 8,760 hr/year] / [453.6 gram/lb]

Annual Controlled PE = 109,770 lb/year

Since the post-control annual emissions do not exceed the Major Source threshold for CO, a once-daily monitoring interval is sufficient to determine compliance with CAM.

VOC Emissions:

Emission Limit = 58 ppmv @ 15% O_2 (equivalent to 0.281 grams/hp-hr)

Annual Uncontrolled PE = [0.281 grams/hp-hr x 490 hp x 8,760 hr/year] / [453.6 gram/lb x (1 – 0.50)]

Annual Uncontrolled PE = 5,318 lb/year

As shown above, the uncontrolled PE for VOC emissions is less than the major source threshold. Therefore, these engines are not subject to the requirements of 40 CFR 64 for this pollutant and no further discussion is required.

Since the pre-control annual emissions exceed the Major Source threshold for NOx and CO, a once-daily monitoring interval is still required to satisfy compliance with CAM. The facility proposes to comply with once-daily monitoring intervals by establishing an O_2 sensor output voltage range for the control device, and recording the O_2 sensor reading on a daily basis.

CAM requirements for these engines will be satisfied by the following conditions:

Unit	Conditions
S-2234-48	28-33
S-2234-84	28-33

Unit	Conditions
S-2234-85	28-33
S-2234-86	28-33

Note: A condition requiring the facility to submit a Title V minor modification application to incorporate the O_2 sensor output voltage range into the permit states that the minor modification application shall be submitted within 12 months from the date the renewed permit is issued. Prior to the final renewed permit being issued, the condition will be modified to state the precise date 12 months from the date the renewed permit is issued.

n. S-2234-52 and '-53 – 25.4 MW natural gas-fired turbines

These turbines contain emission limits for NO_X, CO, VOC, PM_{10} and SO_X emissions. However, these turbines are not equipped with any external control devices for CO, VOC, PM_{10} and SO_X emissions. Therefore, the CAM requirements of 40 CFR 64 are not applicable for these pollutants and no further discussion is required.

These turbines are equipped with ammonia injection for NO_X emission control. However, these gas turbines qualify for the exemption in 40 CFR 64.2(b)(i) for NO_X This exemption is from CAM requirements pertaining to emission limits contained in NSPSs that were proposed prior to November 30, 2000. The EPA included this exemption with the reasoning that newer regulations will include adequate monitoring and thus the CAM

Rule would be redundant. The gas turbine is subject to the Stationary Gas Turbine NSPS (Subpart GG). Therefore, the CAM requirements of 40 CFR 64 are not applicable for this pollutant and no further discussion is required.

o. S-2234-60, -64, -65, and -66 – 650 hp Waukesha, model L7042, natural gas fired internal combustion engines

These engines contain emission limits for NO_X, CO, VOC, PM_{10} and SO_X emissions. However, these engines are not equipped with any external control devices for PM_{10} and SO_X emissions. Therefore, the CAM requirements of 40 CFR 64 are not applicable for these pollutants and no further discussion is required.

Each of these engines is equipped with a non-selective catalytic reduction (NSCR) system. The NSCR system provides control for NO_X, CO and VOC emissions. Typically the District assumes that a NSCR system will achieve 90% control for NO_X emissions, 80% control for CO emissions and 50% control for VOC emissions *(Update On Emissions - Form 960, Second Edition, Waukesha Engine Division, Dresser Industries, October, 1991)*. Therefore, the uncontrolled emission rates from each of these engines can be determined using the emission limit on the current permit and the control efficiency of the NSCR system.

NO_X Emissions:

Emission Limit = 0.72 grams/hp-hr

Annual Uncontrolled PE = [0.72 grams/hp-hr x 650 hp x 8,760 hr/year] / [453.6 gram/lb x (1 – 0.90)]

Annual Uncontrolled PE = 90,381 lb/year

As calculated above, the uncontrolled PE for NOx is greater than the Major Source threshold. Therefore, these engines are subject to the requirements of 40 CFR 64.

In order to determine if a 15-minute monitoring interval is required, we will determine if post-control emissions also exceed the Major Source threshold for NO_X emissions.

Emission Limit = 0.72 grams/hp-hr

Annual Uncontrolled PE = [0.72 grams/hp-hr x 650 hp x 8,760 hr/year] / [453.6 gram/lb]

Annual Uncontrolled PE = 9,038 lb/year

Since the post-control annual emissions do not exceed the Major Source threshold for NO_X, a once-daily monitoring interval is sufficient to determine compliance with CAM.

CO Emissions:

Emission Limit = 2.1 grams/hp-hr

Annual Uncontrolled PE = [2.1 grams/hp-hr x 650 hp x 8,760 hr/year] / [453.6 gram/lb x (1 – 0.80)]

Annual Uncontrolled PE = 131,806 lb/year

As calculated above, the uncontrolled PE for CO is not greater than the Major Source threshold. Therefore, these engines are not subject to the requirements of 40 CFR 64 for CO emissions.

VOC Emissions:

Emission Limit = 67 ppmv @ 15% O_2 (equivalent to 0.325 grams/hp-hr)

Annual Uncontrolled PE = [0.325 grams/hp-hr x 650 hp x 8,760 hr/year] / [453.6 gram/lb x (1 – 0.50)]

Annual Uncontrolled PE = 8,159 lb/year

As shown above, the uncontrolled PE for VOC emissions is less than the major source threshold. Therefore, these engines are not subject to the requirements of 40 CFR 64 for this pollutant and no further discussion is required.

Since the pre-control annual emissions exceed the Major Source threshold for NOx, a once-daily monitoring interval is still required to satisfy compliance with CAM. The facility proposes to comply with once-daily monitoring intervals by establishing an O2 sensor output voltage range for the control device, and recording the O2 sensor reading on a daily basis.

CAM requirements for these engines will be satisfied by the following conditions:

S-2234-60	28-33	S-2234-65	28-33
S-2234-64	28-33	S-2234-66	28-33

Note: A condition requiring the facility to submit a Title V minor modification application to incorporate the O2 sensor output voltage range into the permit states that the minor modification application shall be submitted within 12 months from the date the renewed permit is issued. Prior to the final renewed permit being issued, the condition will be modified to state the precise date 12 months from the date the renewed permit is issued.

p. S-2234-80 and -81 – 1,000 hp Waukesha, model 7042, lean burn natural gas-fired IC engines

These engines contain daily emission limits for NO_X, CO, VOC, PM_{10} and SO_X emissions. However, these are lean burn internal combustion engines which are not served by any add on control devices. Since these engines are not served by any add on control devices, they are not subject to the CAM requirements of 40 CFR Subpart 64 and no further discussion is required.

q. S-2234-82 and -83 – 1,500 hp Waukesha lean burn natural gas-fired emergency internal combustion engine

These engines contain daily emission limits for NO_X, CO, VOC, PM_{10} and SO_X emissions. However, these are lean burn internal combustion engines are not served by any add on control devices. Since these engines are not served by any add on control devices, they are not subject to the CAM requirements of 40 CFR Subpart 64 and no further discussion is required.

r. S-2234-87 – 88 hp Waukesha natural gas-fired emergency internal combustion engine

This engine does not contain emission limits for NO_X, CO, VOC or PM_{10} emissions. Since this engine permit does not contain emission limits for NO_X, CO, VOC or PM_{10} emissions, it is not subject to the CAM requirements of 40 CFR Subpart 64 for these pollutants and no further discussion is required.

This engine permit contains a SO_X emission limit in the form of a natural gas fuel sulfur limitation of 0.017%, by weight. However, this engine is not equipped with any external control devices for SO_X emissions. Therefore, the CAM requirements of 40 CFR 64 are not applicable and no further discussion is required.

s. S-2234-97, -98, -99, -100, -101, -107, -108, -109, -110, -111, -112, -175, and -176 – electrically driven natural gas compressors (various horsepower ratings)

These natural gas compressors do not contain emission limits for NO_X, CO, PM_{10}, or SO_X emissions. Since these permits do not contain emission limits for NO_X, CO, PM_{10} or SO_X emissions, they are not subject to the CAM requirements of 40 CFR Subpart 64 for these pollutants and no further discussion is required.

These natural gas compressor permits each contain a lb/day VOC emission limit. However, the natural gas compressors are not equipped with any external control devices for VOC emissions. Therefore, the CAM requirements of 40 CFR 64 are not applicable and no further discussion is required.

t. S-2234-139, -140, -141, -142, -143, -144, -145, -147, -150, -151, -152, -153, -154, -157, -158, -159, -160, -161, -162, -163, -164, -165, -166, -167, -180, -181, -200, -201, -202, and -203 – electrically driven compressor skids (various horsepower ratings)

These compressor skids do not contain emission limits for NO_X, CO, PM_{10}, or SO_X emissions. Since these permits do not contain emission limits for NO_X, CO, PM_{10} or SO_X emissions, they are not subject to the CAM requirements of 40 CFR Subpart 64 for these pollutants and no further discussion is required.

These compressor skids permits each contain a lb/day VOC emission limit. However, the compressor skids are not equipped with any external control devices for VOC emissions. Therefore, the CAM requirements of 40 CFR 64 are not applicable and no further discussion is required.

u. S-2234-104 – 1,445 hp Caterpillar diesel fired emergency internal combustion engine

This engine contains emission limits for NO_X, CO, VOC, PM_{10} and SO_X emissions. However, this engine is not equipped with any external control devices. Therefore, the CAM requirements of 40 CFR Subpart 64 for these pollutants are not applicable and no further discussion is required.

v. S-2234-114, -115, -116, -117, -118, -119, -120, and -121 – natural gasoline and butane storage tanks (various sizes)

These storage tanks do not contain emission limits for NO_X, CO, PM_{10}, or SO_X emissions. Since these storage tank permits do not contain emission limits for NO_X, CO, PM_{10} or SO_X emissions, they are not subject to the CAM requirements of 40 CFR Subpart 64 for these pollutants and no further discussion is required.

These storage tank permits each contain a lb/day VOC emission limit. However, the storage tanks are not equipped with any external control devices for VOC emissions. Therefore, the CAM requirements of 40 CFR 64 are not applicable and no further discussion is required.

w. S-2234-122, -172, and -194 – glycol dehydration unit

These units do not contain emission limits for NO_X, CO, PM_{10}, or SO_X emissions. Since the permits do not contain emission limits for NO_X, CO, PM_{10} or SO_X emissions, they are not subject to the CAM requirements of 40 CFR Subpart 64 for these pollutants and no further discussion is required.

The glycol dehydration units do contain an emission limit for VOC emissions. However, these units are served by a vapor control system. The vapor control system is a closed system where all of the vapors captured are routed back into the separation plant for processing. Therefore, the vapor recovery system will not be considered an external control device. Since the units are not served by any add on control devices, they are not subject to the CAM requirements of 40 CFR Subpart 64 and no further discussion is required.

x. S-2234-126, -127, -129, -130, -131, -132, -133, -134, -135, -136, and -137 – 1,834 Waukesha natural gas fired internal combustion engines

These engines contain emission limits for NO_X, CO, VOC, PM_{10} and SO_X emissions. However, these engines are not equipped with any external control devices for PM_{10} and SO_X emissions. Therefore, the CAM requirements of 40 CFR 64 are not applicable for these pollutants and no further discussion is required.

These engines are equipped with non-selective catalytic reduction (NSCR) systems. NSCR systems typically provide control for NO_X, CO and VOC emissions. Typically the District assumes that an NSCR system will achieve 90% control for NO_X emissions, 80% control for CO emissions and 50% control for VOC emissions *(Update On Emissions - Form 960, Second Edition, Waukesha Engine Division, Dresser Industries, October, 1991)*. Therefore, the uncontrolled emission rates from each of these engines can be determined using the emission limit on the current permit and the control efficiency of the NSCR system.

NO_X Emissions:

Emission Limit = 5 ppmv @ 15% O_2 (equivalent to 0.0188 lb/MMBtu)

Daily Fuel Consumption Limit = 241.6 Mscf/day

Annual Uncontrolled PE = [0.0188 lb/MMBtu x 1,000 Btu/scf x 241.6 Mscf/day x 365 day/yr] / [(1000 x (1 – 0.90)]

Annual Uncontrolled PE = 16,579 lb/year

As calculated above, the uncontrolled PE for NOx is not greater than the Major Source threshold. Therefore, these engines are not subject to the requirements of 40 CFR 64 for NOx emissions.

CO Emissions:

Emission Limit = 56 ppmv @ 15% O_2 (equivalent to 0.1279 lb/MMBtu)

Annual Uncontrolled PE = [0.1279 lb/MMBtu x 1,000 Btu/scf x 241.6 Mscf/day x 365 day/yr] / [(1000 x (1 – 0.80)]

Annual Uncontrolled PE = 56,394 lb/year

As calculated above, the uncontrolled PE for CO is not greater than the Major Source threshold. Therefore, these engines are not subject to the requirements of 40 CFR 64 for CO emissions.

VOC Emissions:

Emission Limit = 25 ppmv @ 15% O_2 (equivalent to 0.0326 lb/MMBtu)

Annual Uncontrolled PE = [0.0326 lb/MMBtu x 1,000 Btu/scf x 241.6 Mscf/day x 365 day/yr] / [(1000 x (1 – 0.50)]

Annual Uncontrolled PE = 5,750 lb/year

As shown above, the uncontrolled PE for VOC emissions is less than the major source threshold. Therefore, these engines are not subject to the requirements of 40 CFR 64 for this pollutant and no further discussion is required.

As shown above, the uncontrolled PE for NOx, CO, and VOC emissions is less than the major source threshold for each pollutant. Therefore, these engines are not subject to 40 CFR 64.

y. S-2234-170 – 99 hp Cummins diesel fired emergency internal combustion engine

This engine contains emission limits for NO_X, CO, VOC, PM_{10} and SO_X emissions. However, this engine is not equipped with any external control devices. Therefore, the CAM requirements of 40 CFR Subpart 64 for these pollutants are not applicable and no further discussion is required.

z. S-2234-182, -183, -184, -185, -186 – 1,834 Waukesha natural gas fired internal combustion engines (104.6 MMscf/yr fuel limit)

These engines contain emission limits for NO_X, CO, VOC, PM_{10} and SO_X emissions. However, these engines are not equipped with any external control devices for PM_{10} and SO_X emissions. Therefore, the CAM requirements of 40 CFR 64 are not applicable for these pollutants and no further discussion is required.

These engines are equipped with non-selective catalytic reduction (NSCR) systems. NSCR systems typically provide control for NO_X, CO and VOC emissions. Typically the District assumes that an NSCR system will achieve 90% control for NO_X emissions, 80% control for CO emissions

and 50% control for VOC emissions *(Update On Emissions - Form 960, Second Edition, Waukesha Engine Division, Dresser Industries, October, 1991)*. Therefore, the uncontrolled emission rates from each of these engines can be determined using the emission limit on the current permit and the control efficiency of the NSCR system.

NO_X Emissions:

Emission Limit = 0.07 g/hp-hr (equivalent to 0.0188 lb/MMBtu)

Daily Fuel Consumption Limit = 104.6 MMscf/yr

Annual Uncontrolled PE = [0.0188 lb/MMBtu x 1,000 Btu/scf x 104.6 MMscf/yr] / [1 – 0.90]

Annual Uncontrolled PE = 19,665 lb/year

As calculated above, the uncontrolled PE for NOx is not greater than the Major Source threshold. Therefore, these engines are not subject to the requirements of 40 CFR 64 for NOx emissions.

CO Emissions:

Emission Limit = 0.475 g/hp-hr (equivalent to 0.1279 lb/MMBtu)

Daily Fuel Consumption Limit = 104.6 MMscf/yr

Annual Uncontrolled PE = [0.1279 lb/MMBtu x 1,000 Btu/scf x 104.6 MMscf/yr] / [1 – 0.80]

Annual Uncontrolled PE = 66,892 lb/year

As calculated above, the uncontrolled PE for CO is not greater than the Major Source threshold. Therefore, these engines are not subject to the requirements of 40 CFR 64 for CO emissions.

VOC Emissions:

Emission Limit = 0.121 g/hp-hr (equivalent to 0.0326 lb/MMBtu)

Daily Fuel Consumption Limit = 104.6 MMscf/yr

Annual Uncontrolled PE = [0.0326 lb/MMBtu x 1,000 Btu/scf x 104.6 MMscf/yr] / [1 – 0.50]

Annual Uncontrolled PE = 6,820 lb/year

As shown above, the uncontrolled PE for VOC emissions is less than the major source threshold. Therefore, these engines are not subject to the requirements of 40 CFR 64 for this pollutant and no further discussion is required.

As shown above, the uncontrolled PE for NOx, CO, and VOC emissions is less than the major source threshold for each pollutant. Therefore, these engines are not subject to 40 CFR 64.

aa. S-2234-206 – 762 hp Caterpillar diesel-fired emergency IC engine

This engine does not contain emission limits for NO_X, CO, VOC or PM_{10} emissions. Since this engine permit does not contain emission limits for NO_X, CO, VOC or PM_{10} emissions, it is not subject to the CAM requirements of 40 CFR Subpart 64 for these pollutants and no further discussion is required.

This engine permit contains a SO_X emission limit in the form of a diesel fuel sulfur limitation of 0.0015%, by weight. However, this engine is not equipped with any external control devices for SO_X emissions. Therefore, the CAM requirements of 40 CFR 64 are not applicable and no further discussion is required.

bb. S-2234-207, -208, -209, -211 – 1,680 Waukesha natural gas fired internal combustion engines (241.6 Mscf/day fuel limit)

These engines contain emission limits for NO_X, CO, VOC, PM_{10} and SO_X emissions. However, these engines are not equipped with any external control devices for PM_{10} and SO_X emissions. Therefore, the CAM requirements of 40 CFR 64 are not applicable, and no further discussion is required for these pollutants.

These engines are equipped with non-selective catalytic reduction (NSCR) systems. NSCR systems typically provide control for NO_X, CO and VOC emissions. Typically the District assumes that an NSCR system will achieve 90% control for NO_X emissions, 80% control for CO emissions and 50% control for VOC emissions *(Update On Emissions - Form 960,*

Second Edition, Waukesha Engine Division, Dresser Industries, October, 1991). Therefore, the uncontrolled emission rates from each of these engines can be determined using the emission limit on the current permit and the control efficiency of the NSCR system.

NO_X Emissions:

Emission Limit = 5 ppmv @ 15% O_2 (equivalent to 0.0188 lb/MMBtu)

Daily Fuel Consumption Limit = 241.6 Mscf/day

Annual Uncontrolled PE = [0.0188 lb/MMBtu x 1,000 Btu/scf x 241.6 Mscf/day x 365 day/yr] / [(1000 x (1 – 0.90)]

Annual Uncontrolled PE = 16,579 lb/year

As calculated above, the uncontrolled PE for NOx is not greater than the Major Source threshold. Therefore, these engines are not subject to the requirements of 40 CFR 64 for NOx emissions.

CO Emissions:

Emission Limit = 56 ppmv @ 15% O_2 (equivalent to 0.1279 lb/MMBtu)

Daily Fuel Consumption Limit = 241.6 Mscf/day

Annual Uncontrolled PE = [0.1279 lb/MMBtu x 1,000 Btu/scf x 241.6 Mscf/day x 365 day/yr] / [(1000 x (1 – 0.80)]

Annual Uncontrolled PE = 56,394 lb/year

As calculated above, the uncontrolled PE for CO is not greater than the Major Source threshold. Therefore, these engines are not subject to the requirements of 40 CFR 64 for CO emissions.

VOC Emissions:

Emission Limit = 25 ppmv @ 15% O_2 (equivalent to 0.0326 lb/MMBtu)

Daily Fuel Consumption Limit = 241.6 Mscf/day

Annual Uncontrolled PE = [0.0326 lb/MMBtu x 1,000 Btu/scf x 241.6 Mscf/day x 365 day/yr] / [(1000 x (1 – 0.50)]

Annual Uncontrolled PE = 5,750 lb/year

As calculated above, the uncontrolled PE for VOC is not greater than the Major Source threshold. Therefore, these engines are not subject to the requirements of 40 CFR 64 for NOx emissions.

As shown above, the uncontrolled PE for NOx, CO, and VOC emissions is less than the major source threshold for each pollutant. Therefore, these engines are not subject to 40 CFR 64.

cc. S-2234-210, -212, -214 – 1,680 Waukesha natural gas fired internal combustion engines (114.2 MMscf/yr fuel limit)

These engines contain emission limits for NO_X, CO, VOC, PM_{10} and SO_X emissions. However, these engines are not equipped with any external control devices for PM_{10} and SO_X emissions. Therefore, the CAM requirements of 40 CFR 64 are not applicable, and no further discussion is required for these pollutants.

These engines are equipped with non-selective catalytic reduction (NSCR) systems. NSCR systems typically provide control for NO_X, CO and VOC emissions. Typically the District assumes that an NSCR system will achieve 90% control for NO_X emissions, 80% control for CO emissions and 50% control for VOC emissions *(Update On Emissions - Form 960, Second Edition, Waukesha Engine Division, Dresser Industries, October, 1991)*. Therefore, the uncontrolled emission rates from each of these engines can be determined using the emission limit on the current permit and the control efficiency of the NSCR system.

NO_X Emissions:

Emission Limit = 5 ppmv @ 15% O_2 (equivalent to 0.0188 lb/MMbtu)

Daily Fuel Limit = 114.2 MMscf/yr

Annual Uncontrolled PE = [0.0188 lb/MMBtu x 1,000 Btu/scf x 114.2 MMscf/yr] / [1 – 0.90]

Annual Uncontrolled PE = 21,470 lb/year

As calculated above, the uncontrolled PE for NOx is greater than the Major Source threshold. Therefore, these engines are subject to the requirements of 40 CFR 64.

In order to determine if a 15-minute monitoring interval is required, we will determine if post-control emissions also exceed the Major Source threshold for NO_X emissions.

Emission Limit = 5 ppmv @ 15% O_2 (equivalent to 0.0188 lb/MMbtu)

Daily Fuel Limit = 114.2 MMscf/yr

Annual Controlled PE = [0.0188 lb/MMBtu x 1,000 Btu/scf x 114.2 MMscf/yr]

Annual Controlled PE = 2,147 lb/year

Since the post-control annual emissions do not exceed the Major Source threshold for NO_X, a once-daily monitoring interval is sufficient to determine compliance with CAM.

CO Emissions:

Emission Limit = 56 ppmv @ 15% O_2 (equivalent to 0.1227 lb/MMBtu)

Daily Fuel Limit = 114.2 MMscf/yr

Annual Uncontrolled PE = [0.1227 lb/MMBtu x 1,000 Btu/scf x 114.2 MMscf/yr] / [1 – 0.80]

Annual Uncontrolled PE = 70,062 lb/year

As calculated above, the uncontrolled PE for CO is not greater than the Major Source threshold. Therefore, CAM is not required for CO.

VOC Emissions:

Emission Limit = 25 ppmv @ 15% O_2 (equivalent to 0.0313 lb/MMBtu)

Daily Fuel Limit = 114.2 MMscf/yr

Annual Uncontrolled PE = [0.0313 lb/MMBtu x 1,000 Btu/scf x 114.2 MMscf/yr] / [1 – 0.50]

Annual Uncontrolled PE = 7,149 lb/year

As calculated above, the uncontrolled PE for VOC is not greater than the Major Source threshold. Therefore, CAM is not required for VOC.

Since the pre-control annual emissions exceed the Major Source threshold for NOx, a once-daily monitoring interval is still required to satisfy compliance with CAM. The facility proposes to comply with once-daily monitoring intervals by establishing an O2 sensor output voltage range for the control device, and recording the O2 sensor reading on a daily basis.

CAM requirements for these engines will be satisfied by the following conditions:

S-2234-210	36-41
S-2234-212	36-41
S-2234-214	36-41

Note: A condition requiring the facility to submit a Title V minor modification application to incorporate the O2 sensor output voltage range into the permit states that the minor modification application shall be submitted within 12 months from the date the renewed permit is issued. Prior to the final renewed permit being issued, the condition will be modified to state the precise date 12 months from the date the renewed permit is issued.

IX. PERMIT SHIELD

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

A. Requirements Addressed by Model General Permit Templates

The applicant is not requesting to use any model general permit templates for this Title V renewal project.

B. Requirements not Addressed by Model General Permit Templates

The facility is not requesting any new permit shields within this Title V renewal project. In addition, the facility is not requesting any changes to the existing permit shields already included in their Title V operating permit. Therefore, all of the existing permit shields will be maintained on the revised permit for this renewal project.

X. PERMIT CONDITIONS

See Attachment A - Draft Renewed Title V Operating Permit.

XI. ATTACHMENTS

A. Draft Renewed Title V Operating Permit
B. Previous Title V Operating Permit
C. Detailed Facility List
D. District Rule 4311 Stringency Analysis
E. District Rule 4601 Stringency Analysis
F. District Rule 4702 Stringency Analysis

ATTACHMENT A

Draft Renewed Title V Operating Permit

San Joaquin Valley
Air Pollution Control District

FACILITY: S-2234-0-3 **EXPIRATION DATE:** 10/31/2009

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FACILITY-WIDE REQUIREMENTS

1. Equipment that is in vacuum service is exempt from the control and monitoring requirements and work practice standards of District Rule 4409 and applicable NSPS requirements, provided the equipment is identified as such in the Operator Management Plan. [District Rule 4409, 4.2.8 and 40 CFR 60.482-1(d)] Federally Enforceable Through Title V Permit
2. For determining compliance with applicable NSPS requirements, the test methods and procedures at 40 CFR 60.485 shall be used. Alternative test methods may be used subject to approval pursuant to 40 CFR 60.8. [40 CFR 60.8, 40 CFR 60.485] Federally Enforceable Through Title V Permit
3. For all components that are subject to applicable NSPS requirements and are included in the permit unit addendum to the operator management plan and that comply with the applicable NSPS inspection, maintenance and repair requirements as specified by the terms and condition of this permit, a Title-V permit shield is granted for applicable requirements at 40 CFR 60, Subpart KKK. [40 CFR 60, Subpart KKK] Federally Enforceable Through Title V Permit
4. If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements as specified in this permit unit. [District Rule 4409, 4.2.8 and 40 CFR 60.482-10(i)] Federally Enforceable Through Title V Permit
5. For open ended lines and open ended valves, subject to applicable NSPS, each open-ended valve or line shall be sealed with two (2) valves, a blind flange, a cap, or a plug at all times, except during operations requiring process fluid flow through the valve or line. Open ended lines and valves designed to open automatically in the event of an emergency are exempt from this requirement [40 CFR 60.482-6(a) and 40 CFR 60.482-6(d)] Federally Enforceable Through Title V Permit
6. For valves subject to applicable new source performance standards (NSPS), any valve in gas/vapor service or light liquid service that is designated in the Operator Management Plan as an unsafe-to-monitor valve is exempt from the monthly NSPS leak inspection requirements, provided: 1) the owner/operator demonstrates the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence, and 2) a written plan is adhered to that requires monitoring of the valve as frequently as practicable during safe-to-monitor times and at least annually and during shutdown. [40 CFR 60.482-7(g)] Federally Enforceable Through Title V Permit
7. For valves subject to applicable NSPS, any valve in gas/vapor service or light liquid service that is designated in the Operator Management Plan as a difficult-to-monitor (inaccessible) valve is exempt from the monthly NSPS leak inspection requirements, provided: 1) the owner/operator demonstrates the valve cannot be monitored without elevating the monitoring personnel more than 15 feet above a support surface, or that it is over 6 feet away from a platform , 2) the process unit within which the valve is located either becomes an affected facility through 40 CFR 60.14 or 60.15 or if the owner/operator designates less than 3.0% of the total number of valves as difficult-to-monitor, and 3) a written plan is adhered to that, requires monitoring of the valve at least annually and during shutdown. [40 CFR 60.482-7(h)] Federally Enforceable Through Title V Permit

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FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

8. Any components of the closed vent system that are designated as unsafe to inspect are exempt from the inspection requirements specified in this permit unit if the owner or operator complies with the following: 1) the owner or operator determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with the inspection requirements; 2) the owner or operator identifies the components in the Operator Management Plan; 3) the owner or operator has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times; and 4) inspection and required repair of the components is performed at least annually and during shutdown. [District Rule 4409, 5.3.7.5 and 40 CFR 60.482-10(j)] Federally Enforceable Through Title V Permit

9. For components subject to applicable NSPS, when a leak is detected, a weatherproof and readily visible tag shall be attached, bearing the equipment identification number and date which the leak is detected. The tag on a valve shall remain in place until after it has been monitored for 2 successive months and no leak has been detected. The tag on all other equipment may be removed after repair and re-inspection document compliance with the applicable NSPS. [40 CFR 60.486(b) and 60.635(b)(1)] Federally Enforceable Through Title V Permit

10. Any leak detected on the basis of sight, smell, or sound shall be identified by the operator affixing a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until repair and reinspection document compliance, whether or not operator inspection is otherwise required by this permit. [District Rule 4409, 5.3.3 and 5.3.3] Federally Enforceable Through Title V Permit

11. Any leaking component and any leak shall be repaired to a leak-free condition and reinspected within 15 calendar days. [40 CFR 60.482-7] Federally Enforceable Through Title V Permit

12. For components subject to applicable NSPS standards, except as otherwise provided by 40 CFR 60.482-9, any component leak shall be repaired to a leak-free condition, or vented to a flare satisfying the requirements of 40 CFR 60.18, or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 or EPA Method 18 within fifteen (15) calendar days of detection. A first attempt at repair shall be made no later than 5 calendar days after leak detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates necessary and sufficient actions are being taken to correct the leak within this time period. [40 CFR 60.482-2(c)(1) and (c)(2), 60.482-3(g), 60.482-7(d), 60.482-8(c), and 60.633(b)(3)] Federally Enforceable Through Title V Permit

13. For components subject to applicable NSPS, if the leaking component is an essential part of a critical process identified in the operator management plan and which cannot be immediately shut down for repairs, the operator shall minimize the leak within 15 calendar days. If the leak which has been minimized still exceeds the applicable NSPS standard, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than six months from the date of the original leak detection for pumps and one year from the date of the original leak detection for other components. Delay of repair is allowed for equipment which is isolated from the process and which does not remain in VOC service and delay of repair is is allowed pursuant to 40 CFR 60.482-2(c)(1), 40 CFR 60.482-3(g)(1), 40 CFR 60.482-4(b)(1), 40 CFR 60.482-7(d)(1),40 CFR 60.482-8(c)(1). [40 CFR 60.482- 2(c)(1), 40 CFR 40 CFR 60.482-3(g)(1), 40 CFR 60.482-4(b)(1), 40 CFR 60.482-7(d)(1),40 CFR 60.482-8(c)(1), 60.482-9(a) and (b)] Federally Enforceable Through Title V Permit

14. Delay of repair of a closed vent system for which leaks have been detected is allowed if the closed vent system is an essential part of a critical process identified in the operator management plan which cannot be immediately shut down for repairs or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. However the operator shall minimize the leak within 15 calendar days. If the leak which has been minimized still exceeds the limit in this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. [40 CFR 60.482-9] Federally Enforceable Through Title V Permit

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FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

15. For the purpose of determining compliance with applicable NSPS, each operator shall maintain an inspection log for the components subject to NSPS inspection requirements that contains the following information: 1) instrument, operator, and equipment identification numbers; 2) date of leak detection; 3) dates and repair method of each attempt to repair the leak; 4) "above 10,000" if the maximum instrument reading after each repair attempt is equal to or greater than 10,000 ppm; 5) "repair delayed", reason for delay, signature of individual whose decision it was that repair could not be effected without a process shutdown, and expected date of successful repair if a leak is not repaired within 15 days of detection; 6) dates of process unit shutdown that occur while the equipment is unrepaired; 7) date of successful repair and emission level of recheck after leak is repaired. [40 CFR 60.486(c) and 60.635(2)(i) through (ix)] Federally Enforceable Through Title V Permit

16. Each piece of equipment subject to requirements of this permit is presumed to be in VOC service or in wet gas service unless an owner or operator demonstrates that the piece of equipment is not in VOC service or in wet gas service. For a piece of equipment to be considered not in VOC service, it must be determined that the VOC content can be reasonably expected never to exceed 10.0 percent by weight. For a piece of equipment to be considered in wet gas service, it must be determined that it contains or contacts the field gas before the extraction step in the process. For purposes of determining the percent VOC content of the process fluid that is contained in or contacts a piece of equipment, procedures that conform to the methods described this permit shall be used. [40 CFR 60.485(d) and 60.632(f)] Federally Enforceable Through Title V Permit

17. Compliance the no detectable emission standards for this permit unit shall be determined as follows: 1) EPA Method 21 shall be followed, 2) Method 21 shall be used to determine the background level and all potential leak interfaces shall be traversed as close to the inter face as possible, and 3) the arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm to determine compliance. [40 CFR 60.485(c)] Federally Enforceable Through Title V Permit

18. For valves subject to applicable NSPS, if the operator elects to comply with the allowable percentage of leaking valves then for this permit unit, the operator shall notify the APCO 90 days before implementing these alternatives. [40 CFR 60.483-1(b)(1) and (d), 60. 483-2(a)(2), and 60.487(d)] Federally Enforceable Through Title V Permit

19. For valves subject to applicable NSPS, if the allowable percentage of leaking valves is selected, then a performance test shall be conducted initially upon designation for allowable percentage of leaking valves, annually, and at other times requested by the APCO. The performance test shall be conducted as follows: 1) all valves in gas/vapor and light liquid service shall be monitored within 1 week using EPA Method 21 and 2) the leak percentage shall be determined by dividing the number of leaking valves detected and valves for which repair has been delayed by the number of valves in gas/vapor and light liquid service in this permit unit, 3) a record must be kept of the percent of valves found leaking during each leak detection period. [40 CFR 60.483-1(b)(2) and (c) and 60. 483-2(b)(5) and (6)] Federally Enforceable Through Title V Permit

20. For compressors subject to applicable NSPS, each compressor shall meet the applicable control system requirements of 40 CFR 482-3(a) - (i), except as otherwise provided by 40 CFR 60.482-1(c) and 40 CFR 60.482-3(h) and (i). [40 CFR 60.482-3(a) through (j)], 40 CFR 60.482-1(c), 40 CFR 60.482-3(h) and (i), and 40 CFR 60.633] Federally Enforceable Through Title V Permit

21. Compressors that are subject to applicable NSPS, are exempt from requirements of 40 CFR 60.482-3(a) and 40 CFR 60.482-3(b) if the compressor is equipped with a closed vent system to capture and transport leakage from the compressor drive shaft back to a process fuel gas system or a control device. Closed vent systems piping shall comply with applicable requirements at 40 CFR 60.482-10. Closed vent vapor recovery systems shall comply with design requirements at 40 CFR 60.482-10(b). Enclosed combustion devices used by closed vent system shall comply with design requirements at 40 CFR 60.482-10(c). Flares used by closed vent systems shall comply with requirements at 40 CFR 60.482-10(d). Closed vent system control devices shall comply with monitoring requirements at 40 CFR 60.482-10(e). [40 CFR 60 .482-3, 40 CFR 60.482-10] Federally Enforceable Through Title V Permit

22. Compressors that are subject to applicable NSPS and are designated in the Operator Management Plan for no detectable leak emission, as indicated by an instrument reading of less than 500 ppm above background, is are exempt from the requirements of 40 CFR 482-3(a)-(h), provided the compressor is tested for compliance with no detectable emissions initially upon designation, annually, and at other times requested by the APCO. [40 CFR 60.482-3(i)] Federally Enforceable Through Title V Permit

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FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

23. When determining compliance with applicable NSPS, if an instrument reading of 10,000 ppm or greater is measured, a leak is detected. [40 CFR 60.633(b)(2), 40482-7(a), (b), and (c] Federally Enforceable Through Title V Permit

24. For open ended lines or valves subject to applicable NSPS, each open-ended valve or line equipped with a second valve shall be operated so that the valve on the process fluid end is closed before the second valve is closed. [40 CFR 60.482-6(b)] Federally Enforceable Through Title V Permit

25. For equipment subject to applicable NSPS when a double block-and-bleed system is being used, the bleed valve or line may remain open only during operations that require venting the line between the block valves. [40 CFR 60.482-6(c)] Federally Enforceable Through Title V Permit

26. Except as provided by applicable NSPS, valves that are subject to NSPS that are in gas/vapor service or light liquid service shall be monitored monthly to detect leaks using EPA Method 21. Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter. If a leak is subsequently detected, monitoring shall revert to monthly. [40 CFR 60.482-7(a), (b), and (c)] Federally Enforceable Through Title V Permit

27. Any valve in gas/vapor service or light liquid service that is designated in the equipment log list for no detectable leak emission, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the monitoring requirements of 40 CFR 60.482-7(a), provided the valve: 1) has no external actuating mechanism in contact with the process fluid and 2) is tested for and meets compliance with no detectable leak emission initially upon designation, annually and at other times requested by the APCO. [40 CFR 60.482-7(f)] Federally Enforceable Through Title V Permit

28. For valves subject to applicable NSPS requirements, for a valve in gas/vapor service or light or heavy liquid service, first attempts at repair shall include the following where practicable: 1) tightening of bonnet bolts, 2) replacement of bonnet bolts, 3) tightening of packing gland nuts, and 4) injection of lubricant into lubricant packing. [40 CFR 60.482-7(e) and 60.482-8(d)] Federally Enforceable Through Title V Permit

29. For pumps and valves in heavy liquid service, pressure relief devices in light or heavy liquid service, and flanges and other connectors, that are subject to applicable NSPS requirements, if evidence of a potential leak is found by sight, sound, smell, or any other detection method then the device shall be monitored within 5 days for leak detection in accordance with EPA Method 21. A leak is detected if an instrument reading of 10,000 ppm or greater is measured. [40 CFR 60.482-8(a) and (b)] Federally Enforceable Through Title V Permit

30. In addition to the information required by Rule 4409, the operator management plan shall include an addendum for this permit unit containing the following applicable NSPS information: 1) list of identification numbers for equipment subject to the applicable NSPS requirements, 2) list of identification numbers for equipment which is designated for no detectable emissions and which is signed by the owner/operator, 3) list of equipment identification numbers for pressure relief devices which must be operated with no detectable emissions, 4) dates of each compliance test for emissions below 500 ppm, for all equipment subject to this no detectable emission limit and the background level measured and the maximum instrument reading measured at the equipment, during each test, and 5) list of identification numbers for equipment in vacuum service. [40 CFR 60.486(e) and 60.635(b)(2)(x)] Federally Enforceable Through Title V Permit

31. In addition to the information required by Rule 4409, the operator management plan shall include an addendum for this permit unit containing the following applicable NSPS information: for valves in gas/vapor service and light liquid service: 1) a list of identification numbers for valves designated "unsafe-to-monitor" and for valves designated "difficult-to monitor", 2) an explanation for each valve stating why it is so designated, and 3) the schedule for monitoring each such valve. [40 CFR 60.486(f)] Federally Enforceable Through Title V Permit

32. For valves subject to NSPS annual leak detection alternative requirements, the NSPS inspection log shall include the following information: 1) a schedule of monitoring and 2) the percent of valves found leaking during each monitoring period. [40 CFR 60.486(g)] Federally Enforceable Through Title V Permit

33. A log containing the following information for pumps and compressors equipped a barrier fluid seal system which includes a seal failure sensor, for which a system failure criteria is required to be established, pursuant to the requirements for this permit unit, shall be maintained and kept in a readily accessible location: 1) the design criterion required by this permit and an explanation and 2) any changes to this criterion and reasons for the changes. [40 CFR 60.486(h)] Federally Enforceable Through Title V Permit

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34. For equipment (compressors and components) subject to applicable NSPS, the operator shall maintain information and data used to demonstrate that a piece of equipment is not in VOC service and information and data used to demonstrate that a reciprocating compressor is in wet gas service. The information shall be included in the NSPS inspection log for the permit unit and shall be kept in a readily accessible location. [40 CFR 60.486(j) and 60.635(c)] Federally Enforceable Through Title V Permit

35. Vapor recovery systems (for example, condensers and absorbers) shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, whichever is less stringent. [40 CFR 60.482-10(b)] Federally Enforceable Through Title V Permit

36. Enclosed combustion devices shall be designed and operated to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816 oC. [40 CFR 60.482-10(c)] Federally Enforceable Through Title V Permit

37. If the vapor collection system or closed vent system is constructed of hard-piping, the owner or operator shall conduct an initial inspection according to the procedures specified in EPA Method 21 using the calibration gases as specified in the requirements for this permit unit. The owner or operator shall also conduct annual visual inspections for visible, audible, or olfactory indications of leaks. [40 CFR 60.482-10(f)(1) and 40 CFR 60.485(b)] Federally Enforceable Through Title V Permit

38. If the vapor collection system or closed vent system is constructed of ductwork, the owner or operator shall conduct an initial inspection and annual inspections according to the procedures specified in EPA Method 21 using the calibration gases as specified in the requirements for this permit unit. The owner or operator shall also conduct annual visual inspections for visible, audible, or olfactory indications of leaks. [40 CFR 60.482-10(f)(2) and 40 CFR 60.485(b)] Federally Enforceable Through Title V Permit

39. Any parts of the closed vent system that are designated as difficult to inspect are exempt from the inspection requirements of 40 CFR 60.482-10(f)(1) and (f)(2) if the owner or operator complies with the following: 1) the owner or operator determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and 2) the process unit within which the closed vent system is located becomes an affected facility through modification or reconstruction, as defined in 40 CFR 60.14 and 60.15, or the owner or operator designates less than 3.0 percent of the total number of closed vent system equipment as difficult to inspect; and 3) the owner or operator has a written plan that requires inspection of the equipment at least every 5 years. A closed vent system is exempt from inspection if it is operated under a vacuum. [40 CFR 60.482-10(k)] Federally Enforceable Through Title V Permit

40. Closed vent systems and control devices shall be operated at all times when emissions may be vented to them. [40 CFR 60.482-10(m)] Federally Enforceable Through Title V Permit

41. A log shall be maintained containing the following information: 1) identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment; 2) identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment; 3) for each inspection conducted in accordance with EPA Method 21 during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected; and 4) for each visual inspection conducted for visible, audible, or olfactory indications of leaks during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected. [40 CFR 60.482-10(l) and 40 CFR 60.485(b)] Federally Enforceable Through Title V Permit

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42. For components subject to applicable NSPS requirements, semiannual reports shall be submitted to the APCO containing the following information: 1) process unit identification, 2) for each month during the reporting period, number of valves, pumps, compressors, and pressure relief devices for which leaks were detected; number of valves, pumps, compressors, and pressure relief devices for which leaks were not repaired within 15 days and a first attempt not made within 5 days of leak detection; the facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible 3) dates of process unit shutdowns which occurred within the reporting period, and 4) revisions to items reported in the initial or subsequent semiannual reports. [40 CFR 60.487(a) and (c) and 60.636(c)] Federally Enforceable Through Title V Permit

43. {4362} The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit

44. {4363} The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit

45. {4364} The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit

46. Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (8/11/11). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit

47. {4366} The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.9.1 and 9.13.1] Federally Enforceable Through Title V Permit

48. {4367} A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit

49. {4368} Every application for a permit required under Rule 2010 (12/17/92) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit

50. {4369} The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit

51. {4370} The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

52. {4371} The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.5.1] Federally Enforceable Through Title V Permit

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53. {4372} Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520 (6/21/01). [District Rules 2520, 9.5.2 and 1100, 7.0] Federally Enforceable Through Title V Permit

54. {4373} If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit. [District Rule 2520, 9.7] Federally Enforceable Through Title V Permit

55. {4374} It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.8.2] Federally Enforceable Through Title V Permit

56. {4375} The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.8.3] Federally Enforceable Through Title V Permit

57. {4376} The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.8.4] Federally Enforceable Through Title V Permit

58. {4377} The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.8.5] Federally Enforceable Through Title V Permit

59. {4378} The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.9] Federally Enforceable Through Title V Permit

60. {4379} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 2520, 9.13.2.1] Federally Enforceable Through Title V Permit

61. {4380} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.13.2.2] Federally Enforceable Through Title V Permit

62. {4381} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.13.2.3] Federally Enforceable Through Title V Permit

63. {4382} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.13.2.4] Federally Enforceable Through Title V Permit

64. {4383} No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (02/17/05). If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and County Rules 401 (in all eight counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit

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65. {4384} No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating with a VOC content in excess of the corresponding limit specified in Table of Standards 1 effective until 12/30/10 or Table of Standards 2 effective on and after 1/1/11 of District Rule 4601 (12/17/09) for use or sale within the District. [District Rule 4601, 5.1] Federally Enforceable Through Title V Permit

66. {4385} All VOC-containing materials subject to Rule 4601 (12/17/09) shall be stored in closed containers when not in use. [District Rule 4601, 5.4] Federally Enforceable Through Title V Permit

67. {4386} The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.3 (12/17/09). [District Rule 4601, 6.1 and 6.3] Federally Enforceable Through Title V Permit

68. {4387} With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.13.1 and 10.0] Federally Enforceable Through Title V Permit

69. {4388} If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR Part 82, Subpart F. [40 CFR 82 Subpart F] Federally Enforceable Through Title V Permit

70. {4389} If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR Part 82, Subpart B. [40 CFR Part 82, Subpart B] Federally Enforceable Through Title V Permit

71. {4390} Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8021 and 8011] Federally Enforceable Through Title V Permit

72. {4391} Outdoor handling, storage and transport of any bulk material which emits dust shall comply with the requirements of District Rule 8031, unless specifically exempted under Section 4.0 of Rule 8031 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8031 and 8011] Federally Enforceable Through Title V Permit

73. {4392} An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8041 and 8011] Federally Enforceable Through Title V Permit

74. {4393} Whenever open areas are disturbed, or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8051 and 8011] Federally Enforceable Through Title V Permit

75. {4394} Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8061 and Rule 8011] Federally Enforceable Through Title V Permit

76. {4395} Any unpaved vehicle/equipment area that anticipates more than 50 Average annual daily Trips (AADT) shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 150 vehicle trips per day (VDT) shall comply with the requirements of Section 5.1.2 of District Rule 8071. On each day that 25 or more VDT with 3 or more axles will occur on an unpaved vehicle/equipment traffic area, the owner/operator shall comply with the requirements of Section 5.1.3 of District Rule 8071. On each day when a special event will result in 1,000 or more vehicles that will travel/park on an unpaved area, the owner/operator shall comply with the requirements of Section 5.1.4 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (9/16/2004) or Rule 8011 (8/19/2004). [District Rule 8071 and Rule 8011] Federally Enforceable Through Title V Permit

77. {4396} Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M] Federally Enforceable Through Title V Permit

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78. {4397} The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.16] Federally Enforceable Through Title V Permit

79. {4398} The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2] Federally Enforceable Through Title V Permit

80. {4399} When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permits shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit

81. {4400} Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Rule 401 (Madera, Fresno, Kern, Kings, San Joaquin, Stanislaus, Tulare and Merced), Rule 110 (Fresno, Stanislaus, San Joaquin), Rule 109 (Merced), Rule 113 (Madera), Rule 111 (Kern, Tulare, Kings), and Rule 202 (Fresno, Kern, Tulare, Kings, Madera, Stanislaus, Merced, San Joaquin). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

82. {4401} Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (2/17/05); 4601 (12/17/09); 8021 (8/19/2004); 8031 (8/19/2004); 8041 (8/19/2004); 8051 (8/19/2004); 8061 (8/19/2004); and 8071 (9/16/2004). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

83. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

84. {3321} The permittee shall not use any components that leak in excess of the applicable leak standards as specified in this permit. Components that have been found leaking in excess of the applicable leak standards of this rule may be used provided such leaking components have been identified with a tag for repair, are repaired, or are awaiting re-inspection after being repaired, within the applicable time period specified in this permit. [District Rule 4409, 5.1.1] Federally Enforceable Through Title V Permit

85. {3322} For valves, threaded connections, flanges, pipes, pumps, compressors, and other components not specified in this permit; a major gas leak is a detection of > 10,000 ppmv as methane; a minor gas leak is a detection of 1,000 to 10,000 ppmv as methane when the component is in liquid service; a minor gas leak is a detection of 2,000 to 10,000 ppmv as methane when the component is in gas/vapor service. [District Rule 4409, 5.1.1] Federally Enforceable Through Title V Permit

86. {3323} For pressure relief devices (PRDs); a major gas leak is a detection of > 10,000 ppmv as methane; a minor gas leak is a detection of 200 to 10,000 ppmv as methane when the component is in liquid service; a minor gas leak is a detection of 400 to 10,000 ppmv as methane when the component is in gas/vapor service. [District Rule 4409, 5.1.1] Federally Enforceable Through Title V Permit

87. {3324} For polished rod stuffing boxes (PRSBs); a major gas leak is a detection of > 10,000 ppmv as methane; a minor gas leak is a detection of 1,000 to 10,000 ppmv as methane when the component is in liquid service; a minor gas leak is a detection of 1,000 to 10,000 ppmv as methane when the component is in gas/vapor service. [District Rule 4409, 5.1.1] Federally Enforceable Through Title V Permit

88. {3325} Each hatch shall be closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4409, 5.1.2] Federally Enforceable Through Title V Permit

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89. {3326} Minor gas leaks from PRSBs detected during any District inspection shall not be counted toward determination of compliance with this rule provided the permittee repairs, replaces, or removes leaking PRSBs from VOC service as soon as practicable but not later than seven calendar days. [District Rule 4409, 5.1.3.1.2] Federally Enforceable Through Title V Permit

90. {3327} Leaks detected during quarterly operator inspections shall not be counted towards determination of compliance with the provisions of Rule 4409 provided the leaking components are repaired as soon as practicable but not later than the time frame specified in this permit. Leaks detected during quarterly operator inspections that are not repaired, replaced, or removed from operation as soon as practicable but not later than the time frame specified in this rule shall be counted toward determination of compliance with the provisions of Rule 4409. [District Rule 4409, 5.1.3.2.1 and 5.1.3.2.2] Federally Enforceable Through Title V Permit

91. {3328} Leaking components at this facility detected during annual operator inspections, as required by Rule 4409 for a specific component type, that exceed the leak standards specified in this permit, shall constitute a violation of this rule. This violation is regardless of whether or not the leaking components are repaired, replaced, or removed from operation within the allowable repair time frame specified in this permit. [District Rule 4409, 5.1.3.2.3] Federally Enforceable Through Title V Permit

92. {3329} An open-ended line, or a valve located at the end of the line, that is not sealed with either a blind flange, a plug, a cap, or a second closed valve that is not closed at all times, except during attended operations requiring process fluid flow through the open-ended line is a leak. Attended operations include draining or degassing operations, connection of temporary process equipment, sampling of process streams, emergency venting, and other normal operational needs, provided such operations are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4409, 5.1.4.1] Federally Enforceable Through Title V Permit

93. {3330} A leak from a component is when there is a major liquid leak from the component. A major liquid leak from a component is when a visible mist or a continuous flow of liquid, that is not seal lubricant, leaks from the component. [District Rule 4409, 5.1.4.2] Federally Enforceable Through Title V Permit

94. {3331} A leak from a component is when gas emissions greater than 50,000 ppmv, as methane, leaks from the component. [District Rule 4409, 5.1.4.3] Federally Enforceable Through Title V Permit

95. {3332} A minor liquid leak from a component is when more than three drops of liquid per minute, that is not seal lubricant and is not a major liquid leak, leaks from the component. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit

96. {3333} When 200 or fewer valves are inspected, a leak from a valve is when more than one valve has a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. When greater than 200 valves are inspected, a leak from a valve is when more than 0.5 % (rounded up to the nearest whole number) of the valves have a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit

97. {3334} When 200 or fewer threaded connections are inspected, a leak from a threaded connection is when more than one threaded connection has a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. When greater than 200 threaded connections are inspected, a leak from a threaded connection is when more than 0.5 % (rounded up to the nearest whole number) of the threaded connections have a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit

98. {3335} When 200 or fewer flanges are inspected, a leak from a flange is when more than one flange has a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. When greater than 200 flanges are inspected, a leak from a flange is when more than 0.5 % (rounded up to the nearest whole number) of the flanges have a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit

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99. {3336} When 200 or fewer pumps are inspected, a leak from a pump is when more than two pumps have a minor liquid leak, a minor gas leak, or a gas leak greater than 10,000 ppmv and less than or equal to 50,000 ppmv. When greater than 200 pumps are inspected, a leak from a pump is when more than 1.0 % (rounded up to the nearest whole number) of the pumps have a minor liquid leak, a minor gas leak, or a gas leak greater than 10,000 ppmv and less than or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit

100. {3337} When compressors, PRDs, or other components not specified in this permit are inspected, a leak from these components is when more than one component has a minor liquid leak, a minor gas leak, or a gas leak greater than 10,000 ppmv and less than or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit

101. {3338} When 200 or fewer PRSBs are inspected, a leak is when more than four have a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. When greater than 200 PRSBs are inspected, a leak is when more than 2.0 % (rounded up to the nearest whole number) of the PRSBs have a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit

102. {3339} When 200 or fewer wells at light crude oil or gas production facilities are inspected, a leak from a pipe is when more than two or more pipes have a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. When greater than 200 wells at light crude oil or gas production facilities are inspected, a leak from a pipe is when more than 1.0 % (rounded up to the nearest whole number) of the pipes have a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit

103. {3340} When pipes at natural gas processing facilities are inspected, a leak from a pipe is when more than two have a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit

104. {3341} For manned facilities all accessible operating pumps, compressors, and PRDs, in service, shall be audio-visually inspected for leaks at least once every 24 hours except when operators do not report to the facility during a 24 hour period. [District Rule 4409, 5.2.1] Federally Enforceable Through Title V Permit

105. {3342} For unmanned facilities all accessible operating pumps, compressors, and PRDs, in service, shall be audio-visually inspected for leaks at least once per calendar week. [District Rule 4409, 5.2.2] Federally Enforceable Through Title V Permit

106. {3343} All accessible operating pumps, compressors, and PRDs, in service, that are found to be leaking by audio-visual inspection shall be attempted to be repaired immediately. The leaking component shall then be tested within 24 hours and, if found leaking again, shall be repaired as soon as practicable but not later than the timeframe specified in this permit. [District Rule 4409, 5.2.3] Federally Enforceable Through Title V Permit

107. {3344} Except for inaccessible components, unsafe-to-monitor components, or pipes, all components, in service, shall be tested for leaks at least once every calendar quarter. [District Rule 4409, 5.2.4] Federally Enforceable Through Title V Permit

108. {3345} All new, replaced, or repaired fittings, flanges, and threaded connections shall be tested for leaks immediately after being placed into service. [District Rule 4409, 5.2.5] Federally Enforceable Through Title V Permit

109. {3346} All inaccessible components shall be tested for leaks at least once every 12 months. [District Rule 4409, 5.2.6] Federally Enforceable Through Title V Permit

110. {3347} All unsafe-to-monitor components shall be tested for leaks during each turnaround. [District Rule 4409, 5.2.7] Federally Enforceable Through Title V Permit

111. {3348} All pipes shall be visually inspected for leaks at least once every 12 months. [District Rule 4409, 5.2.8] Federally Enforceable Through Title V Permit

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112. {3349} All pipes, in service, that are found to be leaking by visual inspection shall be attempted to be repaired immediately. The leaking pipe shall then be tested within 24 hours and, if found leaking again, shall be repaired as soon as practicable but not later than the timeframe specified in this permit. [District Rule 4409, 5.2.8.1] Federally Enforceable Through Title V Permit

113. {3350} The annual pipe inspection required by either the Department of Oil, Gas, and Geothermal Resources (DOGGR) pursuant to California Code of Regulation Title 14, Division 2, Subchapter 2, Section 1774 (Oilfield Facilities and Equipment Maintenance), or by the Spill Prevention Control and Countermeasure Plan (SPCC) pursuant to 40 Code of Federal Regulation Part 112 (Oil Prevention and Response: Non- Transportation-Related Onshore and Offshore Facilities) can be used as the annual pipe inspection required by District Rule 4409. [District Rule 4409, 5.2.8.2] Federally Enforceable Through Title V Permit

114. {3351} Except for pumps, compressors, and PRDs, the permittee may apply for written approval from the District to change the inspection frequency of accessible components from quarterly to annually for a specific component type provided the following two qualifying requirements are met. During the previous five consecutive quarterly inspections, for the specific component type, there shall be no more leaks than as allowed by this permit. The permittee also shall not have received a Notice of Violation (NOV) from the District during the previous 12 months for violating any provisions of District Rule 4409 for the specific component type. If these two qualifying requirements have not been met, then the inspection frequency shall revert back to quarterly. The written request shall include pertinent documentation to demonstrate that the operator has successfully met the two qualifying requirements. [District Rule 4409, 5.2.9 and 5.2.10] Federally Enforceable Through Title V Permit

115. {3352} The permittee shall notify the District in writing within five calendar days after changing the inspection frequency for a specific component type. The written notification shall include the reason(s) and date of change to a quarterly inspection frequency. [District Rule 4409, 5.2.11] Federally Enforceable Through Title V Permit

116. {3353} A PRD that releases to the atmosphere shall be inspected by the permittee for leaks as soon as practicable but not later than 24 hours after the time of the release. The permittee shall reinspect the PRD for leaks not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the date of the initial release. If the PRD is found by the permittee to be leaking during either inspection, the PRD leak shall be treated as if the leak was found during the required quarterly operator inspections. [District Rule 4409, 5.2.12] Federally Enforceable Through Title V Permit

117. {3354} Except for PRDs, a component shall be inspected for leaks not later than 15 calendar days after repairing the leak or replacing the component. [District Rule 4409, 5.2.13] Federally Enforceable Through Title V Permit

118. {3355} District inspections shall not be counted as an operator inspection required by District Rule 4409. Any attempt by an operator to count such District inspections as part of the operator's mandatory inspections is considered a willful circumvention of the rule and is a violation of this rule. [District Rule 4409, 5.2.14] Federally Enforceable Through Title V Permit

119. {3356} The operator, upon detection of a leaking component, shall affix to that component a weatherproof, readily visible tag, bearing the date and time when the leak was detected and the date and time of the leak measurement. For gaseous leaks, the tag shall indicate the leak concentration in ppmv. For liquid leaks, the tag shall indicate whether it is a major liquid leak or a minor liquid leak. The tag shall indicate, when applicable, whether the component is an essential component, an unsafe-to-monitor component, or a critical component. The tag shall remain in place until the leaking component is repaired or replaced and reinspected and found to be in compliance with the requirements of this rule. [District Rule 4409, 5.3.1] Federally Enforceable Through Title V Permit

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120. {3357} The operator shall minimize all component leaks immediately, to the extent possible, but not later than one hour after detection of the leak in order to stop or reduce leakage to the atmosphere. If the leak has been minimized but the leak still exceeds the applicable leak standards specified in this permit, the operator shall do one of the following within the timeframes specified within this permit: 1) repair or replace the leaking component; 2) vent the leaking component to a closed vent system; 3) or remove the leaking component from operation. A closed vent system is a District approved system that is not open to the atmosphere. It is composed of hard-piping, ductwork connections and, if necessary, flow inducing devices that transport gas or vapor from a piece or pieces of equipment to a District approved control device that has a overall VOC collection and destruction or removal efficiency of at least 95%, or that transports gases or vapors back to a process system. [District Rule 4409, 5.3.4 and 5.3.5] Federally Enforceable Through Title V Permit

121. {3358} The operator shall repair minor gas leaks within seven days. The operator shall repair major gas leaks, which are > 10,000 ppmv but < or equal to 50,000 ppmv, within three days. The operator shall repair major gas leaks, which are > 50,000 ppmv, within two days. The operator shall repair minor liquid leaks within three days. The operator shall repair major liquid leaks within two days. The leak rate measured after leak minimization has been performed shall be the leak rate used to determine the applicable repair period. The start of the repair period shall be the time of the initial leak detection. [District Rule 4409, 5.3.4 and 5.3.5] Federally Enforceable Through Title V Permit

122. {3359} For each calendar quarter, the operator may extend the repair period for a total number of leaking components, not to exceed 0.05 % of the number of components inspected, by type, rounded upward to the nearest whole number. The repair period for minor gas leaks can be extended by seven additional days. The repair period for major gas leaks, which are > 10,000 ppmv but < or equal to 50,000 ppmv, can be extended by two additional days. [District Rule 4409, 5.3.5] Federally Enforceable Through Title V Permit

123. {3360} If a leaking component is an essential component or a critical component and which cannot be shut down immediately for repairs, the operator shall do the following: 1) minimize the leak within one hour after detection of the leak; 2) and if the leak has been minimized, but the leak still exceeds the applicable leak standards of Rule 4409 as specified in this permit, the essential component or critical component shall be repaired or replaced to eliminate the leak during the next process unit turnaround. The repair shall occur no later than one year from the date of the original leak detection. [District Rule 4409, 5.3.6] Federally Enforceable Through Title V Permit

124. {3361} For any component that has incurred five repair actions for major gas leaks or major liquid leaks, or a combination of major gas leaks and major liquid leaks within a continuous 12-month period, the operator shall do one of the following four options. Options 1a through 1f require written notification to the District, option 2 requires written notification to the District and written District approval, options 3 and 4 do not require written notification to the District: 1a) For compressors replace the existing seal with either a dual mechanical seal, an oil film seal, a gas seal, or a face-type seal; 1b) for pumps replace the pump with a seal-less pump or replace the seal with a dual mechanical seal; 1c) for PRDs replace the PRD and install a rupture disc in the line which precedes the PRD such that the PRD is in series with and follows the rupture disc; 1d) for valves replace the valve with a sealed bellows valve, or for seal rings install graphite or Teflon chevron seal rings in a live-loaded packing gland; 1e) for threaded connections weld the connections or replace threaded connections with flanges; 1f) for sampling connections replace the sampling connection with a closed-loop sampling system; 2) Replace the component with Achieved-in-Practice Best Available Control Technology (BACT) equipment; 3) Vent the component to a District approved closed-vent system; 4) Remove the component from operation. For any component that is accessible, is not unsafe-to-monitor, is not an essential component, or is not a critical component, the operator shall comply with these requirements as soon as practicable but not later than twelve months after the date of detection of the fifth major leak within a continuous 12-month period. For any component that is inaccessible, is unsafe-to-monitor, is essential, or is a critical component, the operator shall comply with these requirements as soon as practicable but not later than the next turnaround or not later than two years after the date of detection of the fifth major leak within a continuous 12-month period, whichever comes first. [District Rule 4409, 5.3.7] Federally Enforceable Through Title V Permit

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125. {3362} All major components and critical components shall be physically identified clearly and visibly for inspection, repair, and recordkeeping purposes. The physical identification shall consist of labels, tags, manufacturer's nameplate identifier, serial number, or model number, or other system approved by the District that enables an operator or the District to locate each individual component. The operator shall replace physical identifications that become missing or unreadable as soon as practicable but not later than 24 hours after discovery. [District Rule 4409, 5.4.1] Federally Enforceable Through Title V Permit

126. {3363} The operator shall keep a copy of the District approved Operator Management Plan (OMP) at the facility and make it available to the District, ARB, and EPA upon request. [District Rule 4409, 6.1.2] Federally Enforceable Through Title V Permit

127. {3364} By January 30th of each year the operator shall submit to the District for approval, in writing, an annual report indicating any changes to the existing OMP on file at the District. [District Rule 4409, 6.1.4] Federally Enforceable Through Title V Permit

128. {3365} The operator shall maintain an inspection log that has been signed and dated by the facility operator responsible for the inspection, certifying the accuracy of the information recorded in the log. The inspection log shall contain, at a minimum, all of the following information: 1) The total number of components inspected, and the total number and percentage of leaking components found by component types; 2) The location, type, name or description of each leaking component and the description of any unit where the leaking component is found; 3) Date of the leak detection and method of the leak detection; 4) For gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak; 5) The date of repair, replacement, or removal from operation of the leaking component(s); 6) The identification and location of essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes first; 7) The method(s) used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier; 8) The date of re-inspection and the leak concentration in ppmv after the component is repaired or is replaced; 9) The inspector's name, business mailing address, and business telephone number. [District Rule 4409, 6.2.1] Federally Enforceable Through Title V Permit

129. {3366} Records of leaks detected during quarterly or annual operator inspections, and each subsequent repair and re-inspection, shall be submitted to the District, ARB, and EPA upon request. [District Rule 4409, 6.2.2] Federally Enforceable Through Title V Permit

130. {3367} Records shall be maintained of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components. The records shall include a copy of the current calibration gas certification from the vendor of the calibration gas cylinder, the date of calibration, the concentration of calibration gas, the instrument reading of calibration gas before adjustment, the instrument reading of calibration gas after adjustment, the calibration gas expiration date, and the calibration gas cylinder pressure at the time of calibration. [District Rule 4409, 6.2.3] Federally Enforceable Through Title V Permit

131. All records required by this permit shall be retained on-site for a minimum of five years and made available for District, ARB, and EPA inspection upon request. [District Rules 1070 and 2520, 9.4] Federally Enforceable Through Title V Permit

132. {3369} All measurements of gaseous leak concentrations shall be conducted according to EPA Method 21 using an appropriate portable hydrocarbon detection instrument calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in EPA Method 21 or the manufacturer's instructions not more than 30 days prior to its use. [District Rule 4409, 6.3.1] Federally Enforceable Through Title V Permit

133. {3370} The VOC content by weight percent shall be determined using ASTM D-1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 for liquids. [District Rule 4409, 6.3.2] Federally Enforceable Through Title V Permit

134. {3371} The percent by volume liquid evaporated at 302 øF (150 øC) shall be determined using ASTM D-86. [District Rule 4409, 6.3.3] Federally Enforceable Through Title V Permit

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135. {3372} The TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D-323, and converting the RVP to TVP at the maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures specified in Appendix A of District Rule 4409. [District Rule 4409, 6.3.4] Federally Enforceable Through Title V Permit

136. {3373} The API gravity of crude oil or petroleum distillate shall be determined by using ASTM D-287 or ASTM 1298. Sampling for API gravity shall be performed in accordance with ASTM D-4057. [District Rule 4409, 6.3.5] Federally Enforceable Through Title V Permit

137. {3374} The control efficiency of any VOC control device, measured and calculated as carbon, shall be determined by EPA Method 25, except when the outlet concentration must be below 50 ppm in order to meet the standard, in which case EPA Method 25a may be used. EPA Method 18 may be used in lieu of EPA Method 25 or EPA Method 25a provided the identity and approximate concentrations of the analytes/compounds in the sample gas stream are known before analysis with the gas chromatograph and the gas chromatograph is calibrated for each of those known analyte/compound to ensure that the VOC concentrations are neither under- or over-reported. [District Rule 4409, 6.3.6] Federally Enforceable Through Title V Permit

138. {3375} Halogenated exempt compounds shall be analyzed by EPA Method 18 or ARB Method 422. [District Rule 4409, 6.3.7] Federally Enforceable Through Title V Permit

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

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-1-15 **EXPIRATION DATE:** ~~10/31/2009~~

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

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

PERMIT UNIT REQUIREMENTS

1. Operation shall include refrigerant regeneration system, glycol dehydration system, and two 27.5 MMBtu/hr process heaters F-44-301 & F-44-302 (shared with S-2234-3). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Two process heaters F-44-301 & F-44-302 shall be used on a standby basis, only during periods when one or both gas turbines (S-2234-52 & '53) are inoperative. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Fugitive VOC emission rate from the control system added to control emissions from glycol dehydrator reboiler vent, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c less than or equal to 10,000 ppm (Feb 1999), shall not exceed 0.20 lb/day. Permittee shall demonstrate compliance with specified emissions limit by calculation using the installed components and emissions factors specified above. Permittee shall maintain with the permit an accurate record by number and type of the installed fugitive components and shall make such record available for inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Fugitive VOC emission rate from the propane compressor calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c less than or equal to 10,000 ppm (Feb 1999), shall not exceed 1.9 lb/day. Permittee shall demonstrate compliance with specified emissions limit by calculation using the installed components and emissions factors specified above. Permittee shall maintain with the permit an accurate record by number and type of the installed fugitive components and shall make such record available for inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Control system(s) employed to control emissions from glycol dehydration system vent(s) shall be maintained in a leak free condition, as defined in Rule 4408. [District Rule 4408, 3.8.2, 5.3 and 6.3.2] Federally Enforceable Through Title V Permit
6. The propane compressor shall be maintained in a gas-tight condition. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4409 and shall be reported as a deviation. [District Rules 2201 and 4409, 3.20] Federally Enforceable Through Title V Permit
7. Permittee shall maintain monthly records of amount of gas dehydrated and other records as required by Rule 4408. The permittee shall make such records readily available for District inspection upon request and shall be retained on the premises for a period of not less than five years. [District Rule 4408, 6.1.1, 6.1.2 and 6.1.4] Federally Enforceable Through Title V Permit

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

8. Process heaters shall be fired exclusively by PUC quality natural gas. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit

9. Permittee shall maintain operational records of standby process heaters FF-44-301 & FF-44-302, including date, time, and total amount of natural gas consumed. These records shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

10. All process vessels and lines handling volatile organic compounds shall vent only to other process vessels, District-approved flare, or substrata injection system. [District Rule 2201] Federally Enforceable Through Title V Permit

11. Total duration of process heater startup shall not exceed 2 hr/day. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

12. Total duration of process heater shutdown shall not exceed 2 hr/day. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

13. Duration of start-up or shutdown shall not exceed two hours each per occurrence. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. The operator shall maintain daily records of the duration of start-up and shutdown periods. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

14. Except during start-up and shutdown, emissions rates from process heater exhaust shall not exceed any of the following limits: 6 ppmvd NOx @ 3% O2 or 0.007 lb-NOx/MMBtu, 0.002 lb-SOx/MMBtu, 0.014 lb-PM10/MMBtu, 47 ppmvd @ 3% O2 or 0.037 lb-CO/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

15. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

16. Ammonia (NH3) emissions shall not exceed 10 ppmvd @ 3% O2 over a 15 minute averaging period. [District Rule 4102] Federally Enforceable Through Title V Permit

17. Exhaust stack shall be equipped with adequate provisions facilitating the collection of samples consistent with EPA test methods. [District Rule 1081] Federally Enforceable Through Title V Permit

18. Source testing to measure natural gas-combustion NOx and CO emissions, and NH3 emissions, from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4102, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

19. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

20. Continuous Emissions Monitoring (CEM) equipment shall be in place and operating whenever process heater is operating, except for CEM systems breakdowns, repairs, and required calibration checks and zero and span adjustments, in accordance with 40 CFR 60.13(e). NOx (as NO2) and O2 must be recorded continuously when the CEM equipment is operating. [District Rules 1080, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

21. Operation, calibration and data reduction for the CEM equipment shall be in accordance with the requirements of 40 CFR Part 51, 40 CFR Parts 60.7 and 60.13 (except subsection h), 40 CFR Park 60 Appendix B (Performance Specifications) and 40 CFR Part 60 Appendix F (Quality Assurance Procedures, and applicable provisions of Rule 1080 (Stack Monitoring). [District Rules 1080, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

22. CEM records shall be retained for at least 5 years. Records shall include occurrence and duration of start-up, shutdown or malfunction; performance testing, calibrations, checks, and maintenance of CEM; and emission measurements. [District Rule 1080] Federally Enforceable Through Title V Permit

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23. Daily summaries of CEM records for each calendar quarter shall be submitted to the District within 30 days of the end of the calendar quarter. Hourly fuel stack gas flow rates and/or hourly fuel flow rates shall be measured during operation and included in quarterly reports. [District Rule 1080] Federally Enforceable Through Title V Permit

24. A report shall be submitted to the District within 30 days of the end of each calendar quarter identifying the time and date of each exceedance of emission limits, the excess emissions generated, and any conversion factor used to calculate emissions. [District Rule 1080] Federally Enforceable Through Title V Permit

25. The quarterly report shall identify each period of excess emissions that occurs during startups, shutdowns, or malfunctions. The nature and cause of each malfunction, corrective action taken, and preventative measures adopted shall also be reported. [District Rule 1080] Federally Enforceable Through Title V Permit

26. Heat exchangers utilizing cooling water shall be properly maintained to prevent VOC emissions from cooling towers. [District Rule 2201] Federally Enforceable Through Title V Permit

27. The operator shall test the circulating water from the cooling tower at least every six months to determine the concentration of hexavalent chromium. The District shall be notified 48 hours in advance of any sampling of cooling water for testing. Required testing may be discontinued and an exemption sought when two consecutive required tests show hexavalent chromium concentrations less than 0.15 mg/l. [District Rule 7012] Federally Enforceable Through Title V Permit

28. Operator shall comply with other applicable requirements of District Rule 7012 (amended 12/17/92). [District Rule 7012] Federally Enforceable Through Title V Permit

29. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Amended December 16, 1993). [District Rule 1081, and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit

30. Permittee shall determine sulfur content of combusted gas annually or shall demonstrate that the combusted gas is provided from a PUC or FERC regulated source. [District Rules 1081 and 4320] Federally Enforceable Through Title V Permit

31. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4320. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

32. Continuous Emissions Monitoring System (CEMS) emissions measurements shall be averaged over a period of 15 consecutive minutes to demonstrate compliance with the applicable emission limits. Any 15-consecutive-minute block average CEMS measurement exceeding the applicable emission limits shall constitute a violation. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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

34. Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit

35. Nitrogen oxide (NOx) emissions shall not exceed 140 lb/hr, calculated as NO2. [District Rules 4301, 5.2.2] Federally Enforceable Through Title V Permit

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

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

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38. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306, 4320] Federally Enforceable Through Title V Permit

39. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306, 4320] Federally Enforceable Through Title V Permit

40. Stack gas oxygen shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

41. SOx emissions shall be determined using EPA Method 6C, EPA Method 8, or ARB Method 100. [District Rule 4320] Federally Enforceable Through Title V Permit

42. If fuel analysis is used to demonstrate compliance with the conditions of this permit, the fuel higher heating value for each fuel shall be certified by third party fuel supplier or determined by: ASTM D 240-87 or D 2382-88 for liquid hydrocarbon fuels;ASTM D 1826-88 or D 1945-81 in conjunction with ASTM D 3588-89 for gaseous fuels. [District Rules 2520, 9.4.2, 4305, 4306, and 4320, 6.2.1] Federally Enforceable Through Title V Permit

43. NH3 emissions for source test purposes shall be determined using BAAQMD method ST-1B. [District Rule 4301] Federally Enforceable Through Title V Permit

44. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rules 2520, 9.3.2 and 4301, 5.2.1] Federally Enforceable Through Title V Permit

45. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested for sulfur content (as hydrogen sulfide). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

46. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6B; or Method 8; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months, however annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

47. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content (as hydrogen sulfide) of the gaseous fuel being fired in the unit shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

48. {1400} The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2; County Rules 404 (Madera), 406 (Fresno), and 407 (Kern, Kings, Merced, San Joaquin, Stanislaus, and Tulare)] Federally Enforceable Through Title V Permit

49. The requirements of 40 CFR 60 Subpart LLL do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-3-15 **EXPIRATION DATE:** 10/31/2009

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

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

PERMIT UNIT REQUIREMENTS

1. Operation shall include two 27.5 MMBtu/hr process heaters FF-44-301 & FF-44-302 (shared with S-2234-1). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Two process heaters F-44-301 & F-44-302 shall be used on a standby basis, only during periods when one or both gas turbines (S-2234-52 & '-53) are inoperative. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Fugitive VOC emission rate from the control system added to control emissions from glycol dehydrator reboiler vent, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c less than or equal to 10,000 ppm (Feb 1999), shall not exceed 0.20 lb/day. Permittee shall demonstrate compliance with specified emissions limit by calculation using the installed components and emissions factors specified above. Permittee shall maintain with the permit an accurate record by number and type of the installed fugitive components and shall make such record available for inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Fugitive VOC emission rate from the propane compressor, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c less than or equal to 10,000 ppm (Feb 1999), shall not exceed 1.9 lb/day. Permittee shall demonstrate compliance with specified emissions limit by calculation using the installed components and emissions factors specified above. Permittee shall maintain with the permit an accurate record by number and type of the installed fugitive components and shall make such record available for inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Control system(s) employed to control emissions from glycol dehydration system vent(s) shall be maintained in a leak free condition, as defined in Rule 4408. [District Rule 4408, Sections 3.8.2, 5.3 and 6.3.2] Federally Enforceable Through Title V Permit
6. The propane compressor shall be maintained in a gas-tight condition. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4409 and shall be reported as a deviation. [District Rule 2201 and Rule 4409, Section 3.20] Federally Enforceable Through Title V Permit
7. Permittee shall maintain monthly records of amount of gas dehydrated and other records as required by Rule 4408. The permittee shall make such records readily available for District inspection upon request and shall be retained on the premises for a period of not less than five years. [District Rule 4408, Sections 6.1.1, 6.1.2 and 6.1.4] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

8. Heaters shall be fired exclusively on PUC quality natural gas. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
9. Permittee shall maintain operational records of standby process heaters FF-44-301 & FF-44-302 , including date, time, and total amount of natural gas consumed. These records shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
10. All process vessels and lines handling volatile organic compounds shall vent only to other process vessels, District-approved flare, or substrata injection system. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Total duration of process heater startup shall not exceed 2 hr/day. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
12. Total duration of process heater shutdown shall not exceed 2 hr/day. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
13. Duration of start-up or shutdown shall not exceed two hours each per occurrence. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. The operator shall maintain daily records of the duration of start-up and shutdown periods. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
14. Except during start-up and shutdown, emissions rates from process heater exhaust shall not exceed any of the following limits: 6 ppmvd NOx @ 3% O2 or 0.007 lb-NOx/MMBtu, 0.002 lb-SOx/MMBtu, 0.014 lb-PM10/MMBtu, 47 ppmvd @ 3% O2 or 0.037 lb-CO/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
15. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
16. Heat exchangers utilizing cooling water shall be properly maintained to prevent VOC emissions from cooling towers. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The operator shall test the circulating water from the cooling tower at least every six months to determine the concentration of hexavalent chromium. The District shall be notified 48 hours in advance of any sampling of cooling water for testing. Required testing may be discontinued and an exemption sought when two consecutive required tests show hexavalent chromium concentrations less than 0.15 mg/l. [District Rule 7012] Federally Enforceable Through Title V Permit
18. Source testing to measure natural gas-combustion NOx and CO emissions, and NH3 emissions, from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4102, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
19. Operator shall comply with other applicable requirements of District Rule 7012 (amended 12/17/92). [District Rule 7012] Federally Enforceable Through Title V Permit
20. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
21. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Amended December 16, 1993). [District Rule 1081, and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
22. Continuous Emissions Monitoring (CEM) equipment shall be in place and operating whenever process heater is operating, except for CEM systems breakdowns, repairs, and required calibration checks and zero and span adjustments, in accordance with 40 CFR 60.13(e). NOx (as NO2) and O2 must be recorded continuously when the CEM equipment is operating. [District Rules 1080, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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23. Operation, calibration and data reduction for the CEM equipment shall be in accordance with the requirements of 40 CFR Part 51, 40 CFR Parts 60.7 and 60.13 (except subsection h), 40 CFR Park 60 Appendix B (Performance Specifications) and 40 CFR Part 60 Appendix F (Quality Assurance Procedures, and applicable provisions of Rule 1080 (Stack Monitoring). [District Rules 1080, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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

25. Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit

26. Source testing shall be performed for the boilers and heaters using EPA Method 7E or ARB Method 100. Source testing shall be conducted within two year after the issuance of this Title V permit and each unit shall be tested during each year in which the unit operates 720 hours or more. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

27. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rules 2520, 9.3.2 and 4301, 5.2.1] Federally Enforceable Through Title V Permit

28. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested for sulfur content (as hydrogen sulfide). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

29. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6B; or Method 8; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months, however annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

30. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content (as hydrogen sulfide) of the gaseous fuel being fired in the unit shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

31. Permittee shall determine sulfur content of combusted gas annually or shall demonstrate that the combusted gas is provided from a PUC or FERC regulated source. [District Rules 1081 and 4320]

32. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4320. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

33. Continuous Emissions Monitoring System (CEMS) emissions measurements shall be averaged over a period of 15 consecutive minutes to demonstrate compliance with the applicable emission limits. Any 15-consecutive-minute block average CEMS measurement exceeding the applicable emission limits shall constitute a violation. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

34. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

35. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

36. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

37. SOx emissions shall be determined using EPA Method 6C, EPA Method 8, or ARB Method 100. [District Rule 4320] Federally Enforceable Through Title V Permit

38. If fuel analysis is used to demonstrate compliance with the conditions of this permit, the fuel higher heating value for each fuel shall be certified by third party fuel supplier or determined by: ASTM D 240-87 or D 2382-88 for liquid hydrocarbon fuels;ASTM D 1826-88 or D 1945-81 in conjunction with ASTM D 3588-89 for gaseous fuels. [District Rule 2520, 9.4.2, 4305, 4306, and 4320, 6.2.1] Federally Enforceable Through Title V Permit

39. NH3 emissions for source test purposes shall be determined using BAAQMD method ST-1B. [District Rule 4301] Federally Enforceable Through Title V Permit

40. {1400} The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2; County Rules 404 (Madera), 406 (Fresno), and 407 (Kern, Kings, Merced, San Joaquin, Stanislaus, and Tulare)] Federally Enforceable Through Title V Permit

41. Nitrogen oxide (NOx) emissions shall not exceed 140 lb/hr, calculated as NO2. [District Rules 4301, 5.2.2] Federally Enforceable Through Title V Permit

42. The requirements of 40 CFR 60 Subpart LLL do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-4-7 **EXPIRATION DATE:** ~~10/31~~/2009

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

EQUIPMENT DESCRIPTION:
NATURAL GASOLINE LOADOUT #2 INCLUDING A LOADING RACK WITH VAPOR RECOVERY SYSTEM

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PERMIT UNIT REQUIREMENTS

1. Operation shall be equipped with two 15 hp product transfer pumps. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Loading rack shall incorporate vapor loss collection system. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Nitrogen purge system shall be a closed system such that all VOC's are displaced to the vapor control system via closed piping for reprocessing in S-2234-3. [District NSR Rule] Federally Enforceable Through Title V Permit
4. 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
5. The loading rack shall be equipped with bottom loading and a vapor collection and control system such that VOC emissions do not exceed 0.08 pounds per 1000 gallons of organic liquid transferred. [District Rule 4624, 5.1.1 and Kern County Rule 413] Federally Enforceable Through Title V Permit
6. Vapor collection and control system shall operate such that the pressure in the delivery tank being loaded does not exceed 18 inches water column pressure and 6 inches water column vacuum. [District Rule 4624, 5.4 and Kern County Rule 413] Federally Enforceable Through Title V Permit
7. All delivery tanks which previously contained organic liquids with a TVP of 1.5 psia or greater at the storage container's maximum organic liquid storage temperature shall be filled only at Class 1 loading facilities using bottom loading equipment with a vapor collection and control system operating such that VOC emissions do not exceed 0.08 lb/1000 gallons loaded; or Class 2 loading facilities equipped with a system to control at least 95% of VOC displaced; and which operate so the delivery tank does not exceed 18 inches water column pressure nor 6 inches water column vacuum. [District Rule 4624, 5.5 and Kern County Rule 413] Federally Enforceable Through Title V Permit
8. The transfer rack and vapor collection equipment shall be designed, installed, maintained and operated such that there are no leaks and no excess organic liquid drainage at disconnections. A leak shall be defined as the dripping of VOC-containing liquid at a rate of more than three drops per minute; or a concentration of VOC greater than 10,000 ppmv, as methane, above background when measured with a portable hydrocarbon detection instrument in accordance with EPA Method 21. Excess organic liquid drainage shall be defined as more than 10 milliliters liquid drainage. Such liquid drainage for disconnect operations shall be determined by computing the average drainage from three consecutive disconnects at any one permit unit. [District Rule 4624, 3.13, 3.17, and 5.6 and Kern County Rule 413] Federally Enforceable Through Title V Permit
9. The construction of any new top loading facility or the reconstruction, as defined in 40 CFR 60.15, or the expansion of any existing top loading facility with top loading equipment shall not be allowed. [District Rule 4624, 5.7 and Kern County Rule 413] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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10. During the loading of organic liquids, the operator shall perform and record the results of monthly leak inspections of the loading and vapor collection equipment at each loading arm. Leak inspections shall be conducted using sight, sound, smell and instrument methods to detect leaks. Instrument detection shall be conducted using EPA Method 21 and shall be measured at a distance of one centimeter from the potential source. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: A) Zero air (less than 10 ppm of hydrocarbon in air); and B) Mixture of methane and air at a concentration of about, but less than, 10,000 ppm methane. [District Rules 2520, 9.3.2 and 4624, 6.2.2] Federally Enforceable Through Title V Permit
11. Corrective steps shall be taken at any time the operator observes excess drainage at disconnect. In addition, the operator shall perform and record the results of monthly drainage inspections at disconnect for each loading arm. If no excess drainage conditions are found during five consecutive monthly inspections, the drainage inspection frequency may be changed from monthly to quarterly. However, if one or more excess drainage condition is found during a quarterly inspection, the inspection frequency shall return to monthly. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. Drainage inspections shall be completed before 10:00 AM the day of inspection. Compliance shall be demonstrated by collecting all drainage at disconnect in a spouted container. The drainage shall be transferred to a graduated cylinder and the volume determined within one (1) minute of collection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
13. Each detected leak shall be repaired within 15 calendar days of detection. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
14. The loading rack's vapor collection and control system (VCCS) shall be tested annually to demonstrate the pressure in the delivery tanks being loaded complies with the requirements specified in this permit. Compliance shall be determined by calibrating and installing a liquid manometer, magnehelic device, or other instrument demonstrated to be equivalent, capable of measuring up to 500 mm water gauge pressure with a precision of + or - 2.5 mm water gauge, on the terminal's VCCS at a pressure tap as close as possible to the connection with the product tank truck. The highest instantaneous pressure measurement as well as all pressure measurements at 5 minute intervals during delivery vessel loading must be recorded. Every loading position must be tested at least once during the annual performance test. [District Rules 2520, 9.4.2 and 4624, 6.2.2] Federally Enforceable Through Title V Permit
15. Source testing to show compliance with the VOC emission limit from the transfer operation shall be performed once every 60 months, but no more than 30 days before or after initial source test anniversary date. [District Rule 4624, 6.2.2] Federally Enforceable Through Title V Permit
16. The following test methods shall be used to demonstrate compliance: 40 CFR 60.503 "Test Methods and Procedures" and EPA Methods 2A, 2B, 25A and 25B and ARB Method 422, or ARB Test Procedure TP-203.1. An alternative test method may be used if the alternative is approved in writing by the APCO and EPA. [District Rule 4624, 6.3.2, 6.3.9] Federally Enforceable Through Title V Permit
17. Analysis of halogenated exempt compounds shall be by ARB Method 432. [District Rule 4624, 6.3.1 and Kern County Rule 413] Federally Enforceable Through Title V Permit
18. The permittee shall maintain an inspection log containing at least the following: A) dates of leak and drainage inspections, B) leak determination method, C) findings, D) corrective action (date each leak or excess drainage condition repaired, reasons for any leak repair interval in excess of 15 days), and E) inspector name and signature. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
19. Permittee shall maintain records of daily liquid throughput and the results of any required leak inspections. [District Rule 4624, 6.1.3] Federally Enforceable Through Title V Permit
20. All records necessary to determine compliance with the VOC emission limit for this unit shall include component counts and recognized emission factors for fugitive emission sources. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
21. Compliance with these permit conditions in the Title V permit shall be deemed compliance with the requirements of Kern County Rule 413. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. Compliance with these permit conditions in the Title V permit shall be deemed compliance with the following requirements: District Rule 4624 (as amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-8-3 **EXPIRATION DATE:** 10/31/2009

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

EQUIPMENT DESCRIPTION:
104.6 MMBTU/HR LOW PRESSURE FLARE SERVING LTS #2 PLANT

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PERMIT UNIT REQUIREMENTS

1. This flare shall be inspected every two weeks while in operation for visible emissions. If visible emissions are observed, corrective action shall be taken. If visible emissions continue, an EPA Method 9 test shall be conducted within 72 hours. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. The flare shall be operated only in an emergency. An emergency is defined as any situation or a condition arising from a sudden and reasonably unforeseeable and unpreventable event beyond the control of the operator. Examples include, but are not limited to, not preventable equipment failure, natural disaster, act of war or terrorism, or external power curtailment, excluding a power curtailment due to an interruptible power service agreement from a utility. A flaring event due to improperly designed equipment, lack of preventative maintenance, careless or improper operation, operator error or willful misconduct does not quality as an emergency. An emergency situation requires immediate corrective action to restore safe operation. A planned flaring event shall not be considered as an emergency. [District Rules 2201 and 4311, 3.7, 5.1] Federally Enforceable Through Title V Permit
4. A flame shall be present at all times in the flare whenever combustible gases are vented through the flare. [District Rule 4311, 5.2] Federally Enforceable Through Title V Permit
5. The flare outlet shall be equipped with an automatic ignition system, or, shall operate with a pilot flame present at all times when combustible gases are vented through the flare, except during purge periods for automatic-ignition equipped flares. [District Rule 4311, 5.3] Federally Enforceable Through Title V Permit
6. Except for flares equipped with a flow-sensing ignition system, a heat sensing device such as a thermocouple, ultraviolet beam sensor, infrared sensor, or an equivalent device, capable of continuously detecting at least one pilot flame or the flare flame is present, shall be installed and operated. [District Rule 4311, 5.4] Federally Enforceable Through Title V Permit
7. Flares that use flow-sensing automatic ignition systems and which do not use a continuous flame pilot shall use purge gas for purging. [District Rule 4311, 5.5] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

9. Operators subject to vent gas composition monitoring requirements shall use the following test methods as appropriate, or by an alternative method approved by the APCO, ARB and EPA: Total hydrocarbon content and methane content of vent gas shall be determined using ASTM Method D 1945-96, ASTM Method UOP 539-97, EPA Method 18, or EPA Method 25A or 25B. Hydrogen sulfide content of vent gas shall be determined using ASTM Method D 1945-96, ASTM Method UOP 539-97, ASTM Method D 4084-94, or ASTM Method D 4810-88. [District Rule 4311, 6.3.4] Federally Enforceable Through Title V Permit

10. If vent gas composition is monitored with a continuous analyzer employing gas chromatography the minimum sampling frequency shall be one sample every 30 minutes. If vent gas composition is monitored using continuous analyzers not employing gas chromatography, the total reduced sulfur content of vent gas shall be determined by using EPA Method D4468-85. [District Rule 4311, 6.3.4] Federally Enforceable Through Title V Permit

11. Vent gas flow shall be determined using one or more of the following methods, or by any alternative method approved by the APCO, ARB, and EPA: 1) EPA Methods 1 and 2; 2) A verification method recommended by the manufacturer of the flow monitoring equipment installed; 3) Tracer gas dilution or velocity; or 4) Other flow monitors or process monitors that can provide comparison data on a vent stream that is being directed past the ultrasonic flow meter. [District Rule 4311, 6.3.5] Federally Enforceable Through Title V Permit

12. The operator shall monitor vent gas composition using one of the following five methods as appropriate. If flares share a common header, a sample from the header will be deemed representative of vent gas composition for all flares served by the header. The operator shall provide the APCO with access to the monitoring system to collect vent gas samples to verify the analysis. 1) Sampling that meets the following requirements: (a) If the flow rate of vent gas flared in any consecutive 15-minute period continuously exceeds 330 standard cubic feet per minute (SCFM), a sample shall be taken within 15 minutes. The sampling frequency thereafter shall be one sample every three hours and shall continue until the flow rate of vent gas flared in any consecutive 15-minute period is continuously 330 SCFM or less. In no case shall a sample be required more frequently than once every 3 hours. (b) Samples shall be analyzed using approved test methods; or 2) Integrated sampling that meets the following requirements: (a) If the flow rate of vent gas flared in any consecutive 15 minute period continuously exceeds 330 SCFM, integrated sampling shall begin within 15 minutes and shall continue until the flow rate of vent gas flared in any consecutive 15 minute period is continuously 330 SCFM or less. (b) Integrated sampling shall consist of a minimum of one aliquot for each 15-minute period until the sample container is full. If sampling is still required pursuant to part (a), a new sample container shall be placed in service within one hour after the previous sample was filled. A sample container shall not be used for a sampling period that exceeds 24 hours. (c) Samples shall be analyzed using approved test methods; or 3) Continuous analyzers that meet the following requirements: (a) The analyzers shall continuously monitor for total hydrocarbon methane, and depending upon the analytical method used pursuant to Section 6.3.4, hydrogen sulfide or total reduced sulfur. (b) The hydrocarbon analyzer shall have a full-scale range of 100% total hydrocarbon. (c) Each analyzer shall be maintained to be accurate to within 20% when compared to any field accuracy tests or to within 5% of full scale; or 4). Continuous analyzers employing gas chromatography that meet the following requirements: (a) The gas chromatography system shall monitor for total hydrocarbon, methane, and hydrogen sulfide. (b) The gas chromatography system shall be maintained to be accurate within 5% of full scale; or 5) Monitor sulfur content using a colorimetric tube system on a daily basis, and monitor vent gas hydrocarbon on a weekly basis by collecting samples and having them tested using approved test methods. [District Rule 4311, 6.6] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. Permittee shall monitor the volumetric flows of purge and pilot gases with flow measuring devices or other parameters as specified on the Permit to Operate so that volumetric flows of pilot and purge gas may be calculated based on pilot design and the parameters monitored. [District Rule 4311, 6.7] Federally Enforceable Through Title V Permit
14. The operator of a flare with a water seal shall monitor and record the water level and pressure of the water seal daily or as specified on the Permit to Operate. [District Rule 4311, 6.8] Federally Enforceable Through Title V Permit
15. Periods of flare monitoring system inoperation greater than 24 continuous hours shall be reported by the following working day, followed by notification of resumption of monitoring. Periods of inoperation of monitoring equipment shall not exceed 14 days per any 18-consecutive-month period. Periods of flare monitoring system inoperation do not include the periods when the system feeding the flare is not operating. [District Rule 4311, 6.9] Federally Enforceable Through Title V Permit
16. During periods of inoperation of continuous analyzers or auto-samplers, operators responsible for monitoring shall take one sample within 30 minutes of the commencement of flaring, from the flare header or from an alternate location at which samples are representative of vent gas composition and have samples analyzed using approved test methods. During periods of inoperation of flow monitors, flow shall be calculated using good engineering practices. [District Rule 4311, 6.9] Federally Enforceable Through Title V Permit
17. Permittee shall maintain and calibrate all required monitors and recording devices in accordance with the applicable manufacturer's specifications. In order to claim that a manufacturer's specification is not applicable, the person responsible for emissions must have, and follow, a written maintenance policy that was developed for the device in question. The written policy must explain and justify the difference between the written procedure and the manufacturer's procedure. [District Rule 4311, 6.9] Federally Enforceable Through Title V Permit
18. All in-line continuous analyzer and flow monitoring data must be continuously recorded by an electronic data acquisition system capable of one-minute averages. Flow monitoring data shall be recorded as one-minute averages. [District Rule 4311, 6.9] Federally Enforceable Through Title V Permit
19. Effective on and after July 1, 2012, permittee shall maintain a copy of annual reports submitted to the APCO. [District Rule 4311, 6.1.6] Federally Enforceable Through Title V Permit
20. The permittee shall maintain records of the duration of flare operation, amount of gas burned, the nature of the emergency situation and any corrective action take to rectify the process upset of breakdown that necessitated the use of the flare. [District Rules 2520, 9.4.2 and 4311, 6.1.3] Federally Enforceable Through Title V Permit
21. Records of flare maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
22. Permittee shall maintain records of all monitoring data collected. [District Rule 4311, 6.1.7] Federally Enforceable Through Title V Permit
23. Compliance with the requirements for this permit unit shall be deemed compliance with District Rules 4201. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-9-8 **EXPIRATION DATE:** ~~10/31~~/2009

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EQUIPMENT DESCRIPTION:
5,500 BHP INGERSOLL-RAND MODEL 616KVR LEAN-BURN NATURAL GAS-FIRED IC ENGINE WITH PRE-COMBUSTION CHAMBER POWERING A GAS COMPRESSOR (K-40 UNX #16652)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
3. 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
4. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
6. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 20.00 lb/hr, 1.65 gr/hp-hr and 136 ppmv @ 15% O2, SOx (as SO2): 1.86 lb/hr, PM10: 1.33 lb/hr, CO: 60.63 lb/hr and 676 ppmv @ 15% O2, or VOC: 36.38 lb/hr and 710 ppmv @ 15% O2. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
7. Percent emission reductions, if used to comply with NOx emission limits, shall be calculated as follows: For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. The engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. [District Rule 4702, 5.4] Federally Enforceable Through Title V Permit
8. The operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO. [District Rule 4702, 5.5] Federally Enforceable Through Title V Permit
9. NOx emissions rate shall not exceed 2.00 gr/hp-hr. [PSD SJ 77-42] Federally Enforceable Through Title V Permit
10. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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11. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201 and Kern County Rule 404] Federally Enforceable Through Title V Permit

12. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit

13. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

14. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

15. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

16. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. This average shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. For engines that comply with a percent reduction limit, the percent reduction of NOx emissions shall also be reported. [District Rules 2520, 9.4.2 and 4702, 6.3.3] Federally Enforceable Through Title V Permit

17. 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 Rules 1081 and 4702] Federally Enforceable Through Title V Permit

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

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

21. 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 Rules 2520, 9.4.2 and 4702] Federally Enforceable Through Title V Permit

22. 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 Rules 2520, 9.4.2 and 4702] Federally Enforceable Through Title V Permit

23. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrate compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.3.2, and 4702, 6.3.2; and PSD SJ 77-42] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

24. Permittee shall monitor the nitrogen oxides (NOx) concentration in the engine exhaust with a facility conducted noncertified self test at least on a monthly basis. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

25. The permittee shall monitor and record the stack concentration of NOx, 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

26. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

27. 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

28. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

29. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2201 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

30. 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 of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit

31. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

32. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-10-8 **EXPIRATION DATE:** ~~10/31/2009~~

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EQUIPMENT DESCRIPTION:
5,500 BHP INGERSOLL-RAND MODEL 616KVR LEAN-BURN NATURAL GAS-FIRED IC ENGINE WITH PRE-COMBUSTION CHAMBER POWERING A GAS COMPRESSOR (K-41 UNX #16651)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
3. 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
4. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
6. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 20.00 lb/hr, 1.65 gr/hp-hr and 136 ppmv @ 15% O2, SOx (as SO2): 1.86 lb/hr, PM10: 1.33 lb/hr, CO: 60.63 lb/hr and 676 ppmv @ 15% O2, or VOC: 36.38 lb/hr and 710 ppmv @ 15% O2. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
7. Percent emission reductions, if used to comply with NOx emission limits, shall be calculated as follows: For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. The engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. [District Rule 4702, 5.4] Federally Enforceable Through Title V Permit
8. The operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO. [District Rule 4702, 5.5] Federally Enforceable Through Title V Permit
9. NOx emissions rate shall not exceed 2.00 gr/hp-hr. [PSD SJ 77-42] Federally Enforceable Through Title V Permit
10. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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11. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201; Kern County Rule 404] Federally Enforceable Through Title V Permit

12. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit

13. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

14. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

15. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

16. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. This average shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. For engines that comply with a percent reduction limit, the percent reduction of NOx emissions shall also be reported. [District Rules 2520, 9.4.2 and 4702, 6.3.3] Federally Enforceable Through Title V Permit

17. 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 Rules 1081 and 4702] Federally Enforceable Through Title V Permit

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

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

21. 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 Rules 2520, 9.4.2 and 4702] Federally Enforceable Through Title V Permit

22. 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 Rules 2520, 9.4.2 and 4702] Federally Enforceable Through Title V Permit

23. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrate compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, and 4702, 6.3.2; and PSD SJ 77-42] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

24. Permittee shall monitor the nitrogen oxides (NOx) concentration in the engine exhaust with a facility conducted noncertified self test at least on a monthly basis. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

25. The permittee shall monitor and record the stack concentration of NOx, 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

26. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

27. 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

28. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

29. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2201 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

30. 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 of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit

31. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

32. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-11-8 **EXPIRATION DATE:** ~~10/31/2009~~

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EQUIPMENT DESCRIPTION:
5,500 BHP INGERSOLL-RAND MODEL 616KVR LEAN-BURN NATURAL GAS-FIRED IC ENGINE WITH PRE-COMBUSTION CHAMBER POWERING A GAS COMPRESSOR (K-42 UNX #16650)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
3. 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
4. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
6. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 20.00 lb/hr, 1.65 gr/hp-hr and 136 ppmv @ 15% O2, SOx (as SO2): 1.86 lb/hr, PM10: 1.33 lb/hr, CO: 60.63 lb/hr and 676 ppmv @ 15% O2, or VOC: 36.38 lb/hr and 710 ppmv @ 15% O2. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
7. Percent emission reductions, if used to comply with NOx emission limits, shall be calculated as follows: For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. The engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. [District Rule 4702, 5.4] Federally Enforceable Through Title V Permit
8. The operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO. [District Rule 4702, 5.5] Federally Enforceable Through Title V Permit
9. NOx emissions rate shall not exceed 2.00 gr/hp-hr. [PSD SJ 77-42] Federally Enforceable Through Title V Permit
10. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit

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11. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201; Kern County Rule 404] Federally Enforceable Through Title V Permit

12. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit

13. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

14. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

15. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

16. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. This average shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. For engines that comply with a percent reduction limit, the percent reduction of NOx emissions shall also be reported. [District Rules 2520, 9.4.2 and 4702, 6.3.3] Federally Enforceable Through Title V Permit

17. 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 Rules 1081 and 4702] Federally Enforceable Through Title V Permit

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

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

21. 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 Rules 2520, 9.4.2 and 4702] Federally Enforceable Through Title V Permit

22. 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 Rules 2520, 9.4.2 and 4702] Federally Enforceable Through Title V Permit

23. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrate compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, and 4702, 6.3.2; and PSD SJ 77-42] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

24. Permittee shall monitor the nitrogen oxides (NOx) concentration in the engine exhaust with a facility conducted noncertified self test at least on a monthly basis. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

25. The permittee shall monitor and record the stack concentration of NOx, 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

26. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

27. 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

28. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

29. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2201 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

30. 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 of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit

31. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

32. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-12-8 **EXPIRATION DATE:** ~~10/31/2009~~

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EQUIPMENT DESCRIPTION:
2,000 BHP INGERSOLL-RAND MODEL 412KVS LEAN-BURN NATURAL GAS-FIRED IC ENGINE WITH PRE-COMBUSTION CHAMBER POWERING A GAS COMPRESSOR (K-43 UNX #13694)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
3. 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, 601 and 7.5] Federally Enforceable Through Title V Permit
4. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
5. Particulate matter emissions at the point of discharge shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] 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. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 7.72 lb/hr, 1.75 gr/hp-hr and 144 ppmv @ 15% O2 (equivalent to 90% NOx reduction); SOx (as SO2): 0.67 lb/hr; PM10: 0.49 lb/hr; CO: 22.05 lb/hr and 676 ppmv @ 15% O2; or VOC: 13.23 lb/hr and 710 ppmv @ 15% O2. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
8. Percent emission reductions, if used to comply with NOx emission limits, shall be calculated as follows: For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. The engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. [District Rule 4702, 5.4] Federally Enforceable Through Title V Permit
9. The operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO. [District Rule 4702, 5.5] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit

11. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit

12. If the IC engine is fired on PUC-regulated natural gas, the permittee shall maintain on file, copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

13. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

14. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

15. Source testing to measure the NOx, CO, and VOC emissions from this unit shall be conducted not less than once every 12 months. If compliance with the emission limits is demonstrated on two (2) consecutive annual source tests, the testing frequency may be reduced to not less than once every 24 months. If the unit fails to demonstrate compliance with the applicable emission limits, the testing frequency shall return to not less than once every 12 months. [District Rules 2201 and 4702, 6.3.2] Federally Enforceable Through Title V Permit

16. 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

17. 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

18. 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 Rules 1081 and 4702, 6.4] Federally Enforceable Through Title V Permit

19. 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. For engines that comply with a percent reduction limit, the percent reduction of NOx emissions shall also be reported. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit

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

21. 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

22. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. The permittee shall monitor and record the stack concentration of NOx, 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

24. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

25. 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

26. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

27. 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 of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

28. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

29. NOx emissions rate shall not exceed 2.00 gr/hp-hr. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

30. Source testing to measure the NOx emissions from at least one representative engine of this type (Ingersoll-Rand, model 412KVS) shall be conducted not less than once every 12 months. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

31. The permittee shall determine the NOx emissions from at least one representative engine of this type (Ingersoll-Rand, model 412KVS) at least once per month by either direct NOx measurement, or measurement of other exhaust gas concentrations (e.g. CO and O2) and engine parameters from which NOx emissions can be directly computed. NOx emissions shall be determined from every engine of this type at least once each calendar half. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-14-3 **EXPIRATION DATE:** 10/31/2009

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

EQUIPMENT DESCRIPTION:
105.6 MMBTU/HR LOW PRESSURE FLARE SERVING LTS #1

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PERMIT UNIT REQUIREMENTS

1. This flare shall be inspected every two weeks while in operation for visible emissions. If visible emissions are observed, corrective action shall be taken. If visible emissions continue, an EPA Method 9 test shall be conducted within 72 hours. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. The flare shall be operated only in an emergency. An emergency is defined as any situation or a condition arising from a sudden and reasonably unforeseeable and unpreventable event beyond the control of the operator. Examples include, but are not limited to, not preventable equipment failure, natural disaster, act of war or terrorism, or external power curtailment, excluding a power curtailment due to an interruptible power service agreement from a utility. A flaring event due to improperly designed equipment, lack of preventative maintenance, careless or improper operation, operator error or willful misconduct does not quality as an emergency. An emergency situation requires immediate corrective action to restore safe operation. A planned flaring event shall not be considered as an emergency. [District Rules 2201 and 4311, 3.7, 5.1] Federally Enforceable Through Title V Permit
4. A flame shall be present at all times in the flare whenever combustible gases are vented through the flare. [District Rule 4311, 5.2] Federally Enforceable Through Title V Permit
5. The flare outlet shall be equipped with an automatic ignition system, or, shall operate with a pilot flame present at all times when combustible gases are vented through the flare, except during purge periods for automatic-ignition equipped flares. [District Rule 4311, 5.3] Federally Enforceable Through Title V Permit
6. Except for flares equipped with a flow-sensing ignition system, a heat sensing device such as a thermocouple, ultraviolet beam sensor, infrared sensor, or an equivalent device, capable of continuously detecting at least one pilot flame or the flare flame is present, shall be installed and operated. [District Rule 4311, 5.4] Federally Enforceable Through Title V Permit
7. Flares that use flow-sensing automatic ignition systems and which do not use a continuous flame pilot shall use purge gas for purging. [District Rule 4311, 5.5] Federally Enforceable Through Title V Permit

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

9. Operators subject to vent gas composition monitoring requirements shall use the following test methods as appropriate, or by an alternative method approved by the APCO, ARB and EPA: Total hydrocarbon content and methane content of vent gas shall be determined using ASTM Method D 1945-96, ASTM Method UOP 539-97, EPA Method 18, or EPA Method 25A or 25B. Hydrogen sulfide content of vent gas shall be determined using ASTM Method D 1945-96, ASTM Method UOP 539-97, ASTM Method D 4084-94, or ASTM Method D 4810-88. [District Rule 4311, 6.3.4] Federally Enforceable Through Title V Permit

10. If vent gas composition is monitored with a continuous analyzer employing gas chromatography the minimum sampling frequency shall be one sample every 30 minutes. If vent gas composition is monitored using continuous analyzers not employing gas chromatography, the total reduced sulfur content of vent gas shall be determined by using EPA Method D4468-85. [District Rule 4311, 6.3.4] Federally Enforceable Through Title V Permit

11. Vent gas flow shall be determined using one or more of the following methods, or by any alternative method approved by the APCO, ARB, and EPA: 1) EPA Methods 1 and 2; 2) A verification method recommended by the manufacturer of the flow monitoring equipment installed; 3) Tracer gas dilution or velocity; or 4) Other flow monitors or process monitors that can provide comparison data on a vent stream that is being directed past the ultrasonic flow meter. [District Rule 4311, 6.3.5] Federally Enforceable Through Title V Permit

12. The operator shall monitor vent gas composition using one of the following five methods as appropriate. If flares share a common header, a sample from the header will be deemed representative of vent gas composition for all flares served by the header. The operator shall provide the APCO with access to the monitoring system to collect vent gas samples to verify the analysis. 1) Sampling that meets the following requirements: (a) If the flow rate of vent gas flared in any consecutive 15-minute period continuously exceeds 330 standard cubic feet per minute (SCFM), a sample shall be taken within 15 minutes. The sampling frequency thereafter shall be one sample every three hours and shall continue until the flow rate of vent gas flared in any consecutive 15-minute period is continuously 330 SCFM or less. In no case shall a sample be required more frequently than once every 3 hours. (b) Samples shall be analyzed using approved test methods; or 2) Integrated sampling that meets the following requirements: (a) If the flow rate of vent gas flared in any consecutive 15 minute period continuously exceeds 330 SCFM, integrated sampling shall begin within 15 minutes and shall continue until the flow rate of vent gas flared in any consecutive 15 minute period is continuously 330 SCFM or less. (b) Integrated sampling shall consist of a minimum of one aliquot for each 15-minute period until the sample container is full. If sampling is still required pursuant to part (a), a new sample container shall be placed in service within one hour after the previous sample was filled. A sample container shall not be used for a sampling period that exceeds 24 hours. (c) Samples shall be analyzed using approved test methods; or 3) Continuous analyzers that meet the following requirements: (a) The analyzers shall continuously monitor for total hydrocarbon methane, and depending upon the analytical method used pursuant to Section 6.3.4, hydrogen sulfide or total reduced sulfur. (b) The hydrocarbon analyzer shall have a full-scale range of 100% total hydrocarbon. (c) Each analyzer shall be maintained to be accurate to within 20% when compared to any field accuracy tests or to within 5% of full scale; or 4). Continuous analyzers employing gas chromatography that meet the following requirements: (a) The gas chromatography system shall monitor for total hydrocarbon, methane, and hydrogen sulfide. (b) The gas chromatography system shall be maintained to be accurate within 5% of full scale; or 5) Monitor sulfur content using a colorimetric tube system on a daily basis, and monitor vent gas hydrocarbon on a weekly basis by collecting samples and having them tested using approved test methods. [District Rule 4311, 6.6] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. Permittee shall monitor the volumetric flows of purge and pilot gases with flow measuring devices or other parameters as specified on the Permit to Operate so that volumetric flows of pilot and purge gas may be calculated based on pilot design and the parameters monitored. [District Rule 4311, 6.7] Federally Enforceable Through Title V Permit
14. The operator of a flare with a water seal shall monitor and record the water level and pressure of the water seal daily or as specified on the Permit to Operate. [District Rule 4311, 6.8] Federally Enforceable Through Title V Permit
15. Periods of flare monitoring system inoperation greater than 24 continuous hours shall be reported by the following working day, followed by notification of resumption of monitoring. Periods of inoperation of monitoring equipment shall not exceed 14 days per any 18-consecutive-month period. Periods of flare monitoring system inoperation do not include the periods when the system feeding the flare is not operating. [District Rule 4311, 6.9] Federally Enforceable Through Title V Permit
16. During periods of inoperation of continuous analyzers or auto-samplers, operators responsible for monitoring shall take one sample within 30 minutes of the commencement of flaring, from the flare header or from an alternate location at which samples are representative of vent gas composition and have samples analyzed using approved test methods. During periods of inoperation of flow monitors, flow shall be calculated using good engineering practices. [District Rule 4311, 6.9] Federally Enforceable Through Title V Permit
17. Permittee shall maintain and calibrate all required monitors and recording devices in accordance with the applicable manufacturer's specifications. In order to claim that a manufacturer's specification is not applicable, the person responsible for emissions must have, and follow, a written maintenance policy that was developed for the device in question. The written policy must explain and justify the difference between the written procedure and the manufacturer's procedure. [District Rule 4311, 6.9] Federally Enforceable Through Title V Permit
18. All in-line continuous analyzer and flow monitoring data must be continuously recorded by an electronic data acquisition system capable of one-minute averages. Flow monitoring data shall be recorded as one-minute averages. [District Rule 4311, 6.9] Federally Enforceable Through Title V Permit
19. Effective on and after July 1, 2012, permittee shall maintain a copy of annual reports submitted to the APCO. [District Rule 4311, 6.1.6] Federally Enforceable Through Title V Permit
20. The permittee shall maintain records of the duration of flare operation, amount of gas burned, the nature of the emergency situation and any corrective action take to rectify the process upset of breakdown that necessitated the use of the flare. [District Rules 2520, 9.4.2 and 4311, 6.1.3] Federally Enforceable Through Title V Permit
21. Records of flare maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
22. Permittee shall maintain records of all monitoring data collected. [District Rule 4311, 6.1.7] Federally Enforceable Through Title V Permit
23. Compliance with the requirements for this permit unit shall be deemed compliance with District Rules 4201. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-15-8 **EXPIRATION DATE:** 10/31/2009

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EQUIPMENT DESCRIPTION:
5,500 BHP INGERSOLL-RAND MODEL 616KVR LEAN-BURN NATURAL GAS-FIRED IC ENGINE WITH PRE-COMBUSTION CHAMBER POWERING A GAS COMPRESSOR (K-36 UNX #13675)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
3. 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
4. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
6. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 20.00 lb/hr, 1.65 gr/hp-hr and 136 ppmv @ 15% O2, SOx (as SO2): 1.86 lb/hr, PM10: 1.33 lb/hr, CO: 60.63 lb/hr and 676 ppmv @ 15% O2, or VOC: 36.38 lb/hr and 710 ppmv @ 15% O2. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
7. Percent emission reductions, if used to comply with NOx emission limits, shall be calculated as follows: For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. The engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. [District Rule 4702, 5.4] Federally Enforceable Through Title V Permit
8. The operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO. [District Rule 4702, 5.5] Federally Enforceable Through Title V Permit
9. NOx emissions rate shall not exceed 2.00 gr/hp-hr. [PSD SJ 77-42] Federally Enforceable Through Title V Permit
10. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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11. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201; Kern County Rule 404] Federally Enforceable Through Title V Permit

12. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit

13. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

14. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

15. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

16. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. This average shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. For engines that comply with a percent reduction limit, the percent reduction of NOx emissions shall also be reported. [District Rules 2520, 9.4.2 and 4702, 6.3.3] Federally Enforceable Through Title V Permit

17. 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 Rules 1081 and 4702] Federally Enforceable Through Title V Permit

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

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

21. 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 Rules 2520, 9.4.2 and 4702] Federally Enforceable Through Title V Permit

22. 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 Rules 2520, 9.4.2 and 4702] Federally Enforceable Through Title V Permit

23. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrate compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, and 4702, 6.3.2; and PSD SJ 77-42] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

24. Permittee shall monitor the nitrogen oxides (NOx) concentration in the engine exhaust with a facility conducted noncertified self test at least on a monthly basis. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

25. The permittee shall monitor and record the stack concentration of NOx, 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

26. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

27. 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

28. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

29. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2201 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

30. 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 of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit

31. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

32. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-16-8 **EXPIRATION DATE:** 10/31/2009

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EQUIPMENT DESCRIPTION:
5,500 BHP INGERSOLL-RAND MODEL 616KVR LEAN-BURN NATURAL GAS-FIRED IC ENGINE WITH PRE-COMBUSTION CHAMBER POWERING A GAS COMPRESSOR (K-37 UNX #13674)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
3. 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
4. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
6. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 20.00 lb/hr, 1.65 gr/hp-hr and 136 ppmv @ 15% O2, SOx (as SO2): 1.86 lb/hr, PM10: 1.33 lb/hr, CO: 60.63 lb/hr and 676 ppmv @ 15% O2, or VOC: 36.38 lb/hr and 710 ppmv @ 15% O2. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
7. Percent emission reductions, if used to comply with NOx emission limits, shall be calculated as follows: For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. The engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. [District Rule 4702, 5.4] Federally Enforceable Through Title V Permit
8. The operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO. [District Rule 4702, 5.5] Federally Enforceable Through Title V Permit
9. NOx emissions rate shall not exceed 2.00 gr/hp-hr. [PSD SJ 77-42] Federally Enforceable Through Title V Permit
10. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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11. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201; Kern County Rule 404] Federally Enforceable Through Title V Permit

12. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit

13. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

14. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

15. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

16. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. This average shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. For engines that comply with a percent reduction limit, the percent reduction of NOx emissions shall also be reported. [District Rules 2520, 9.4.2 and 4702, 6.3.3] Federally Enforceable Through Title V Permit

17. 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 Rules 1081 and 4702] Federally Enforceable Through Title V Permit

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

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

21. 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 Rules 2520, 9.4.2 and 4702] Federally Enforceable Through Title V Permit

22. 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 Rules 2520, 9.4.2 and 4702] Federally Enforceable Through Title V Permit

23. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrate compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, and 4702, 6.3.2; and PSD SJ 77-42] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

24. Permittee shall monitor the nitrogen oxides (NOx) concentration in the engine exhaust with a facility conducted noncertified self test at least on a monthly basis. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

25. The permittee shall monitor and record the stack concentration of NOx, 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

26. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

27. 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

28. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

29. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2201 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

30. 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 of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit

31. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

32. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-17-8 **EXPIRATION DATE:** ~~10/31/2009~~

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EQUIPMENT DESCRIPTION:
5,500 BHP INGERSOLL-RAND MODEL 616KVR LEAN-BURN NATURAL GAS-FIRED IC ENGINE WITH PRE-COMBUSTION CHAMBER POWERING A GAS COMPRESSOR (K-38 UNX #13673)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
3. 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
4. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
6. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 20.00 lb/hr, 1.65 gr/hp-hr and 136 ppmv @ 15% O2 (equivalent to 90% NOx reduction), SOx (as SO2): 1.86 lb/hr, PM10: 1.33 lb/hr, CO: 60.63 lb/hr and 676 ppmv @ 15% O2, or VOC: 36.38 lb/hr and 710 ppmv @ 15% O2. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
7. Percent emission reductions, if used to comply with NOx emission limits, shall be calculated as follows: For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. The engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. [District Rule 4702, 5.4] Federally Enforceable Through Title V Permit
8. The operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO. [District Rule 4702, 5.5] Federally Enforceable Through Title V Permit
9. NOx emissions rate shall not exceed 2.00 gr/hp-hr. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit

11. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201 and Kern County Rule 404] Federally Enforceable Through Title V Permit

12. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit

13. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

14. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

15. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

16. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. This average shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. For engines that comply with a percent reduction limit, the percent reduction of NOx emissions shall also be reported. [District Rules 2520, 9.4.2 and 4702, 6.3.3] Federally Enforceable Through Title V Permit

17. 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 Rules 1081 and 4702] Federally Enforceable Through Title V Permit

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

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

21. 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 Rules 2520, 9.4.2 and 4702] Federally Enforceable Through Title V Permit

22. 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 Rules 2520, 9.4.2 and 4702] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrate compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, and 4702, 6.3.2; and PSD SJ 77-42] Federally Enforceable Through Title V Permit

24. Permittee shall monitor the nitrogen oxides (NOx) concentration in the engine exhaust with a facility conducted noncertified self test at least on a monthly basis. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

25. The permittee shall monitor and record the stack concentration of NOx, 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

26. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

27. 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

28. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

29. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2201 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

30. 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 of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit

31. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

32. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-18-8 **EXPIRATION DATE:** ~~10/31/2009~~

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EQUIPMENT DESCRIPTION:
2,000 BHP INGERSOLL-RAND MODEL 412KVS LEAN-BURN NATURAL GAS-FIRED IC ENGINE WITH PRE-COMBUSTION CHAMBER POWERING A GAS COMPRESSOR (K-39 UNX #13672)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
3. 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, 601 and 7.5] Federally Enforceable Through Title V Permit
4. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
5. Particulate matter emissions at the point of discharge shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] 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. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 7.72 lb/hr, 1.75 gr/hp-hr and 144 ppmv @ 15% O2 (equivalent to 90% NOx reduction); SOx (as SO2): 0.67 lb/hr; PM10: 0.49 lb/hr; CO: 22.05 lb/hr and 676 ppmv @ 15% O2; or VOC: 13.23 lb/hr and 710 ppmv @ 15% O2. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
8. Percent emission reductions, if used to comply with NOx emission limits, shall be calculated as follows: For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. The engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. [District Rule 4702, 5.4] Federally Enforceable Through Title V Permit
9. The operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO. [District Rule 4702, 5.5] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit

11. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit

12. If the IC engine is fired on PUC-regulated natural gas, the permittee shall maintain on file, copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

13. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

14. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

15. Source testing to measure the NOx, CO, and VOC emissions from this unit shall be conducted not less than once every 12 months. If compliance with the emission limits is demonstrated on two (2) consecutive annual source tests, the testing frequency may be reduced to not less than once every 24 months. If the unit fails to demonstrate compliance with the applicable emission limits, the testing frequency shall return to not less than once every 12 months. [District Rules 2201 and 4702, 6.3.2] Federally Enforceable Through Title V Permit

16. 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

17. 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

18. 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 Rules 1081 and 4702, 6.4] Federally Enforceable Through Title V Permit

19. 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. For engines that comply with a percent reduction limit, the percent reduction of NOx emissions shall also be reported. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit

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

21. 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

22. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. The permittee shall monitor and record the stack concentration of NOx, 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

24. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

25. 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

26. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

27. 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 of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

28. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

29. NOx emissions rate shall not exceed 2.00 gr/hp-hr. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

30. Source testing to measure the NOx emissions from at least one representative engine of this type (Ingersoll-Rand, model 412KVS) shall be conducted not less than once every 12 months. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

31. The permittee shall determine the NOx emissions from at least one representative engine of this type (Ingersoll-Rand, model 412KVS) at least once per month by either direct NOx measurement, or measurement of other exhaust gas concentrations (e.g. CO and O2) and engine parameters from which NOx emissions can be directly computed. NOx emissions shall be determined from every engine of this type at least once each calendar half. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-19-13 **EXPIRATION DATE:** ~~10/31/2009~~

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

DRAFT

EQUIPMENT DESCRIPTION:
35R GAS PLANT WITH LEAN OIL RECLAIMING STILL, FOUR AIR COMPRESSORS, ABSORBER, RICH OIL RECTIFIER, STRIPPER, DE-ETHANIZER AND DE-PROPANIZER

PERMIT UNIT REQUIREMENTS

1. Operation shall include 3 absorption columns, rich absorption oil rectifier, absorption oil stripper, de-ethanizer, de-propanizer, de-butanizer, de-isobutanizer, 36 associated vessels, 32 heat exchangers, 31 process pumps, gas compressor K-8, and associated piping. [District Rule 2201] Federally Enforceable Through Title V Permit
2. All process vessels and lines handling volatile organic compounds shall vent only to other process vessels, District-approved flare, or substrata injection system. [District Rule 2201] Federally Enforceable Through Title V Permit
3. 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
4. Heat exchangers utilizing cooling water shall be properly maintained to prevent VOC contamination of cooling water and resultant emissions from cooling towers. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The operator shall test the circulating water from the cooling tower at least every six months to determine the concentration of hexavalent chromium. The District shall be notified 48 hours in advance of any sampling of cooling water for testing. Required testing may be discontinued and an exemption sought when two consecutive required tests show hexavalent chromium concentrations less than 0.15 mg/l. [District Rule 7012]
6. Operator shall comply with other applicable requirements of District Rule 7012 (amended 12/17/92). [District Rule 7012]
7. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Amended December 16, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
8. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit
9. VOC emissions from absorption column C-1C, its associated piping, and components shall consist only of fugitive emissions and shall not exceed 0.8 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
10. VOC emissions from gas compressor K-8, its associated piping, and components shall consist only of fugitive emissions and shall not exceed 6.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Permittee shall maintain with the permit accurate fugitive component counts and resulting emissions calculated using API Publication 450-3-83-007, Table E-3, for compressor K-8, its associated piping, and components, and for absorption column C-1C, its associated piping and components. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Permittee shall maintain a written record of VOC content (sampled not less than annually) of the gas processed through absorption column C-1C, its associated piping and components. Such records available for District inspection upon request for a period of five years. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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13. For absorption column C-1C, its associated piping, and components leak shall be defined as a reading as methane in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter from the potential source. [40 CFR 60.482(b), 60.633(b)(2)] Federally Enforceable Through Title V Permit

14. Flanges and threaded connections associated with absorption column C-1C shall be inspected at least annually to detect any leaks and shall be monitored within 5 days by the method 21 if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method. [40 CFR 60.482-8(a)] Federally Enforceable Through Title V Permit

15. Valves associated with absorption column C-1C shall be initially monitored monthly for leak detection and if a no leak is detected for 2 successive months valves may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected. If a leak is detected, the valves shall be monitored monthly until no leak is detected for 2 successive months. After 5 consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0, the inspection frequency may be changed from quarterly to annually. If the percent of valves found leaking during any annual or other inspection, is greater than 2.0, the owner or operator shall comply with the requirements as described in ⊥ 60.482-7 but can again elect to use annual monitoring. The percent of valves leaking shall be determined by dividing the sum of valves found leaking during current monitoring and valves for which repair has been delayed by the total number of valves subject to the requirements. [40 CFR 60.483-2(b)(1) & 40 CFR 60.483-1(b)(3)(4)(5)] Federally Enforceable Through Title V Permit

16. An owner or operator must keep a record of the percent of valves found leaking during each leak detection period. [40 CFR 60.483(b)(6)] Federally Enforceable Through Title V Permit

17. Each pressure relief device associated with absorption column C-1C shall be monitored at least quarterly for leak detection and shall be inspected within one (1) working day after venting to atmosphere. [40 CFR 60.633(b)(1)] Federally Enforceable Through Title V Permit

18. For absorption column C-1C, its associated piping, and components, a leaking component shall be identified by affixing a weatherproof and readily visible tag, marked with the equipment identification number and date on which leak is detected. The leak shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the following best practices where practicable: (1) Tightening of bonnet bolts; (2) Replacement of bonnet bolts; (3) Tightening of packing gland nuts; (4) Injection of lubricant into lubricated packing. [40 CFR 60.482-7(d)(2), (e), 40 CFR 60.486(b)(1), 40 CFR 60.635(b)(1)] Federally Enforceable Through Title V Permit

19. For absorption column C-1C, delay of repair for valves will be allowed until the next process unit turnaround, but in no case later than one year from the date of the original leak detection, if: (1) The owner or operator demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and (2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with ⊥ 60.482-10. [40 CFR 60.482-9(c)] Federally Enforceable Through Title V Permit

20. For absorption column C-1C, the identification on a valve may be removed after it has been monitored for 2 successive months as specified in ⊥ 60.482-7(c) and no leaks has been detected during those 2 months. [40 CFR 60.486(b)(3)] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

21. For absorption column C-1C, the following information shall be recorded in a log and shall be kept for 5 years in a readily accessible location: (1) A schedule of monitoring. (2) The percent of valves found leaking during each monitoring period. (3) The instrument and operator identification numbers and the equipment identification number. (4) The date the leak was detected and the dates of each attempt to repair the leak. (5) Repair methods applied in each attempt to repair the leak. (6) "Above 10,000" if the maximum instrument reading measured by the methods specified in ⊥ 60.485(a) after each repair attempt is equal to or greater than 10,000 ppm. (7) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak. (8) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown. (9) The expected date of successful repair of the leak if a leak is not repaired within 15 days. (10) Dates of process unit shutdown that occur while the equipment is un-repaired. (11) The date of successful repair of the leak. [40 CFR 60.486(c), (g)] Federally Enforceable Through Title V Permit

22. For absorption column C-1C, semi-annual reporting must include following for the reporting period. (1) Process unit identification. (2) Number of pressure relief devices for which leaks were detected as required in ⊥ 60.633(b)(2) and (3) Number of pressure relief devices for which leaks were not repaired as required in ⊥ 60.633(b)(3). (4) Number of valves for which leaks were detected as described in ⊥ 60.482(7)(b) or ⊥ 60.483-2, (5) Number of valves for which leaks were not repaired as required in ⊥ 60.482-7(d)(1). (6) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible. (7) Dates of process unit shutdowns which occurred within the semiannual reporting period. [40 CFR 60.636(c) & 60.487(c)] Federally Enforceable Through Title V Permit

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

24. The requirements of 40 CFR 60 Subpart LLL do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-27-7 **EXPIRATION DATE:** 10/31/2009

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EQUIPMENT DESCRIPTION:
4,000 BHP DELAVAL MODEL HVA12 LEAN-BURN NATURAL GAS-FIRED IC ENGINE WITH PRE-COMBUSTION CHAMBER POWERING A GAS COMPRESSOR (K-9 UNX #11726)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
3. 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
4. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
6. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 14.55 lb/hr, 1.65 gr/hp-hr and 136 ppmv @ 15% O2 (equivalent to 90% NOx reduction), SOx (as SO2): 10 lb/day, PM10: 85.5 lb/day, CO: 453 ppmv @ 15% O2, or VOC: 436 ppmv @ 15% O2. [District Rules 2201, 4201, and 4702; Kern County Rule 407] Federally Enforceable Through Title V Permit
7. Percent emission reductions, if used to comply with NOx emission limits, shall be calculated as follows: For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. The engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. [District Rule 4702, 5.4] Federally Enforceable Through Title V Permit
8. The operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO. [District Rule 4705, 5.5] Federally Enforceable Through Title V Permit
9. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201 and Kern County Rule 404] Federally Enforceable Through Title V Permit

11. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit

12. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

13. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

14. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

15. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. This average shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. For engines that comply with a percent reduction limit, the percent reduction of NOx emissions shall also be reported. [District Rules 2520, 9.4.2 and 4702, 6.3.3] Federally Enforceable Through Title V Permit

16. 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 Rules 1081 and 4702] Federally Enforceable Through Title V Permit

17. 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

18. 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] Federally Enforceable Through Title V Permit

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

20. 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 Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

21. 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 Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

22. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrate compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, and 4702, 6.3.2] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. Permittee shall monitor the nitrogen oxides (NOx) concentration in the engine exhaust with a facility conducted noncertified self test at least on a monthly basis. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

24. The permittee shall monitor and record the stack concentration of NOx, 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

25. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

26. 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

27. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

28. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2201 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

29. 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 of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

30. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

31. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-28-8 **EXPIRATION DATE:** 10/31/2009

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EQUIPMENT DESCRIPTION:
4,000 BHP DELAVAL MODEL HVA12 LEAN-BURN NATURAL GAS-FIRED IC ENGINE WITH PRE-COMBUSTION CHAMBER POWERING A GAS COMPRESSOR (K-10 UNX #11718)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
3. 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
4. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
6. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 14.55 lb/hr, 1.65 gr/hp-hr and 136 ppmv @ 15% O2 (equivalent to 90% NOx reduction), SOx (as SO2): 10 lb/day, PM10: 85.5 lb/day, CO: 453 ppmv @ 15% O2, or VOC: 436 ppmv @ 15% O2. [District Rules 2201, 4201, and 4702; Kern County Rule 407] Federally Enforceable Through Title V Permit
7. Percent emission reductions, if used to comply with NOx emission limits, shall be calculated as follows: For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. The engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. [District Rule 4702, 5.4] Federally Enforceable Through Title V Permit
8. The operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO. [District Rule 4702, 5.5] Federally Enforceable Through Title V Permit
9. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit

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10. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201 and Kern County Rule 404] Federally Enforceable Through Title V Permit

11. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit

12. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

13. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

14. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

15. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. This average shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. For engines that comply with a percent reduction limit, the percent reduction of NOx emissions shall also be reported. [District Rules 2520, 9.4.2 and 4702, 6.3.3] Federally Enforceable Through Title V Permit

16. 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 Rules 1081 and 4702] Federally Enforceable Through Title V Permit

17. 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

18. 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] Federally Enforceable Through Title V Permit

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

20. 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 Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

21. 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 Rules 2520, 9.4.2 and 4702] Federally Enforceable Through Title V Permit

22. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrated compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, and 4702, 6.3.2] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. Permittee shall monitor the nitrogen oxides (NOx) concentration in the engine exhaust with a facility conducted noncertified self test at least on a monthly basis. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

24. The permittee shall monitor and record the stack concentration of NOx, 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

25. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

26. 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

27. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

28. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2201 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

29. 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 of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

30. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

31. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-29-11 **EXPIRATION DATE:** 10/31/2009

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EQUIPMENT DESCRIPTION:
1,000 BHP WAUKESHA MODEL L7042GSI RICH-BURN NATURAL GAS-FIRED IC ENGINE WITH TURBOCHARGER, ENLARGED TURBOCHARGER NOZZLE RING, AND CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-11 UNX #13198)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
3. 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
4. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
6. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.59 lb/hr, 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction), SOx (as SO2): 0.34 lb/hr, PM10: 0.24 lb/hr, CO: 8.82 lb/hr and 541 ppmv @ 15% O2, or VOC: 2.33 lb/hr and 250 ppmv @ 15% O2. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
7. Percent emission reductions, if used to comply with NOx emission limits, shall be calculated as follows: For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. The engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. [District Rule 4702, 5.4] Federally Enforceable Through Title V Permit
8. The operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO. [District Rule 4702, 5.5] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit

10. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201 and Kern County Rule 404] Federally Enforceable Through Title V Permit

11. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit

12. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

13. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

14. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

15. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. This average shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. For engines that comply with a percent reduction limit, the percent reduction of NOx emissions shall also be reported. [District Rules 2520, 9.4.2 and 4702, 6.3.3] Federally Enforceable Through Title V Permit

16. 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] Federally Enforceable Through Title V Permit

17. 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 Rules 1081 and 4702] Federally Enforceable Through Title V Permit

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

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

20. 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 Rules 2520, 9.4.2 and 4702] Federally Enforceable Through Title V Permit

21. 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 Rules 2520, 9.4.2 and 4702] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrated compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, and 4702, 6.3.2] Federally Enforceable Through Title V Permit

23. The permittee shall monitor and record the stack concentration of NOx, 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

24. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

25. 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

26. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

27. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2201 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

28. 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 of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

29. 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

30. 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

31. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

32. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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33. 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

34. 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

35. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

36. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

37. An Authority to Construct (ATC) to modify the VOC emissions rate so post-control VOC emissions do not exceed 20,000 lb-VOC/yr shall be fully implemented within six months of the finalized Title V permit renewal for this facility. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-30-11 **EXPIRATION DATE:** ~~10/31~~/2009

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EQUIPMENT DESCRIPTION:
1,000 BHP WAUKESHA MODEL L7042GSIU RICH-BURN NATURAL GAS-FIRED IC ENGINE WITH TURBOCHARGER, ENLARGED TURBOCHARGER NOZZLE RING, AND CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-12 UNX #12493)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
3. 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
4. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
6. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.59 lb/hr, 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction), SOx (as SO2): 0.34 lb/hr, PM10: 0.24 lb/hr, CO: 8.82 lb/hr and 541 ppmv @ 15% O2, or VOC: 2.33 lb/hr and 250 ppmv @ 15% O2. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
7. Percent emission reductions, if used to comply with NOx emission limits, shall be calculated as follows: For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. The engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. [District Rule 4702, 5.4] Federally Enforceable Through Title V Permit
8. The operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO. [District Rule 4702, 5.5] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit

10. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201 and Kern County Rule 404] Federally Enforceable Through Title V Permit

11. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit

12. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

13. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

14. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

15. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. This average shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. For engines that comply with a percent reduction limit, the percent reduction of NOx emissions shall also be reported. [District Rules 2520, 9.4.2 and 4702, 6.3.3] Federally Enforceable Through Title V Permit

16. 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] Federally Enforceable Through Title V Permit

17. 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 Rules 1081 and 4702] Federally Enforceable Through Title V Permit

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

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

20. 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 Rules 2520, 9.4.2 and 4702] Federally Enforceable Through Title V Permit

21. 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 Rules 2520, 9.4.2 and 4702] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrated compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, and 4702, 6.3.2] Federally Enforceable Through Title V Permit

23. The permittee shall monitor and record the stack concentration of NOx, 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

24. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

25. 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

26. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

27. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2201 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

28. 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 of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

29. 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

30. 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

31. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

32. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

33. 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

34. 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

35. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

36. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

37. An Authority to Construct (ATC) to modify the VOC emissions rate so post-control VOC emissions do not exceed 20,000 lb-VOC/yr shall be fully implemented within six months of the finalized Title V permit renewal for this facility. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-31-11 **EXPIRATION DATE:** ~~10/31/2009~~

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EQUIPMENT DESCRIPTION:
1,000 BHP WAUKESHA MODEL L7042GSI RICH-BURN NATURAL GAS-FIRED IC ENGINE WITH TURBOCHARGER, ENLARGED TURBOCHARGER NOZZLE RING, AND CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-13 UNX #13409)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
3. 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
4. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
6. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.59 lb/hr, 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction), SOx (as SO2): 0.34 lb/hr, PM10: 0.24 lb/hr, CO: 8.82 lb/hr and 541 ppmv @ 15% O2, or VOC: 2.33 lb/hr and 250 ppmv @ 15% O2. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
7. Percent emission reductions, if used to comply with NOx emission limits, shall be calculated as follows: For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. The engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. [District Rule 4702, 5.4] Federally Enforceable Through Title V Permit
8. The operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO. [District Rule 4702, 5.5] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit

10. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201 and Kern County Rule 404] Federally Enforceable Through Title V Permit

11. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit

12. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

13. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

14. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

15. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. This average shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. For engines that comply with a percent reduction limit, the percent reduction of NOx emissions shall also be reported. [District Rules 2520, 9.4.2 and 4702, 6.3.3] Federally Enforceable Through Title V Permit

16. 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] Federally Enforceable Through Title V Permit

17. 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 Rules 1081 and 4702] Federally Enforceable Through Title V Permit

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

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

20. 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 Rules 2520, 9.4.2 and 4702] Federally Enforceable Through Title V Permit

21. 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 Rules 2520, 9.4.2 and 4702] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrated compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, and 4702, 6.3.2] Federally Enforceable Through Title V Permit

23. The permittee shall monitor and record the stack concentration of NOx, 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

24. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

25. 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

26. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

27. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2201 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

28. 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 of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

29. 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

30. 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

31. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

32. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

33. 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

34. 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

35. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

36. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

37. An Authority to Construct (ATC) to modify the VOC emissions rate so post-control VOC emissions do not exceed 20,000 lb-VOC/yr shall be fully implemented within six months of the finalized Title V permit renewal for this facility. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-38-4 **EXPIRATION DATE:** ~~10/31~~/2009

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EQUIPMENT DESCRIPTION:
310 BHP CUMMINS DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIREWATER PUMP (UNX #51392)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
3. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
4. {2414} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 4.3.1, 17 CCR 93115, and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
6. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2520, 9.3.2 and 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
7. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. For testing purposes, the engine shall only be operated the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 - "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems", 1998 edition. Total hours of operation for all maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rule 4702, 4.3.1, 17 CCR 93115, and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
8. An emergency situation is when the engine is operated exclusively to preserve or protect property, human life, or public health during a disaster or state of emergency, such as a fire or flood. [District Rule 4702, 4.3.1] Federally Enforceable Through Title V Permit
9. The permittee shall maintain records of hours of emergency and non-emergency operation. Records shall include the date, the initial start-up hours, the number of hours of operation, and the purpose of the operation (e.g., load testing, weekly testing, rolling blackout, general area power outage, etc.). For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702, 6.2.3 and 17 CCR 93115] Federally Enforceable Through Title V Permit
10. The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [District Rules 2520, 9.4.2 and 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Rule 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
12. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 402 (Madera) and 404 (Fresno, Merced, Kern, Kings, San Joaquin, Stanislaus, Tulare). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
13. On and after May 3, 2013, the permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
14. On and after May 3, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
15. On and after May 3, 2013, the engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
16. On and after May 3, 2013, the engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
17. On and after May 3, 2013, the engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
18. On and after May 3, 2013, the permittee shall maintain monthly records of all performance tests, opacity and visible emissions observations and required maintenance performed on the air pollution control and monitoring equipment. [District Rule 1070 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
19. On and after May 3, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-39-4 **EXPIRATION DATE:** 10/31/2009

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EQUIPMENT DESCRIPTION:
310 BHP CUMMINS DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIREWATER PUMP (UNX #14535)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
3. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
4. {2414} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 4.3.1, 17 CCR 93115, and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
6. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2520, 9.3.2 and 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
7. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. For testing purposes, the engine shall only be operated the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 - "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems", 1998 edition. Total hours of operation for all maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rule 4702, 4.3.1, 17 CCR 93115, and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
8. An emergency situation is when the engine is operated exclusively to preserve or protect property, human life, or public health during a disaster or state of emergency, such as a fire or flood. [District Rule 4702, 4.3.1] Federally Enforceable Through Title V Permit
9. The permittee shall maintain records of hours of emergency and non-emergency operation. Records shall include the date, the initial start-up hours, the number of hours of operation, and the purpose of the operation (e.g., load testing, weekly testing, rolling blackout, general area power outage, etc.). For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702, 6.2.3 and 17 CCR 93115] Federally Enforceable Through Title V Permit
10. The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [District Rules 2520, 9.4.2 and 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Rule 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
12. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 402 (Madera) and 404 (Fresno, Merced, Kern, Kings, San Joaquin, Stanislaus, Tulare). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
13. On and after May 3, 2013, the permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
14. On and after May 3, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
15. On and after May 3, 2013, the engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
16. On and after May 3, 2013, the engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
17. On and after May 3, 2013, the engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
18. On and after May 3, 2013, the permittee shall maintain monthly records of all performance tests, opacity and visible emissions observations and required maintenance performed on the air pollution control and monitoring equipment. [District Rule 1070 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
19. On and after May 3, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-43-4 **EXPIRATION DATE:** ~~10/31~~/2009

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EQUIPMENT DESCRIPTION:
227 BHP CATERPILLAR DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR (P4)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
3. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
4. {2414} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 17 CCR 93115, and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
6. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702] Federally Enforceable Through Title V Permit
7. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2520, 9.3.2 and 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
8. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [District Rule 4702, 4.2, 17 CCR 93115, and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
9. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit
10. This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702] Federally Enforceable Through Title V Permit
11. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.), and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702, 6.2.3 and 17 CCR 93115] Federally Enforceable Through Title V Permit

13. The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [District Rules 2520, 9.4.2 and 4702, and 17 CCR 93115] Federally Enforceable Through Title V Permit

14. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Rule 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

15. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 402 (Madera) and 404 (Fresno, Merced, Kern, Kings, San Joaquin, Stanislaus, Tulare). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

16. On and after May 3, 2013, the permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

17. On and after May 3, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

18. On and after May 3, 2013, the engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

19. On and after May 3, 2013, the engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

20. On and after May 3, 2013, the engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

21. On and after May 3, 2013, the permittee shall maintain monthly records of all performance tests, opacity and visible emissions observations and required maintenance performed on the air pollution control and monitoring equipment. [District Rule 1070 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

22. On and after May 3, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-44-5 **EXPIRATION DATE:** 10/31/2009

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

EQUIPMENT DESCRIPTION:
773 BHP WAUKESHA NATURAL GAS-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR (UNX #14166)

DRAFT

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702] Federally Enforceable Through Title V Permit
4. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
5. {2414} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
6. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
7. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
8. {842} If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rules 2201 and 4702, 3.15 and 4.2, 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
12. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702] Federally Enforceable Through Title V Permit

14. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit

15. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.), and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rules 1070 and 4702, 6.2.3] Federally Enforceable Through Title V Permit

16. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

17. On and after October 19, 2013, the permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

18. On and after October 19, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

19. On and after October 19, 2013, the engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

20. On and after October 19, 2013, the engine's spark plugs shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

21. On and after October 19, 2013, the engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

22. On and after October 19, 2013, the permittee shall maintain monthly records of all performance tests, opacity and visible emissions observations and required maintenance performed on the air pollution control and monitoring equipment. [District Rule 1070 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

23. On and after October 19, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-45-5 **EXPIRATION DATE:** ~~10/31/2009~~

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EQUIPMENT DESCRIPTION:
310 HP CUMMINS DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIREWATER PUMP (UNIT #12052)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
3. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
4. {2414} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 4.3.1, 17 CCR 93115, and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
6. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2520, 9.3.2 and 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
7. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. For testing purposes, the engine shall only be operated the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 - "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems", 1998 edition. Total hours of operation for all maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rule 4702, 4.3.1, 17 CCR 93115, and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
8. An emergency situation is when the engine is operated exclusively to preserve or protect property, human life, or public health during a disaster or state of emergency, such as a fire or flood. [District Rule 4702, 4.3.1] Federally Enforceable Through Title V Permit
9. The permittee shall maintain records of hours of emergency and non-emergency operation. Records shall include the date, the initial start-up hours, the number of hours of operation, and the purpose of the operation (e.g., load testing, weekly testing, rolling blackout, general area power outage, etc.). For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702, 6.2.3 and 17 CCR 93115] Federally Enforceable Through Title V Permit
10. The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [District Rules 2520, 9.4.2 and 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Rule 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
12. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 402 (Madera) and 404 (Fresno, Merced, Kern, Kings, San Joaquin, Stanislaus, Tulare). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
13. On and after May 3, 2013, the permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
14. On and after May 3, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
15. On and after May 3, 2013, the engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
16. On and after May 3, 2013, the engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
17. On and after May 3, 2013, the engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
18. On and after May 3, 2013, the permittee shall maintain monthly records of all performance tests, opacity and visible emissions observations and required maintenance performed on the air pollution control and monitoring equipment. [District Rule 1070 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
19. On and after May 3, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-46-6 **EXPIRATION DATE:** 10/31/2009

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

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EQUIPMENT DESCRIPTION:
793 BHP WAUKESHA NATURAL GAS-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR (UNX #13397)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702] Federally Enforceable Through Title V Permit
4. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
5. {2414} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
6. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
7. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
8. {842} If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rules 2201 and 4702, 3.15 and 4.2, 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
12. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit

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

13. This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702] Federally Enforceable Through Title V Permit

14. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit

15. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.), and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rules 1070 and 4702, 6.2.3] Federally Enforceable Through Title V Permit

16. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

17. On and after October 19, 2013, the permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

18. On and after October 19, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

19. On and after October 19, 2013, the engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

20. On and after October 19, 2013, the engine's spark plugs shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

21. On and after October 19, 2013, the engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

22. On and after October 19, 2013, the permittee shall maintain monthly records of all performance tests, opacity and visible emissions observations and required maintenance performed on the air pollution control and monitoring equipment. [District Rule 1070 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

23. On and after October 19, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-47-6 **EXPIRATION DATE:** 10/31/2009

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

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EQUIPMENT DESCRIPTION:
793 BHP WAUKESHA NATURAL GAS-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR (UNX #14772)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702] Federally Enforceable Through Title V Permit
4. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
5. {2414} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
6. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
7. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
8. {842} If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rules 2201 and 4702, 3.15 and 4.2, 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
12. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702] Federally Enforceable Through Title V Permit

14. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit

15. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.), and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rules 1070 and 4702, 6.2.3] Federally Enforceable Through Title V Permit

16. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

17. On and after October 19, 2013, the permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

18. On and after October 19, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

19. On and after October 19, 2013, the engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

20. On and after October 19, 2013, the engine's spark plugs shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

21. On and after October 19, 2013, the engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

22. On and after October 19, 2013, the permittee shall maintain monthly records of all performance tests, opacity and visible emissions observations and required maintenance performed on the air pollution control and monitoring equipment. [District Rule 1070 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

23. On and after October 19, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-48-6 **EXPIRATION DATE:** 10/31/2009

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EQUIPMENT DESCRIPTION:
490 BHP CATERPILLAR MODEL G398 RICH-BURN NATURAL GAS-FIRED IC ENGINE POWERING A GAS COMPRESSOR (K-68 UNX #54313)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
3. 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
4. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
5. Particulate matter emissions at the point of discharge shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] 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. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction); SOx (as SO2): 0.6 lb/day; PM10: 10.5 lb/day; CO: 11.6 g/hp-hr and 1,592 ppmv @ 15% O2; or VOC: 58 ppmv @ 15% O2. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
8. Percent emission reductions, if used to comply with NOx emission limits, shall be calculated as follows: For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. The engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. [District Rule 5.4] Federally Enforceable Through Title V Permit
9. The operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO. [District Rule 4702, 5.5] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit

11. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit

12. If the IC engine is fired on PUC-regulated natural gas, the permittee shall maintain on file, copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

13. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

14. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

15. Source testing to measure the NOx, CO, and VOC emissions from this unit shall be conducted not less than once every 12 months. If compliance with the emission limits is demonstrated on two (2) consecutive annual source tests, the testing frequency may be reduced to not less than once every 24 months. If the unit fails to demonstrate compliance with the applicable emission limits, the testing frequency shall return to not less than once every 12 months. [District Rules 2201 and 4702, 6.3.2] Federally Enforceable Through Title V Permit

16. 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

17. 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

18. 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 Rules 1081 and 4702, 6.4] Federally Enforceable Through Title V Permit

19. 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. For engines that comply with a percent reduction limit, the percent reduction of NOx emissions shall also be reported. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit

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

21. 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

22. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. The permittee shall monitor and record the stack concentration of NOx, 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

24. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

25. 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

26. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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

27. 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 of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

28. 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

29. 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

30. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

31. 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

32. 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

33. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

34. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-52-9 **EXPIRATION DATE:** ~~10/31/2009~~

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

DRAFT

EQUIPMENT DESCRIPTION:
ONE 24.5 MW NATURAL GAS-FIRED GAS TURBINE COGENERATION SYSTEM, INCLUDING 250 MMBTU/HR GENERAL ELECTRIC MODEL LM-2500 GAS TURBINE, 103 MMBTU/HR DUCT BURNER ASSEMBLY, 150,000 LB/HR HEAT RECOVERY STEAM GENERATOR, AND 6 MW STEAM TURBINE SERVING S-2234-52 AND S-2234-53

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained and operated according to manufacturers' recommendations. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Circular cross section exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and equipped with flow straighteners, if necessary, to minimize turbulence. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Gas turbine engine and duct burner assembly shall be equipped with continuously recording fuel gas flowmeters. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Gas turbine engine shall be equipped with continuously recording NOx and O2 monitors for engine exhaust gas stream after duct burners and catalyst beds. [District Rules 2201 and 4703, 6.2.1] Federally Enforceable Through Title V Permit
5. Startup and shutdown of gas turbine engine, as defined in 40 CFR Subpart A 60.2, shall not exceed a time period of one hour and one hour, respectively, per occurrence. [District Rules 2201 and 4703, 5.3.1] Federally Enforceable Through Title V Permit
6. Gas turbine engine combustor steam injection system shall be equipped with continuously recording steam-to-fuel injection rate monitoring system accurate to within +/- 5%. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Except during periods of gas turbine engine startup/shutdown, gas turbine engine steam injection rate shall be maintained at steam-to-fuel ratio range documented to result in compliance with emission limits. [District Rule 2201] Federally Enforceable Through Title V Permit
8. All exhaust from gas turbine engine and duct burners shall flow through both SCR and oxidation catalyst beds. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Gas temperatures at SCR and oxidation catalyst inlets shall be monitored by operational temperature indicators. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Except during periods of gas turbine engine startup/shutdown, inlet gas temperatures of SCR and oxidation catalyst beds shall be maintained within ranges recommended by the catalyst manufacturers. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Ammonia injection grid shall be equipped with operational ammonia flowmeter and injection pressure indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Installed SCR and oxidation catalyst beds shall provide space for additional catalyst if source operation cannot achieve emission sampling limits of NOx, VOC, and CO. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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13. Except during periods of gas turbine engine startup/shutdown, gas turbine engine shall be shut down if steam injection or SCR system is inoperative. [District Rule 2201] Federally Enforceable Through Title V Permit

14. Ammonia injection rate shall be controlled to maintain ammonia "breakthrough" to less than 20 ppmv (3-hr rolling average) from gas turbine exhaust. [District Rule 4102]

15. Excess emissions shall be defined as any operating hour in which 4-hour rolling average NOx concentration exceeds applicable emissions limit and a period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx or O2 (or both). [40 CFR 60.334(J)(1)(iii)] Federally Enforceable Through Title V Permit

16. Transitional Operation Period shall be defined as any of following periods: bypass transition period, primary re-ignition period, reduced load period, start-up or shutdown. [District Rule 4703, 3.33] Federally Enforceable Through Title V Permit

17. Bypass Transition Period shall be defined as the duration of time that a gas turbine's operation transitions between the heat recovery steam generator and bypass exhaust stacks, provided all of the following conditions are met: a) The selective catalytic reduction catalyst is not within the required temperature range or the required ammonia saturation level has not yet been achieved; b) The duration of a bypass transition period shall not exceed two hours; c) NOx emissions shall not exceed 15 ppmvd, corrected to 15% O2, averaged over two (2) hours; and d) The applicable CO compliance limit shall not be exceeded. [District Rule 4703, 3.2] Federally Enforceable Through Title V Permit

18. Primary Re-ignition Period shall be defined as the duration of time during which a gas turbine is operated at less than rated capacity in order to reset the DLN combustion system following a primary re-ignition, provided all of the following conditions are met: a) The duration of a primary re-ignition period shall not exceed one hour; b) NOx emissions shall not exceed 15 ppmvd, corrected at 15% O2, averaged over one (1) hour; and c) CO emissions shall not exceed 25 ppmvd, corrected at 15% O2. [District Rule 4703, 3.20] Federally Enforceable Through Title V Permit

19. Reduced Load Period shall be defined as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate, not to exceed one hour. [District Rule 4703, 3.23] Federally Enforceable Through Title V Permit

20. The emission control system shall be in operation and emissions shall be minimized insofar as technologically feasible during each transitional operation period. [District Rule 4703, 5.3.2] Federally Enforceable Through Title V Permit

21. No more than 6.00 MMscf/day of natural gas shall be consumed by gas turbine and no more than 2.47 MMscf/day of natural gas shall be consumed by duct burners. [District Rule 2201] Federally Enforceable Through Title V Permit

22. Maximum emissions from turbines S-2234-52 & -53 and standby boilers/heaters S-2234-1 & -3 shall not exceed the following daily emission limitations (DEL): PM10: 50.6 lb/day, NOx (as NO2): 245.7 lb/day, VOC: 51.4 lb/day, and CO: 544.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

23. During days of gas turbine startup/shutdown, daily NO2 and CO emissions shall be calculated by natural gas consumption rates, CEM results, and emission factors for standby boilers/heaters. [District Rule 2201] Federally Enforceable Through Title V Permit

24. During days of gas turbine startup/shutdown, permittee shall maintain accurate daily records of natural gas consumption in gas turbines for normal operation and startup/shutdown periods, and in LTS-1 & LTS-2 gas plant standby boilers/heaters. [District Rule 2201] Federally Enforceable Through Title V Permit

25. Permittee shall maintain daily records of NO2 and CO emission calculations during days of gas turbine startup/shutdown, and such records shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

26. Permittee shall maintain accurate records of CEM printouts, and daily natural gas consumption in gas turbine & duct burners, and shall make such records readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

27. Permittee shall report the following emission exceedances to the District: emission rates of NOx and CO on a 3-hr rolling average, NSPS NOx emission rate on one hour average, and DEL of NOx & CO during days of gas turbine engine startup/shutdown. [District Rule 2201] Federally Enforceable Through Title V Permit

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28. Gas turbine lube oil system atmospheric vent shall be equipped with aerosol/smoke control provisions. [District Rule 2201] Federally Enforceable Through Title V Permit

29. Emission rates from gas turbine lube oil vent shall not exceed the following: PM10: 0.02 lb/hr and VOC: 0.00 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit

30. PM10 and VOC emissions from lube oil vent shall be measured by source testing within 60 days upon detection of visible emissions in excess of 5% opacity or Ringelmann 1/4 from gas turbine lube oil vent. [District Rule 2201] Federally Enforceable Through Title V Permit

31. Except during periods of startup/shutdown, emission rates (3-hr rolling average) from gas turbine combustion shall not exceed: PM10: 0.004 lb/MMBtu, NOx as NO2: 0.013 lb/MMBtu & 3.75 ppmvd @ 15% O2, VOC: 0.004 lb/MMBtu, and CO: 0.043 lb/MMBtu. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit

32. Except during periods of startup/shutdown, emission rates (3-hr rolling average) from duct burner combustion shall not exceed: PM10: 0.001 lb/MMBtu, NOx as NO2: 0.008 lb/MMBtu, VOC: 0.001 lb/MMBtu, and CO: 0.007 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit

33. If NOx CEM data & source testing results show compliance at lower NOx emission than 3.75 ppmvd @ 15% O2, District may adjust permitted NOx emission rate 12 months after complete implementation of this approval according to CEM data & testing results. [District Rule 2201] Federally Enforceable Through Title V Permit

34. NOx, VOC, CO, and ammonia emissions shall be measured by source testing annually 60 days prior to permit anniversary. [District Rule 2201] Federally Enforceable Through Title V Permit

35. Permittee shall maintain steam to fuel ratio during annual compliance testing to within +/- 5% of the average daily values recorded during the 60 day period prior to annual testing. [District Rule 2201] Federally Enforceable Through Title V Permit

36. Permittee shall maintain exhaust gas temperatures at SCR and oxidation catalyst inlets to within +/- 5% of the average daily values recorded during the 60 day period prior to annual testing. [District Rule 2201] Federally Enforceable Through Title V Permit

37. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

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

39. LTS-1 and LTS-2 gas plants (S-2234-3 & '1) standby boilers/heaters shall only be used when one or both gas turbines (S-2234-52 & '53) are inoperative. [District Rule 2201] Federally Enforceable Through Title V Permit

40. Gas turbine engine shall be equipped with G.E. Steward Stevenson turbine combustor steam injection system, Mitsubishi/Applied Thermal Systems selective catalytic reduction (SCR) with ammonia injection, and Grace oxidation catalyst system. [District Rule 2201] Federally Enforceable Through Title V Permit

41. Unit shall be fired exclusively on PUC-quality natural gas which has a sulfur content of less than or equal to 0.0026% by weight. [40 CFR 60.333(a) & (b); 60.332(a)] Federally Enforceable Through Title V Permit

42. Operator shall not discharge into the atmosphere combustion contaminants (PM) exceeding in concentration at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit

43. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the monitoring devices required by this rule to ensure that such devices are functioning properly. [District Rule 1080, 11.0] Federally Enforceable Through Title V Permit

44. Operator shall be required to conform to the compliance testing procedures described in District Rule 1081. [District Rule 1081] Federally Enforceable Through Title V Permit

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45. If the turbine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the turbine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.3.2, 40 CFR 60.335(d)] Federally Enforceable Through Title V Permit

46. If the turbine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [40 CFR 60.334(b)(2)] Federally Enforceable Through Title V Permit

47. The HHV and LHV of the fuel shall be determined using ASTM D3588-91, ASTM 1826-88, OR ASTM 1945-81. [40 CFR 60.332(a),(b) and District Rule 4703, 6.4.5] Federally Enforceable Through Title V Permit

48. Performance testing shall be conducted annually to measure NOx and CO emission concentrations using the following test methods: EPA Methods 7E or 20 for NOx emissions, EPA Methods 10 or 10B for CO emissions, EPA Methods 3, 3A, or 20 for Oxygen content of the exhaust gas. The 9-run tests shall be performed at highest physically achievable load of the gas turbine. [40 CFR 60.335(a), (b)(7) and District Rule 4703, 6.3.1, 6.4.1, 6.4.2, & 6.4.3] Federally Enforceable Through Title V Permit

49. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and date recording) for each successive 15-minute period or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [40 CFR 60.334(b)FSand District Rule 1081, 6.4] Federally Enforceable Through Title V Permit

50. Results of the CEM system shall be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance with all applicable requirements of CFR 60.13. [40 CFR 60.13 and District Rule 4703, 5.1, 6.4] Federally Enforceable Through Title V Permit

51. Any gas turbine with an intermittently operated auxiliary burner shall demonstrate compliance with the auxiliary burner both on and off. [40 CFR 60.335(b) and District Rule 4703, 6.3.3] Federally Enforceable Through Title V Permit

52. The NOx and O2 CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specifications 2 and 3, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [40 CFR 60.334(b)(1) and, District Rule 1080, 6.3, 6.5, 6.6, & 7.2] Federally Enforceable Through Title V Permit

53. The CEMS shall be linked to a data logger which is compatible with the District's Data acquisition system. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080, 7.1] Federally Enforceable Through Title V Permit

54. Records shall be maintained and shall contain: the occurrence and duration of any start-up, shutdown, performance testing, evaluations, calibrations, checks, adjustments, any periods during which a continuous monitoring system or monitoring device is inoperative, maintenance of any CEMS that have been installed pursuant to District Rule 1080, and emission measurements. [District Rules 1080, 7.3, and 4703, 6.2.8, and 40 CFR 60.7 (b)] Federally Enforceable Through Title V Permit

55. If the turbine is fired on PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

56. The operator of a stationary gas turbine system shall maintain records of the date, time and duration of each bypass transition period and each primary re-ignition period. [District Rule 4703, 6.2.11] Federally Enforceable Through Title V Permit

57. The operator of a stationary gas turbine system shall provide source test information annually regarding the exhaust gas NOx and CO concentrations and the control efficiency of the emission control device. [District Rule 4703, 6.3.1] Federally Enforceable Through Title V Permit

58. Results of continuous emission monitoring must be averaged in accordance with the requirements of 40 CFR 60.13. [40 CFR 60.334(a),(b),(c) and District Rule 4703, 5.0] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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59. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation and quantity of fuel used. [40 CFR 60.332(a),(b) and District Rule 4703, 6.2.4] Federally Enforceable Through Title V Permit

60. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: 40 CFR 60.333 (a) and (b); 60.334(a),(b), and (c)(1); SJVUAPCD Rule 4703, Section 6.2.2 and 1080, 7.3. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

61. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rule 4201, 1081 and 1080, Sections 6.5, 7.2, 8.0, 9.0, and 10.0; 40 CFR 60.332(c) and (d); 60.334(b) and (c)(2); 60.335(d). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

62. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rule 4703, sections 5.0, 5.1.1, 6.2.1, 6.2.4, 6.3, 6.4.1, 6.4.3, 6.4.5, and 6.4.6. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

63. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: 40 CFR 60.332(a), (b); 60.335(a), (b), (c), and (e). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

64. Operator shall install, operate and maintain in calibration a system which continuously measures and records: control system operating parameters, elapsed time of operation, the exhaust gas NOx and O2 concentrations. [40 CFR 60.334(a),(b)] Federally Enforceable Through Title V Permit

65. A violation of NOx emission standards indicated by the NOx CEM shall be reported by the operator to the APCO within 96 hours. [District Rule 1080, 9.0] Federally Enforceable Through Title V Permit

66. Operator shall submit a semiannual report listing any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8% by weight. [40 CFR 60.334(c)(2)] Federally Enforceable Through Title V Permit

67. Operator shall notify the APCO no later than eight hours after the detection of a breakdown of the CEM. Operator shall inform the APCO of the intent to shut down the CEM at least 24 hours prior to the event. [District Rule 1080, 10.0] Federally Enforceable Through Title V Permit

68. Operators of CEM's installed at the direction of the APCO shall submit a written report for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include: A. time intervals, data and magnitude of excess emissions, nature and cause of excess (if known), corrective actions taken and preventive measures adopted; B. averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; C. applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; D. a negative declaration when no excess emissions occurred. [District Rule 1080, 8.0] Federally Enforceable Through Title V Permit

69. NOx and carbon monoxide daily emissions shall be measured by use of CEM data, fuel rate data, and daily hours of operation data. A written record of the required compliance demonstrations shall be maintained and made available for District inspection for a period of five years. [District Rule 2201] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-53-7 **EXPIRATION DATE:** 10/31/2009

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

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EQUIPMENT DESCRIPTION:
ONE 24.5 MW NATURAL GAS-FIRED GAS TURBINE COGENERATION SYSTEM, INCLUDING 250 MMBTU/HR GENERAL ELECTRIC MODEL LM-2500 GAS TURBINE, 103 MMBTU/HR DUCT BURNER ASSEMBLY, AND 150,000 LB/HR HEAT RECOVERY STEAM GENERATOR

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained and operated according to manufacturers' recommendations. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Circular cross section exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and equipped with flow straighteners, if necessary, to minimize turbulence. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Gas turbine engine and duct burner assembly shall be equipped with continuously recording fuel gas flowmeters. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Gas turbine engine shall be equipped with continuously recording NOx and O2 monitors for engine exhaust gas stream after duct burners and catalyst beds. [District Rules 2201 and 4703, 6.2.1] Federally Enforceable Through Title V Permit
5. Startup and shutdown of gas turbine engine, as defined in 40 CFR Subpart A 60.2, shall not exceed a time period of one hour and one hour, respectively, per occurrence. [District Rules 2201 and 4703, 5.3.1] Federally Enforceable Through Title V Permit
6. Gas turbine engine combustor steam injection system shall be equipped with continuously recording steam-to-fuel injection rate monitoring system accurate to within +/- 5%. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Except during periods of gas turbine engine startup/shutdown, gas turbine engine steam injection rate shall be maintained at steam-to-fuel ratio range documented to result in compliance with emission limits. [District Rule 2201] Federally Enforceable Through Title V Permit
8. All exhaust from gas turbine engine and duct burners shall flow through both SCR and oxidation catalyst beds. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Gas temperatures at SCR and oxidation catalyst inlets shall be monitored by operational temperature indicators. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Except during periods of gas turbine engine startup/shutdown, inlet gas temperatures of SCR and oxidation catalyst beds shall be maintained within ranges recommended by the catalyst manufacturers. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Ammonia injection grid shall be equipped with operational ammonia flowmeter and injection pressure indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Installed SCR and oxidation catalyst beds shall provide space for additional catalyst if source operation cannot achieve emission sampling limits of NOx, VOC, and CO. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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13. Except during periods of gas turbine engine startup/shutdown, gas turbine engine shall be shut down if steam injection or SCR system is inoperative. [District Rule 2201] Federally Enforceable Through Title V Permit

14. Ammonia injection rate shall be controlled to maintain ammonia "breakthrough" to less than 20 ppmv (3-hr rolling average) from gas turbine exhaust. [District Rule 4102]

15. Excess emissions shall be defined as any operating hour in which 4-hour rolling average NOx concentration exceeds applicable emissions limit and a period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx or O2 (or both). [40 CFR 60.334(J)(1)(iii)] Federally Enforceable Through Title V Permit

16. Transitional Operation Period shall be defined as any of following periods: bypass transition period, primary re-ignition period, reduced load period, start-up or shutdown. [District Rule 4703, 3.33] Federally Enforceable Through Title V Permit

17. Bypass Transition Period shall be defined as the duration of time that a gas turbine's operation transitions between the heat recovery steam generator and bypass exhaust stacks, provided all of the following conditions are met: a) The selective catalytic reduction catalyst is not within the required temperature range or the required ammonia saturation level has not yet been achieved; b) The duration of a bypass transition period shall not exceed two hours; c) NOx emissions shall not exceed 15 ppmvd, corrected to 15% O2, averaged over two (2) hours; and d) The applicable CO compliance limit shall not be exceeded. [District Rule 4703, 3.2] Federally Enforceable Through Title V Permit

18. Primary Re-ignition Period shall be defined as the duration of time during which a gas turbine is operated at less than rated capacity in order to reset the DLN combustion system following a primary re-ignition, provided all of the following conditions are met: a) The duration of a primary re-ignition period shall not exceed one hour; b) NOx emissions shall not exceed 15 ppmvd, corrected at 15% O2, averaged over one (1) hour; and c) CO emissions shall not exceed 25 ppmvd, corrected at 15% O2. [District Rule 4703, 3.20] Federally Enforceable Through Title V Permit

19. Reduced Load Period shall be defined as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate, not to exceed one hour. [District Rule 4703, 3.23] Federally Enforceable Through Title V Permit

20. The emission control system shall be in operation and emissions shall be minimized insofar as technologically feasible during each transitional operation period. [District Rule 4703, 5.3.2] Federally Enforceable Through Title V Permit

21. No more than 6.00 MMscf/day of natural gas shall be consumed by gas turbine and no more than 2.47 MMscf/day of natural gas shall be consumed by duct burners. [District Rule 2201] Federally Enforceable Through Title V Permit

22. Maximum emissions from turbines S-2234-52 & -53 and standby boilers/heaters S-2234-1 & -3 shall not exceed the following daily emission limitations (DEL): PM10: 50.6 lb/day, NOx (as NO2): 245.7 lb/day, VOC: 51.4 lb/day, and CO: 544.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

23. During days of gas turbine startup/shutdown, daily NO2 and CO emissions shall be calculated by natural gas consumption rates, CEM results, and emission factors for standby boilers/heaters. [District Rule 2201] Federally Enforceable Through Title V Permit

24. During days of gas turbine startup/shutdown, permittee shall maintain accurate daily records of natural gas consumption in gas turbines for normal operation and startup/shutdown periods, and in LTS-1 & LTS-2 gas plant standby boilers/heaters. [District Rule 2201] Federally Enforceable Through Title V Permit

25. Permittee shall maintain daily records of NO2 and CO emission calculations during days of gas turbine startup/shutdown, and such records shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

26. Permittee shall maintain accurate records of CEM printouts, and daily natural gas consumption in gas turbine & duct burners, and shall make such records readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

27. Permittee shall report the following emission exceedances to the District: emission rates of NOx and CO on a 3-hr rolling average, NSPS NOx emission rate on one hour average, and DEL of NOx & CO during days of gas turbine engine startup/shutdown. [District Rule 2201] Federally Enforceable Through Title V Permit

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28. Gas turbine lube oil system atmospheric vent shall be equipped with aerosol/smoke control provisions. [District Rule 2201] Federally Enforceable Through Title V Permit

29. Emission rates from gas turbine lube oil vent shall not exceed the following: PM10: 0.02 lb/hr and VOC: 0.00 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit

30. PM10 and VOC emissions from lube oil vent shall be measured by source testing within 60 days upon detection of visible emissions in excess of 5% opacity or Ringelmann 1/4 from gas turbine lube oil vent. [District Rule 2201] Federally Enforceable Through Title V Permit

31. Except during periods of startup/shutdown, emission rates (3-hr rolling average) from gas turbine combustion shall not exceed: PM10: 0.004 lb/MMBtu, NOx as NO2: 0.013 lb/MMBtu & 3.75 ppmvd @ 15% O2, VOC: 0.004 lb/MMBtu, and CO: 0.043 lb/MMBtu. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit

32. Except during periods of startup/shutdown, emission rates (3-hr rolling average) from duct burner combustion shall not exceed: PM10: 0.001 lb/MMBtu, NOx as NO2: 0.008 lb/MMBtu, VOC: 0.001 lb/MMBtu, and CO: 0.007 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit

33. If NOx CEM data & source testing results show compliance at lower NOx emission than 3.75 ppmvd @ 15% O2, District may adjust permitted NOx emission rate 12 months after complete implementation of this approval according to CEM data & testing results. [District Rule 2201] Federally Enforceable Through Title V Permit

34. NOx, VOC, CO, and ammonia emissions shall be measured by source testing annually 60 days prior to permit anniversary. [District Rule 2201] Federally Enforceable Through Title V Permit

35. Permittee shall maintain steam to fuel ratio during annual compliance testing to within +/- 5% of the average daily values recorded during the 60 day period prior to annual testing. [District Rule 2201] Federally Enforceable Through Title V Permit

36. Permittee shall maintain exhaust gas temperatures at SCR and oxidation catalyst inlets to within +/- 5% of the average daily values recorded during the 60 day period prior to annual testing. [District Rule 2201] Federally Enforceable Through Title V Permit

37. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

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

39. LTS-1 and LTS-2 gas plants (S-2234-3 & '1) standby boilers/heaters shall only be used when one or both gas turbines (S-2234-52 & '53) are inoperative. [District Rule 2201] Federally Enforceable Through Title V Permit

40. Gas turbine engine shall be equipped with G.E. Steward Stevenson turbine combustor steam injection system, Mitsubishi/Applied Thermal Systems selective catalytic reduction (SCR) with ammonia injection, and Grace oxidation catalyst system. [District Rule 2201] Federally Enforceable Through Title V Permit

41. Unit shall be fired exclusively on PUC-quality natural gas which has a sulfur content of less than or equal to 0.0026% by weight. [40 CFR 60.333(a) & (b); 60.332(a)] Federally Enforceable Through Title V Permit

42. Operator shall not discharge into the atmosphere combustion contaminants (PM) exceeding in concentration at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit

43. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the monitoring devices required by this rule to ensure that such devices are functioning properly. [District Rule 1080, 11.0] Federally Enforceable Through Title V Permit

44. Operator shall be required to conform to the compliance testing procedures described in District Rule 1081. [District Rule 1081] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

45. If the turbine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the turbine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.3.2, 40 CFR 60.335(d)] Federally Enforceable Through Title V Permit

46. If the turbine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [40 CFR 60.334(b)(2)] Federally Enforceable Through Title V Permit

47. The HHV and LHV of the fuel shall be determined using ASTM D3588-91, ASTM 1826-88, OR ASTM 1945-81. [40 CFR 60.332(a),(b) and District Rule 4703, 6.4.5] Federally Enforceable Through Title V Permit

48. Performance testing shall be conducted annually to measure NOx and CO emission concentrations using the following test methods: EPA Methods 7E or 20 for NOx emissions, EPA Methods 10 or 10B for CO emissions, EPA Methods 3, 3A, or 20 for Oxygen content of the exhaust gas. The 9-run tests shall be performed at highest physically achievable load of the gas turbine. [40 CFR 60.335(a), (b)(7) and District Rule 4703, 6.3.1, 6.4.1, 6.4.2, & 6.4.3] Federally Enforceable Through Title V Permit

49. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and date recording) for each successive 15-minute period or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [40 CFR 60.334(b)(2) and District Rule 1081, 6.4] Federally Enforceable Through Title V Permit

50. Results of the CEM system shall be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance with all applicable requirements of CFR 60.13. [40 CFR 60.13 and District Rule 4703, 5.1, 6.4] Federally Enforceable Through Title V Permit

51. Any gas turbine with an intermittently operated auxiliary burner shall demonstrate compliance with the auxiliary burner both on and off. [40 CFR 60.335(b) and District Rule 4703, 6.3.3] Federally Enforceable Through Title V Permit

52. The NOx and O2 CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specifications 2 and 3, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [40 CFR 60.334(b)(1) and, District Rule 1080, 6.3, 6.5, 6.6, & 7.2] Federally Enforceable Through Title V Permit

53. The CEMS shall be linked to a data logger which is compatible with the District's Data acquisition system. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080, 7.1] Federally Enforceable Through Title V Permit

54. Records shall be maintained and shall contain: the occurrence and duration of any start-up, shutdown, performance testing, evaluations, calibrations, checks, adjustments, any periods during which a continuous monitoring system or monitoring device is inoperative, maintenance of any CEMS that have been installed pursuant to District Rule 1080, and emission measurements. [District Rules 1080, 7.3, and 4703, 6.2.8, and 40 CFR 60.7 (b)] Federally Enforceable Through Title V Permit

55. If the turbine is fired on PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

56. The operator of a stationary gas turbine system shall maintain records of the date, time and duration of each bypass transition period and each primary re-ignition period. [District Rule 4703, 6.2.11] Federally Enforceable Through Title V Permit

57. The operator of a stationary gas turbine system shall provide source test information annually regarding the exhaust gas NOx and CO concentrations and the control efficiency of the emission control device. [District Rule 4703, 6.3.1] Federally Enforceable Through Title V Permit

58. Results of continuous emission monitoring must be averaged in accordance with the requirements of 40 CFR 60.13. [40 CFR 60.334(a),(b),(c) and District Rule 4703, 5.0] Federally Enforceable Through Title V Permit

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59. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation and quantity of fuel used. [40 CFR 60.332(a),(b) and District Rule 4703, 6.2.4] Federally Enforceable Through Title V Permit

60. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: 40 CFR 60.333 (a) and (b); 60.334(a),(b), and (c)(1); SJVUAPCD Rule 4703, Section 6.2.2 and 1080, 7.3. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

61. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rule 4201, 1081 and 1080, Sections 6.5, 7.2, 8.0, 9.0, and 10.0; 40 CFR 60.332(c) and (d); 60.334(b) and (c)(2); 60.335(d). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

62. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rule 4703, sections 5.0, 5.1.1, 6.2.1, 6.2.4, 6.3, 6.4.1, 6.4.3, 6.4.5, and 6.4.6. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

63. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: 40 CFR 60.332(a), (b); 60.335(a), (b), (c), and (e). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

64. Operator shall install, operate and maintain in calibration a system which continuously measures and records: control system operating parameters, elapsed time of operation, the exhaust gas NOx and O2 concentrations. [40 CFR 60.334(a),(b)] Federally Enforceable Through Title V Permit

65. A violation of NOx emission standards indicated by the NOx CEM shall be reported by the operator to the APCO within 96 hours. [District Rule 1080, 9.0] Federally Enforceable Through Title V Permit

66. Operator shall submit a semiannual report listing any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8% by weight. [40 CFR 60.334(c)(2)] Federally Enforceable Through Title V Permit

67. Operator shall notify the APCO no later than eight hours after the detection of a breakdown of the CEM. Operator shall inform the APCO of the intent to shut down the CEM at least 24 hours prior to the event. [District Rule 1080, 10.0] Federally Enforceable Through Title V Permit

68. Operators of CEM's installed at the direction of the APCO shall submit a written report for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include: A. time intervals, data and magnitude of excess emissions, nature and cause of excess (if known), corrective actions taken and preventive measures adopted; B. averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; C. applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; D. a negative declaration when no excess emissions occurred. [District Rule 1080, 8.0] Federally Enforceable Through Title V Permit

69. NOx and carbon monoxide daily emissions shall be measured by use of CEM data, fuel rate data, and daily hours of operation data. A written record of the required compliance demonstrations shall be maintained and made available for District inspection for a period of five years. [District Rule 2201] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-57-11 **EXPIRATION DATE:** 10/31/2009

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EQUIPMENT DESCRIPTION:
1,000 BHP WAUKESHA MODEL L7042 RICH-BURN NATURAL GAS-FIRED IC ENGINE WITH TURBOCHARGER, ENLARGED NOZZLE RING, AIR/FUEL RATIO CONTROL UNIT, AND A NONSELECTIVE THREE WAY CATALYTIC REDUCTION (NSCR) SYSTEM (K-53 UNX #13444)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
3. 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
4. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
6. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.59 lb/hr, 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction); SOx (as SO2): 0.34 lb/hr; PM10: 0.24 lb/hr; CO: 8.82 lb/hr and 541 ppmv @ 15% O2; or VOC: 2.33 lb/hr and 250 ppmv @ 15% O2. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
7. Percent emission reductions, if used to comply with NOx emission limits, shall be calculated as follows: For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. The engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. [District Rule 4702, 5.4] Federally Enforceable Through Title V Permit
8. The operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO. [District Rule 4702, 5.5] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit

10. Particulate matter emissions at the point of discharge shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit

11. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit

12. If the IC engine is fired on PUC-regulated natural gas, the permittee shall maintain on file, copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

13. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

14. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

15. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. For engines that comply with a percent reduction limit, the percent reduction of NOx emissions shall also be reported. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit

16. 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 Rules 1081 and 4702, 6.4] Federally Enforceable Through Title V Permit

17. Source testing to measure the NOx, CO, and VOC emissions from this unit shall be conducted not less than once every 12 months. If compliance with the emission limits is demonstrated on two (2) consecutive annual source tests, the testing frequency may be reduced to not less than once every 24 months. If the unit fails to demonstrate compliance with the applicable emission limits, the testing frequency shall return to not less than once every 12 months. [District Rules 2201 and 4702, 6.3.2] Federally Enforceable Through Title V Permit

18. 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

19. 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

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

21. 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

22. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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23. The permittee shall monitor and record the stack concentration of NOx, 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

24. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

25. 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

26. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

27. 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 of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

28. 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

29. 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

30. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

31. 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

32. 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

33. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

34. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

35. NOx emissions rate shall not exceed 8.00 gr/hp-hr. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

36. Source testing to measure the NOx emissions from at least one representative engine of this type (Waukesha, model L7042GSI) shall be conducted not less than once every 12 months. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

37. The permittee shall determine the NOx emissions from at least one representative engine of this type (Waukesha, model L7042GSI) at least once per month by either direct NOx measurement, or measurement of other exhaust gas concentrations (e.g. CO and O2) and engine parameters from which NOx emissions can be directly computed. NOx emissions shall be determined from every engine of this type at least once each calendar half. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

38. An Authority to Construct (ATC) to modify the VOC emissions rate so post-control VOC emissions do not exceed 20,000 lb-VOC/yr shall be fully implemented within six months of the finalized Title V permit renewal for this facility. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-58-13 **EXPIRATION DATE:** 10/31/2009

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EQUIPMENT DESCRIPTION:
1,000 BHP WAUKESHA MODEL L7042-GSIU RICH-BURN NATURAL GAS-FIRED IC ENGINE WITH CATALYTIC CONVERTER POWERING A GAS COMPRESSOR (K-49 UNX# 51286)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
3. 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
4. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
6. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.59 lb/hr, 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction), SOx (as SO2): 0.34 lb/hr, PM10: 0.24 lb/hr, CO: 8.82 lb/hr and 541 ppmv @ 15% O2, or VOC: 2.33 lb/hr and 250 ppmv @ 15% O2. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
7. Percent emission reductions, if used to comply with NOx emission limits, shall be calculated as follows: For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. The engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. [District Rule 4702, 5.4] Federally Enforceable Through Title V Permit
8. The operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO. [District Rule 4702, 5.5] Federally Enforceable Through Title V Permit
9. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201 and Kern County Rule 404] Federally Enforceable Through Title V Permit

11. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit

12. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

13. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

14. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

15. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. This average shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. For engines that comply with a percent reduction limit, the percent reduction of NOx emissions shall also be reported. [District Rules 2520, 9.4.2 and 4702, 6.3.3] Federally Enforceable Through Title V Permit

16. 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] Federally Enforceable Through Title V Permit

17. 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 Rules 1081 and 4702] Federally Enforceable Through Title V Permit

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

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

20. 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 Rules 2520, 9.4.2 and 4702] Federally Enforceable Through Title V Permit

21. 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 Rules 2520, 9.4.2 and 4702] Federally Enforceable Through Title V Permit

22. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrated compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, and 4702, 6.3.2] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. The permittee shall monitor and record the stack concentration of NOx, 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

24. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

25. 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

26. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

27. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2201 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

28. 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 of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

29. 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

30. 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

31. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

32. 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

33. 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

34. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

35. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

36. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

37. An Authority to Construct (ATC) to modify the VOC emissions rate so post-control VOC emissions do not exceed 20,000 lb-VOC/yr shall be fully implemented within six months of the finalized Title V permit renewal for this facility. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-59-12 **EXPIRATION DATE:** ~~10/31~~/2009

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EQUIPMENT DESCRIPTION:
1,000 BHP WAUKESHA MODEL L7042-GSI RICH-BURN NATURAL GAS-FIRED IC ENGINE WITH CATALYTIC CONVERTER POWERING A GAS COMPRESSOR (K-29 UNX# 13207)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
3. 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
4. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
6. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.59 lb/hr, 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction), SOx (as SO2): 0.34 lb/hr, PM10: 0.24 lb/hr, CO: 8.82 lb/hr and 541 ppmv @ 15% O2, or VOC: 2.33 lb/hr and 250 ppmv @ 15% O2. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
7. Percent emission reductions, if used to comply with NOx emission limits, shall be calculated as follows: For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. The engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. [District Rule 4702, 5.4] Federally Enforceable Through Title V Permit
8. The operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO. [District Rule 4702, 5.5] Federally Enforceable Through Title V Permit
9. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201 and Kern County Rule 404] Federally Enforceable Through Title V Permit

11. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit

12. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

13. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

14. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

15. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. This average shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. For engines that comply with a percent reduction limit, the percent reduction of NOx emissions shall also be reported. [District Rules 2520, 9.4.2 and 4702, 6.3.3] Federally Enforceable Through Title V Permit

16. 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] Federally Enforceable Through Title V Permit

17. 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 Rules 1081 and 4702] Federally Enforceable Through Title V Permit

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

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

20. 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 Rules 2520, 9.4.2 and 4702] Federally Enforceable Through Title V Permit

21. 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 Rules 2520, 9.4.2 and 4702] Federally Enforceable Through Title V Permit

22. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrated compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, and 4702, 6.3.2] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. The permittee shall monitor and record the stack concentration of NOx, 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

24. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

25. 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

26. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

27. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2201 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

28. 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 of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

29. 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

30. 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

31. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

32. 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

33. 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

34. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

35. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

36. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

37. An Authority to Construct (ATC) to modify the VOC emissions rate so post-control VOC emissions do not exceed 20,000 lb-VOC/yr shall be fully implemented within six months of the finalized Title V permit renewal for this facility. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-60-7 **EXPIRATION DATE:** 10/31/2009

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EQUIPMENT DESCRIPTION:
650 BHP WAUKESHA MODEL L7042-GU RICH-BURN NATURAL GAS-FIRED IC ENGINE WITH CATALYTIC CONVERTER POWERING A GAS COMPRESSOR (K-54 UNX# 12877)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
3. 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
4. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
6. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.03 lb/hr, 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction); SOx (as SO2): 1.6 lb/day; PM10: 13.9 lb/day; CO: 2.1 g/hp-hr and 289 ppmv @ 15% O2; or VOC: 67 ppmv @ 15% O2. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
7. Percent emission reductions, if used to comply with NOx emission limits, shall be calculated as follows: For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. The engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. [District Rule 4702, 5.4] Federally Enforceable Through Title V Permit
8. The operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO. [District Rule 4702, 5.5] Federally Enforceable Through Title V Permit
9. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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10. Particulate matter emissions at the point of discharge shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit

11. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit

12. If the IC engine is fired on PUC-regulated natural gas, the permittee shall maintain on file, copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

13. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

14. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

15. Source testing to measure the NOx, CO, and VOC emissions from this unit shall be conducted not less than once every 12 months. If compliance with the emission limits is demonstrated on two (2) consecutive annual source tests, the testing frequency may be reduced to not less than once every 24 months. If the unit fails to demonstrate compliance with the applicable emission limits, the testing frequency shall return to not less than once every 12 months. [District Rules 2201 and 4702, 6.3.2] Federally Enforceable Through Title V Permit

16. 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

17. 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

18. 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 Rules 1081 and 4702, 6.4] Federally Enforceable Through Title V Permit

19. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. For engines that comply with a percent reduction limit, the percent reduction of NOx emissions shall also be reported. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit

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

21. 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

22. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. The permittee shall monitor and record the stack concentration of NOx, 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

24. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

25. 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

26. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

27. 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 of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

28. 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

29. 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

30. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

31. 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

32. 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

33. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

34. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-61-11 **EXPIRATION DATE:** 10/31/2009

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EQUIPMENT DESCRIPTION:
1,000 BHP WAUKESHA MODEL L7042GSI RICH-BURN NATURAL GAS-FIRED IC ENGINE WITH TURBOCHARGER AND CATALYTIC CONVERTER POWERING A GAS COMPRESSOR (K-52 UNX# 15676)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
3. 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
4. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
6. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.59 lb/hr, 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction); SOx (as SO2): 0.34 lb/hr; PM10: 0.24 lb/hr; CO: 8.82 lb/hr and 541 ppmv @ 15% O2; or VOC: 2.33 lb/hr and 250 ppmv @ 15% O2. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
7. Percent emission reductions, if used to comply with NOx emission limits, shall be calculated as follows: For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. The engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. [District Rule4702, 5.4] Federally Enforceable Through Title V Permit
8. The operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO. [District Rule 5.5] Federally Enforceable Through Title V Permit
9. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Particulate matter emissions at the point of discharge shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit

11. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit

12. If the IC engine is fired on PUC-regulated natural gas, the permittee shall maintain on file, copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

13. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

14. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

15. Source testing to measure the NOx, CO, and VOC emissions from this unit shall be conducted not less than once every 12 months. If compliance with the emission limits is demonstrated on two (2) consecutive annual source tests, the testing frequency may be reduced to not less than once every 24 months. If the unit fails to demonstrate compliance with the applicable emission limits, the testing frequency shall return to not less than once every 12 months. [District Rules 2201 and 4702, 6.3.2] Federally Enforceable Through Title V Permit

16. 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

17. 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

18. 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 Rules 1081 and 4702, 6.4] Federally Enforceable Through Title V Permit

19. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. For engines that comply with a percent reduction limit, the percent reduction of NOx emissions shall also be reported. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit

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

21. 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

22. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. The permittee shall monitor and record the stack concentration of NOx, 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

24. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

25. 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

26. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

27. 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 of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

28. 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

29. 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

30. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

31. 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

32. 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

33. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

34. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

35. NOx emissions rate shall not exceed 8.00 gr/hp-hr. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

36. Source testing to measure the NOx emissions from at least one representative engine of this type (Waukesha, model L7042GSI) shall be conducted not less than once every 12 months. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

37. The permittee shall determine the NOx emissions from at least one representative engine of this type (Waukesha, model L7042GSI) at least once per month by either direct NOx measurement, or measurement of other exhaust gas concentrations (e.g. CO and O2) and engine parameters from which NOx emissions can be directly computed. NOx emissions shall be determined from every engine of this type at least once each calendar half. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

38. An Authority to Construct (ATC) to modify the VOC emissions rate so post-control VOC emissions do not exceed 20,000 lb-VOC/yr shall be fully implemented within six months of the finalized Title V permit renewal for this facility. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-62-8 **EXPIRATION DATE:** ~~10/31~~/2009

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EQUIPMENT DESCRIPTION:
2,000 BHP INGERSOLL-RAND MODEL 412KVS LEAN-BURN NATURAL GAS-FIRED IC ENGINE WITH PRE-COMBUSTION CHAMBER POWERING A GAS COMPRESSOR (K-44 UNX# 13701)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
3. 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, 601 and 7.5] Federally Enforceable Through Title V Permit
4. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
5. Particulate matter emissions at the point of discharge shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] 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. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 7.72 lb/hr, 1.75 gr/hp-hr and 144 ppmv @ 15% O2 (equivalent to 90% NOx reduction); SOx (as SO2): 0.67 lb/hr; PM10: 0.49 lb/hr; CO: 22.05 lb/hr and 676 ppmv @ 15% O2; or VOC: 13.23 lb/hr and 710 ppmv @ 15% O2. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
8. Percent emission reductions, if used to comply with NOx emission limits, shall be calculated as follows: For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. The engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. [District Rule 4702, 5.4] Federally Enforceable Through Title V Permit
9. The operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO. [District Rule 4702, 5.5] Federally Enforceable Through Title V Permit

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

10. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit

11. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit

12. If the IC engine is fired on PUC-regulated natural gas, the permittee shall maintain on file, copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

13. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

14. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

15. Source testing to measure the NOx, CO, and VOC emissions from this unit shall be conducted not less than once every 12 months. If compliance with the emission limits is demonstrated on two (2) consecutive annual source tests, the testing frequency may be reduced to not less than once every 24 months. If the unit fails to demonstrate compliance with the applicable emission limits, the testing frequency shall return to not less than once every 12 months. [District Rules 2201 and 4702, 6.3.2] Federally Enforceable Through Title V Permit

16. 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

17. 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

18. 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 Rules 1081 and 4702, 6.4] Federally Enforceable Through Title V Permit

19. 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. For engines that comply with a percent reduction limit, the percent reduction of NOx emissions shall also be reported. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit

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

21. 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

22. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. The permittee shall monitor and record the stack concentration of NOx, 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

24. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

25. 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

26. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

27. 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 of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

28. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

29. NOx emissions rate shall not exceed 2.00 gr/hp-hr. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

30. Source testing to measure the NOx emissions from at least one representative engine of this type (Ingersoll-Rand, model 412KVS) shall be conducted not less than once every 12 months. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

31. The permittee shall determine the NOx emissions from at least one representative engine of this type (Ingersoll-Rand, model 412KVS) at least once per month by either direct NOx measurement, or measurement of other exhaust gas concentrations (e.g. CO and O2) and engine parameters from which NOx emissions can be directly computed. NOx emissions shall be determined from every engine of this type at least once each calendar half. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-63-11 **EXPIRATION DATE:** 10/31/2009

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EQUIPMENT DESCRIPTION:
1,000 BHP WAUKESHA MODEL L7042-GSIU RICH-BURN NATURAL GAS-FIRED IC ENGINE WITH TURBOCHARGER AND CATALYTIC CONVERTER POWERING A GAS COMPRESSOR (K-48 UNX# 13435)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
3. 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
4. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
6. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.59 lb/hr, 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction), SOx (as SO2): 0.34 lb/hr, PM10: 0.24 lb/hr, CO: 8.82 lb/hr and 541 ppmv @ 15% O2, or VOC: 2.33 lb/hr and 250 ppmv @ 15% O2. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
7. Percent emission reductions, if used to comply with NOx emission limits, shall be calculated as follows: For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. The engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. [District Rule 4702, 5.4] Federally Enforceable Through Title V Permit
8. The operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO. [District Rule 4702, 5.5] Federally Enforceable Through Title V Permit
9. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201 and Kern County Rule 404] Federally Enforceable Through Title V Permit

11. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit

12. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

13. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

14. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

15. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. This average shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. For engines that comply with a percent reduction limit, the percent reduction of NOx emissions shall also be reported. [District Rules 2520, 9.4.2 and 4702, 6.3.3] Federally Enforceable Through Title V Permit

16. 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] Federally Enforceable Through Title V Permit

17. 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 Rules 1081 and 4702] Federally Enforceable Through Title V Permit

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

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

20. 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 Rules 2520, 9.4.2 and 4702] Federally Enforceable Through Title V Permit

21. 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 Rules 2520, 9.4.2 and 4702] Federally Enforceable Through Title V Permit

22. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrated compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, and 4702, 6.3.2] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. The permittee shall monitor and record the stack concentration of NOx, 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

24. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

25. 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

26. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

27. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2201 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

28. 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 of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

29. 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

30. 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

31. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

32. 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

33. 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

34. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

35. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

36. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

37. An Authority to Construct (ATC) to modify the VOC emissions rate so post-control VOC emissions do not exceed 20,000 lb-VOC/yr shall be fully implemented within six months of the finalized Title V permit renewal for this facility. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-64-9 **EXPIRATION DATE:** ~~10/31/2009~~

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EQUIPMENT DESCRIPTION:
650 BHP WAUKESHA MODEL L7042-GU RICH-BURN NATURAL GAS-FIRED IC ENGINE WITH CATALYTIC CONVERTER POWERING A GAS COMPRESSOR (K-26 UNX# 11554)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
3. 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
4. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
6. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.03 lb/hr, 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction); SOx (as SO2): 1.6 lb/day, PM10: 13.9 lb/day; CO: 2.1 g/hp-hr and 289 ppmv; or VOC: 67 ppmv. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
7. Percent emission reductions, if used to comply with NOx emission limits, shall be calculated as follows: For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. The engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. [District Rule 4702, 5.4] Federally Enforceable Through Title V Permit
8. The operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO. [District Rule 5.5] Federally Enforceable Through Title V Permit
9. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
10. Particulate matter emissions at the point of discharge shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit

12. If the IC engine is fired on PUC-regulated natural gas, the permittee shall maintain on file, copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

13. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

14. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

15. Source testing to measure the NOx, CO, and VOC emissions from this unit shall be conducted not less than once every 12 months. If compliance with the emission limits is demonstrated on two (2) consecutive annual source tests, the testing frequency may be reduced to not less than once every 24 months. If the unit fails to demonstrate compliance with the applicable emission limits, the testing frequency shall return to not less than once every 12 months. [District Rules 2201 and 4702, 6.3.2] Federally Enforceable Through Title V Permit

16. 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

17. 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

18. 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 Rules 1081 and 4702, 6.4] Federally Enforceable Through Title V Permit

19. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. For engines that comply with a percent reduction limit, the percent reduction of NOx emissions shall also be reported. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit

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

21. 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

22. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. The permittee shall monitor and record the stack concentration of NOx, 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

24. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

25. 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

26. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

27. 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 of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

28. 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

29. 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

30. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

31. 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

32. 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

33. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

34. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

35. NOx emissions rate shall not exceed 8.00 gr/hp-hr. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

36. Source testing to measure the NOx emissions from at least one representative engine of this type (Waukesha, model L7042GU) shall be conducted not less than once every 12 months. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

37. The permittee shall determine the NOx emissions from at least one representative engine of this type (Waukesha, model L7042GU) at least once per month by either direct NOx measurement, or measurement of other exhaust gas concentrations (e.g. CO and O2) and engine parameters from which NOx emissions can be directly computed. NOx emissions shall be determined from every engine of this type at least once each calendar half. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-65-9 **EXPIRATION DATE:** 10/31/2009

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EQUIPMENT DESCRIPTION:
650 BHP WAUKESHA MODEL L7042-GU RICH-BURN NATURAL GAS-FIRED IC ENGINE WITH CATALYTIC CONVERTER POWERING A GAS COMPRESSOR (K-27 UNX #12705)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
3. 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
4. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
6. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.03 lb/hr, 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction); SOx (as SO2): 1.6 lb/day, PM10: 13.9 lb/day; CO: 2.1 g/hp-hr and 289 ppmv; or VOC: 67 ppmv. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
7. Percent emission reductions, if used to comply with NOx emission limits, shall be calculated as follows: For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. The engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. [District Rule 4702, 5.4] Federally Enforceable Through Title V Permit
8. The operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO. [District Rule 4702, 5.5] Federally Enforceable Through Title V Permit
9. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit

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

10. Particulate matter emissions at the point of discharge shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit

11. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit

12. If the IC engine is fired on PUC-regulated natural gas, the permittee shall maintain on file, copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

13. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

14. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

15. Source testing to measure the NOx, CO, and VOC emissions from this unit shall be conducted not less than once every 12 months. If compliance with the emission limits is demonstrated on two (2) consecutive annual source tests, the testing frequency may be reduced to not less than once every 24 months. If the unit fails to demonstrate compliance with the applicable emission limits, the testing frequency shall return to not less than once every 12 months. [District Rules 2201 and 4702, 6.3.2] Federally Enforceable Through Title V Permit

16. 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

17. 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

18. 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 Rules 1081 and 4702, 6.4] Federally Enforceable Through Title V Permit

19. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. For engines that comply with a percent reduction limit, the percent reduction of NOx emissions shall also be reported. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit

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

21. 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

22. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. The permittee shall monitor and record the stack concentration of NOx, 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

24. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

25. 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

26. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

27. 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 of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

28. 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

29. 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

30. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

31. 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

32. 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

33. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

34. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

35. NOx emissions rate shall not exceed 8.00 gr/hp-hr. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

36. Source testing to measure the NOx emissions from at least one representative engine of this type (Waukesha, model L7042GU) shall be conducted not less than once every 12 months. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

37. The permittee shall determine the NOx emissions from at least one representative engine of this type (Waukesha, model L7042GU) at least once per month by either direct NOx measurement, or measurement of other exhaust gas concentrations (e.g. CO and O2) and engine parameters from which NOx emissions can be directly computed. NOx emissions shall be determined from every engine of this type at least once each calendar half. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-66-9 **EXPIRATION DATE:** 10/31/2009

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EQUIPMENT DESCRIPTION:
650 BHP WAUKESHA MODEL L7042-GU RICH-BURN NATURAL GAS-FIRED IC ENGINE EQUIPPED WITH CATALYTIC CONVERTER POWERING A GAS COMPRESSOR (K-28 UNX# 12850)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
3. 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
4. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
6. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.03 lb/hr, 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction); SOx (as SO2): 1.6 lb/day, PM10: 13.9 lb/day; CO: 2.1 g/hp-hr and 289 ppmv; or VOC: 67 ppmv. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
7. Percent emission reductions, if used to comply with NOx emission limits, shall be calculated as follows: For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. The engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. [District Rule 4702, 5.4] Federally Enforceable Through Title V Permit
8. The operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO. [District Rule 4702, 5.5] Federally Enforceable Through Title V Permit
9. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Particulate matter emissions at the point of discharge shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit

11. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit

12. If the IC engine is fired on PUC-regulated natural gas, the permittee shall maintain on file, copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

13. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

14. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

15. Source testing to measure the NOx, CO, and VOC emissions from this unit shall be conducted not less than once every 12 months. If compliance with the emission limits is demonstrated on two (2) consecutive annual source tests, the testing frequency may be reduced to not less than once every 24 months. If the unit fails to demonstrate compliance with the applicable emission limits, the testing frequency shall return to not less than once every 12 months. [District Rules 2201 and 4702, 6.3.2] Federally Enforceable Through Title V Permit

16. 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

17. 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

18. 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 Rules 1081 and 4702, 6.4] Federally Enforceable Through Title V Permit

19. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. For engines that comply with a percent reduction limit, the percent reduction of NOx emissions shall also be reported. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit

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

21. 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

22. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. The permittee shall monitor and record the stack concentration of NOx, 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

24. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

25. 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

26. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

27. 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 of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

28. 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

29. 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

30. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

31. 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

32. 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

33. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

34. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

35. NOx emissions rate shall not exceed 8.00 gr/hp-hr. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

36. Source testing to measure the NOx emissions from at least one representative engine of this type (Waukesha, model L7042GU) shall be conducted not less than once every 12 months. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

37. The permittee shall determine the NOx emissions from at least one representative engine of this type (Waukesha, model L7042GU) at least once per month by either direct NOx measurement, or measurement of other exhaust gas concentrations (e.g. CO and O2) and engine parameters from which NOx emissions can be directly computed. NOx emissions shall be determined from every engine of this type at least once each calendar half. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-67-11 **EXPIRATION DATE:** 10/31/2009

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EQUIPMENT DESCRIPTION:
1,000 BHP WAUKESHA MODEL L7042-GSIU RICH-BURN NATURAL GAS-FIRED IC ENGINE WITH TURBOCHARGER AND CATALYTIC CONVERTER POWERING A GAS COMPRESSOR (K-30 UNX# 13426)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
3. 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
4. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
6. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.59 lb/hr, 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction); SOx (as SO2): 0.34 lb/hr; PM10: 0.24 lb/hr; CO: 8.82 lb/hr and 541 ppmv @ 15% O2; or VOC: 2.33 lb/hr and 250 ppmv @ 15% O2. [District NSR Rule and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
7. Percent emission reductions, if used to comply with NOx emission limits, shall be calculated as follows: For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. The engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. [District Rule 4702, 5.4] Federally Enforceable Through Title V Permit
8. The operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO. [District Rule 4702, 5.5] Federally Enforceable Through Title V Permit
9. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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10. Particulate matter emissions at the point of discharge shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit

11. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit

12. If the IC engine is fired on PUC-regulated natural gas, the permittee shall maintain on file, copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

13. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

14. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

15. Source testing to measure the NOx, CO, and VOC emissions from this unit shall be conducted not less than once every 12 months. If compliance with the emission limits is demonstrated on two (2) consecutive annual source tests, the testing frequency may be reduced to not less than once every 24 months. If the unit fails to demonstrate compliance with the applicable emission limits, the testing frequency shall return to not less than once every 12 months. [District Rules 2201 and 4702, 6.3.2] Federally Enforceable Through Title V Permit

16. 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

17. 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

18. 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 Rules 1081 and 4702, 6.4] Federally Enforceable Through Title V Permit

19. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. For engines that comply with a percent reduction limit, the percent reduction of NOx emissions shall also be reported. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit

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

21. 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

22. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. The permittee shall monitor and record the stack concentration of NOx, 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

24. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

25. 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

26. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

27. 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 of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

28. 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

29. 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

30. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

31. 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

32. 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

33. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

34. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

35. NOx emissions rate shall not exceed 8.00 gr/hp-hr. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

36. Source testing to measure the NOx emissions from at least one representative engine of this type (Waukesha, model L7042GSI) shall be conducted not less than once every 12 months. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

37. The permittee shall determine the NOx emissions from at least one representative engine of this type (Waukesha, model L7042GSI) at least once per month by either direct NOx measurement, or measurement of other exhaust gas concentrations (e.g. CO and O2) and engine parameters from which NOx emissions can be directly computed. NOx emissions shall be determined from every engine of this type at least once each calendar half. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

38. An Authority to Construct (ATC) to modify the VOC emissions rate so post-control VOC emissions do not exceed 20,000 lb-VOC/yr shall be fully implemented within six months of the finalized Title V permit renewal for this facility. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-68-11 **EXPIRATION DATE:** 10/31/2009

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EQUIPMENT DESCRIPTION:
1,000 BHP WAUKESHA MODEL L7042-GSIU RICH-BURN NATURAL GAS-FIRED IC ENGINE WITH TURBOCHARGER AND CATALYTIC CONVERTER POWERING A GAS COMPRESSOR (K-31 UNX# 11553)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
3. 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
4. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
6. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.59 lb/hr, 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction), SOx (as SO2): 0.34 lb/hr, PM10: 0.24 lb/hr, CO: 8.82 lb/hr and 541 ppmv @ 15% O2, or VOC: 2.33 lb/hr and 250 ppmv @ 15% O2. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
7. Percent emission reductions, if used to comply with NOx emission limits, shall be calculated as follows: For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. The engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. [District Rule 4702, 5.4] Federally Enforceable Through Title V Permit
8. The operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO. [District Rule 4702, 5.5] Federally Enforceable Through Title V Permit
9. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit

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10. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201 and Kern County Rule 404] Federally Enforceable Through Title V Permit

11. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit

12. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

13. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

14. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

15. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. This average shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. For engines that comply with a percent reduction limit, the percent reduction of NOx emissions shall also be reported. [District Rules 2520, 9.4.2 and 4702, 6.3.3] Federally Enforceable Through Title V Permit

16. 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] Federally Enforceable Through Title V Permit

17. 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 Rules 1081 and 4702] Federally Enforceable Through Title V Permit

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

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

20. 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 Rules 2520, 9.4.2 and 4702] Federally Enforceable Through Title V Permit

21. 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 Rules 2520, 9.4.2 and 4702] Federally Enforceable Through Title V Permit

22. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrated compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, and 4702, 6.3.2] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. The permittee shall monitor and record the stack concentration of NOx, 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

24. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

25. 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

26. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

27. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2201 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

28. 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 of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

29. 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

30. 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

31. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

32. 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

33. 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

34. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

35. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

36. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

37. An Authority to Construct (ATC) to modify the VOC emissions rate so post-control VOC emissions do not exceed 20,000 lb-VOC/yr shall be fully implemented within six months of the finalized Title V permit renewal for this facility. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-69-11 **EXPIRATION DATE:** ~~10/31/2009~~

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EQUIPMENT DESCRIPTION:
1,000 BHP WAUKESHA MODEL L7042-GSIU RICH-BURN NATURAL GAS-FIRED IC ENGINE WITH TURBOCHARGER AND CATALYTIC CONVERTER POWERING A GAS COMPRESSOR (K-32 UNX# 18028)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
3. 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
4. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
6. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.59 lb/hr, 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction), SOx (as SO2): 0.34 lb/hr, PM10: 0.24 lb/hr, CO: 8.82 lb/hr and 541 ppmv @ 15% O2, or VOC: 2.33 lb/hr and 250 ppmv @ 15% O2. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
7. Percent emission reductions, if used to comply with NOx emission limits, shall be calculated as follows: For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. The engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. [District Rule 4702, 5.4] Federally Enforceable Through Title V Permit
8. The operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO. [District Rule 4702, 5.5] Federally Enforceable Through Title V Permit
9. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201 and Kern County Rule 404] Federally Enforceable Through Title V Permit

11. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit

12. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

13. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

14. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

15. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. This average shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. For engines that comply with a percent reduction limit, the percent reduction of NOx emissions shall also be reported. [District Rules 2520, 9.4.2 and 4702, 6.3.3] Federally Enforceable Through Title V Permit

16. 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] Federally Enforceable Through Title V Permit

17. 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 Rules 1081 and 4702] Federally Enforceable Through Title V Permit

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

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

20. 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 Rules 2520, 9.4.2 and 4702] Federally Enforceable Through Title V Permit

21. 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 Rules 2520, 9.4.2 and 4702] Federally Enforceable Through Title V Permit

22. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrated compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, and 4702, 6.3.2] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. The permittee shall monitor and record the stack concentration of NOx, 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

24. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

25. 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

26. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

27. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2201 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

28. 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 of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

29. 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

30. 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

31. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

32. 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

33. 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

34. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

35. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

36. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

37. An Authority to Construct (ATC) to modify the VOC emissions rate so post-control VOC emissions do not exceed 20,000 lb-VOC/yr shall be fully implemented within six months of the finalized Title V permit renewal for this facility. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-70-12 **EXPIRATION DATE:** ~~10/31/2009~~

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EQUIPMENT DESCRIPTION:
1,000 BHP WAUKESHA MODEL L7042-GSIU RICH-BURN NATURAL GAS-FIRED IC ENGINE WITH TURBOCHARGER AND CATALYTIC CONVERTER POWERING A GAS COMPRESSOR (K-33 UNX# 16453)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
3. 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
4. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
6. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.59 lb/hr, 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction), SOx (as SO2): 0.34 lb/hr, PM10: 0.24 lb/hr, CO: 8.82 lb/hr and 541 ppmv @ 15% O2, or VOC: 2.33 lb/hr and 250 ppmv @ 15% O2. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
7. Percent emission reductions, if used to comply with NOx emission limits, shall be calculated as follows: For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. The engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. [District Rule 4702, 5.4] Federally Enforceable Through Title V Permit
8. The operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO. [District Rule 4702, 5.5] Federally Enforceable Through Title V Permit
9. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201 and Kern County Rule 404] Federally Enforceable Through Title V Permit

11. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit

12. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

13. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

14. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

15. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. This average shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. For engines that comply with a percent reduction limit, the percent reduction of NOx emissions shall also be reported. [District Rules 2520, 9.4.2 and 4702, 6.3.3] Federally Enforceable Through Title V Permit

16. 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] Federally Enforceable Through Title V Permit

17. 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 Rules 1081 and 4702] Federally Enforceable Through Title V Permit

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

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

20. 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 Rules 2520, 9.4.2 and 4702] Federally Enforceable Through Title V Permit

21. 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 Rules 2520, 9.4.2 and 4702] Federally Enforceable Through Title V Permit

22. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrated compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, and 4702, 6.3.2] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. The permittee shall monitor and record the stack concentration of NOx, 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

24. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

25. 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

26. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

27. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2201 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

28. 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 of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

29. 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

30. 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

31. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

32. 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

33. 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

34. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

35. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

36. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

37. An Authority to Construct (ATC) to modify the VOC emissions rate so post-control VOC emissions do not exceed 20,000 lb-VOC/yr shall be fully implemented within six months of the finalized Title V permit renewal for this facility. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-71-12

EXPIRATION DATE: 10/31/2009

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EQUIPMENT DESCRIPTION:
1,000 BHP WAUKESHA MODEL L7042-GSIU RICH-BURN NATURAL GAS-FIRED IC ENGINE WITH TURBOCHARGER AND CATALYTIC CONVERTER POWERING A GAS COMPRESSOR (K-34 UNX# 13417)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
3. 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
4. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
6. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.59 lb/hr, 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction), SOx (as SO2): 0.34 lb/hr, PM10: 0.24 lb/hr, CO: 8.82 lb/hr and 541 ppmv @ 15% O2, or VOC: 2.33 lb/hr and 250 ppmv @ 15% O2. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
7. Percent emission reductions, if used to comply with NOx emission limits, shall be calculated as follows: For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. The engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. [District Rule 4702, 5.4] Federally Enforceable Through Title V Permit
8. The operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO. [District Rule 4702, 5.5] Federally Enforceable Through Title V Permit
9. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit

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10. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201 and Kern County Rule 404] Federally Enforceable Through Title V Permit
11. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit
12. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
13. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
14. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
15. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. This average shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. For engines that comply with a percent reduction limit, the percent reduction of NOx emissions shall also be reported. [District Rules 2520, 9.4.2 and 4702, 6.3.3] Federally Enforceable Through Title V Permit
16. 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] Federally Enforceable Through Title V Permit
17. 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 Rules 1081 and 4702] Federally Enforceable Through Title V Permit
18. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
19. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
20. 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 Rules 2520, 9.4.2 and 4702] Federally Enforceable Through Title V Permit
21. 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 Rules 2520, 9.4.2 and 4702] Federally Enforceable Through Title V Permit
22. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrated compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, and 4702, 6.3.2] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. The permittee shall monitor and record the stack concentration of NOx, 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

24. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

25. 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

26. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

27. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2201 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

28. 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 of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

29. 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

30. 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

31. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

32. 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

33. 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

34. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

35. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

36. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

37. An Authority to Construct (ATC) to modify the VOC emissions rate so post-control VOC emissions do not exceed 20,000 lb-VOC/yr shall be fully implemented within six months of the finalized Title V permit renewal for this facility. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-72-11 **EXPIRATION DATE:** 10/31/2009

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EQUIPMENT DESCRIPTION:
1,000 BHP WAUKESHA MODEL L7042-GSIU RICH-BURN NATURAL GAS-FIRED IC ENGINE WITH TURBOCHARGER AND CATALYTIC CONVERTER POWERING A GAS COMPRESSOR (K-35 UNX# 54626)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
3. 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
4. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
6. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.59 lb/hr, 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction), SOx (as SO2): 0.34 lb/hr, PM10: 0.24 lb/hr, CO: 8.82 lb/hr and 541 ppmv @ 15% O2, or VOC: 2.33 lb/hr and 250 ppmv @ 15% O2. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
7. Percent emission reductions, if used to comply with NOx emission limits, shall be calculated as follows: For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. The engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. [District Rule 4702, 5.4] Federally Enforceable Through Title V Permit
8. The operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO. [District Rule 4702, 5.5] Federally Enforceable Through Title V Permit
9. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201; Kern County Rule 404] Federally Enforceable Through Title V Permit

11. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit

12. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

13. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

14. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

15. Source testing to measure the NOx, CO, and VOC emissions from this unit shall be conducted not less than once every 12 months. If compliance with the emission limits is demonstrated on two (2) consecutive annual source tests, the testing frequency may be reduced to not less than once every 24 months. If the unit fails to demonstrate compliance with the applicable emission limits, the testing frequency shall return to not less than once every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, and 4702, 6.3.2] Federally Enforceable Through Title V Permit

16. 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

17. 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

18. 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 Rules 1081 and 4702] Federally Enforceable Through Title V Permit

19. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. This average shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. For engines that comply with a percent reduction limit, the percent reduction of NOx emissions shall also be reported. [District Rules 2520, 9.4.2 and 4702, 6.3.3] Federally Enforceable Through Title V Permit

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

21. 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 Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

22. 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 Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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23. The permittee shall monitor and record the stack concentration of NOx, 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

24. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

25. 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

26. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

27. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2201 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

28. 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 of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

29. 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

30. 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

31. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

32. 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

33. 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

34. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

35. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

36. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

37. An Authority to Construct (ATC) to modify the VOC emissions rate so post-control VOC emissions do not exceed 20,000 lb-VOC/yr shall be fully implemented within six months of the finalized Title V permit renewal for this facility. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

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PERMIT UNIT: S-2234-73-11 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
1,000 BHP WAUKESHA MODEL L7042-GSIU RICH-BURN NATURAL GAS-FIRED IC ENGINE WITH TURBOCHARGER AND CATALYTIC CONVERTER POWERING A GAS COMPRESSOR (K-51 UNX# 13793)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
3. 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
4. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
6. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.59 lb/hr, 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction), SOx (as SO2): 0.34 lb/hr, PM10: 0.24 lb/hr, CO: 8.82 lb/hr and 541 ppmv @ 15% O2, or VOC: 2.33 lb/hr and 250 ppmv @ 15% O2. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
7. Percent emission reductions, if used to comply with NOx emission limits, shall be calculated as follows: For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. The engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. [District Rule 4702, 5.4] Federally Enforceable Through Title V Permit
8. The operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO. [District Rule 4702, 5.5] Federally Enforceable Through Title V Permit
9. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit

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

10. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201 and Kern County Rule 404] Federally Enforceable Through Title V Permit

11. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit

12. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

13. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

14. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

15. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. This average shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. For engines that comply with a percent reduction limit, the percent reduction of NOx emissions shall also be reported. [District Rules 2520, 9.4.2 and 4702, 6.3.3] Federally Enforceable Through Title V Permit

16. 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] Federally Enforceable Through Title V Permit

17. 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 Rules 1081 and 4702] Federally Enforceable Through Title V Permit

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

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

20. 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 Rules 2520, 9.4.2 and 4702] Federally Enforceable Through Title V Permit

21. 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 Rules 2520, 9.4.2 and 4702] Federally Enforceable Through Title V Permit

22. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrated compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, and 4702, 6.3.2] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. The permittee shall monitor and record the stack concentration of NOx, 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

24. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

25. 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

26. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

27. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2201 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

28. 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 of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

29. 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

30. 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

31. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

32. 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

33. 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

34. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

35. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

36. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

37. An Authority to Construct (ATC) to modify the VOC emissions rate so post-control VOC emissions do not exceed 20,000 lb-VOC/yr shall be fully implemented within six months of the finalized Title V permit renewal for this facility. [District Rule 2520, 6.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-74-11 **EXPIRATION DATE:** ~~10/31/2009~~

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EQUIPMENT DESCRIPTION:
1,000 BHP WAUKESHA MODEL L7042-GSIU RICH-BURN NATURAL GAS-FIRED IC ENGINE WITH TURBOCHARGER AND CATALYTIC CONVERTER POWERING A GAS COMPRESSOR (K-50 UNX# 13401)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
3. 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
4. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
6. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.59 lb/hr, 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction), SOx (as SO2): 0.34 lb/hr, PM10: 0.24 lb/hr, CO: 8.82 lb/hr and 541 ppmv @ 15% O2, or VOC: 2.33 lb/hr and 250 ppmv @ 15% O2. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
7. Percent emission reductions, if used to comply with NOx emission limits, shall be calculated as follows: For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. The engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. [District Rule 4702, 5.4] Federally Enforceable Through Title V Permit
8. The operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO. [District Rule 4702, 5.5] Federally Enforceable Through Title V Permit
9. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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10. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201 and Kern County Rule 404] Federally Enforceable Through Title V Permit

11. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit

12. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

13. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

14. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

15. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. This average shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. For engines that comply with a percent reduction limit, the percent reduction of NOx emissions shall also be reported. [District Rules 2520, 9.4.2 and 4702, 6.3.3] Federally Enforceable Through Title V Permit

16. 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] Federally Enforceable Through Title V Permit

17. 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 Rules 1081 and 4702] Federally Enforceable Through Title V Permit

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

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

20. 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 Rules 2520, 9.4.2 and 4702] Federally Enforceable Through Title V Permit

21. 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 Rules 2520, 9.4.2 and 4702] Federally Enforceable Through Title V Permit

22. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrated compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, and 4702, 6.3.2] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. The permittee shall monitor and record the stack concentration of NOx, 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

24. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

25. 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

26. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

27. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2201 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

28. 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 of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

29. 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

30. 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

31. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

32. 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

33. 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

34. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

35. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

36. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

37. An Authority to Construct (ATC) to modify the VOC emissions rate so post-control VOC emissions do not exceed 20,000 lb-VOC/yr shall be fully implemented within six months of the finalized Title V permit renewal for this facility. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-75-8 **EXPIRATION DATE:** 10/31/2009

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EQUIPMENT DESCRIPTION:
2,000 BHP INGERSOLL-RAND MODEL 412KVS LEAN-BURN NATURAL GAS-FIRED IC ENGINE WITH PRE-COMBUSTION CHAMBER POWERING A GAS COMPRESSOR (K-45 UNX# 13706)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
3. 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, 601 and 7.5] Federally Enforceable Through Title V Permit
4. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
5. Particulate matter emissions at the point of discharge shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] 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. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 7.72 lb/hr, 1.75 gr/hp-hr and 144 ppmv @ 15% O2 (equivalent to 90% NOx reduction); SOx (as SO2): 0.67 lb/hr; PM10: 0.49 lb/hr; CO: 22.05 lb/hr and 676 ppmv @ 15% O2; or VOC: 13.23 lb/hr and 710 ppmv @ 15% O2. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
8. Percent emission reductions, if used to comply with NOx emission limits, shall be calculated as follows: For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. The engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. [District Rule 4702, 5.4] Federally Enforceable Through Title V Permit
9. The operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO. [District Rule 4702, 5.5] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit

11. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit

12. If the IC engine is fired on PUC-regulated natural gas, the permittee shall maintain on file, copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

13. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

14. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

15. Source testing to measure the NOx, CO, and VOC emissions from this unit shall be conducted not less than once every 12 months. If compliance with the emission limits is demonstrated on two (2) consecutive annual source tests, the testing frequency may be reduced to not less than once every 24 months. If the unit fails to demonstrate compliance with the applicable emission limits, the testing frequency shall return to not less than once every 12 months. [District Rules 2201 and 4702, 6.3.2] Federally Enforceable Through Title V Permit

16. 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

17. 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

18. 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 Rules 1081 and 4702, 6.4] Federally Enforceable Through Title V Permit

19. 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. For engines that comply with a percent reduction limit, the percent reduction of NOx emissions shall also be reported. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit

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

21. 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

22. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. The permittee shall monitor and record the stack concentration of NOx, 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

24. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

25. 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

26. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

27. 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 of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

28. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

29. NOx emissions rate shall not exceed 2.00 gr/hp-hr. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

30. Source testing to measure the NOx emissions from at least one representative engine of this type (Ingersoll-Rand, model 412KVS) shall be conducted not less than once every 12 months. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

31. The permittee shall determine the NOx emissions from at least one representative engine of this type (Ingersoll-Rand, model 412KVS) at least once per month by either direct NOx measurement, or measurement of other exhaust gas concentrations (e.g. CO and O2) and engine parameters from which NOx emissions can be directly computed. NOx emissions shall be determined from every engine of this type at least once each calendar half. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-76-8 **EXPIRATION DATE:** 10/31/2009

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EQUIPMENT DESCRIPTION:
2,000 BHP INGERSOLL-RAND MODEL 412KVS LEAN-BURN NATURAL GAS-FIRED IC ENGINE WITH PRE-COMBUSTION CHAMBER POWERING A GAS COMPRESSOR (K-46 UNX# 13715)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
3. 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, 601 and 7.5] Federally Enforceable Through Title V Permit
4. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
5. Particulate matter emissions at the point of discharge shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] 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. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 7.72 lb/hr, 1.75 gr/hp-hr and 144 ppmv @ 15% O2 (equivalent to 90% NOx reduction); SOx (as SO2): 0.67 lb/hr; PM10: 0.49 lb/hr; CO: 22.05 lb/hr and 676 ppmv @ 15% O2; or VOC: 13.23 lb/hr and 710 ppmv @ 15% O2. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
8. Percent emission reductions, if used to comply with NOx emission limits, shall be calculated as follows: For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. The engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. [District Rule 4702, 5.4] Federally Enforceable Through Title V Permit
9. The operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO. [District Rule 4702, 5.5] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit

11. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit

12. If the IC engine is fired on PUC-regulated natural gas, the permittee shall maintain on file, copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

13. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

14. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

15. Source testing to measure the NOx, CO, and VOC emissions from this unit shall be conducted not less than once every 12 months. If compliance with the emission limits is demonstrated on two (2) consecutive annual source tests, the testing frequency may be reduced to not less than once every 24 months. If the unit fails to demonstrate compliance with the applicable emission limits, the testing frequency shall return to not less than once every 12 months. [District Rules 2201 and 4702, 6.3.2] Federally Enforceable Through Title V Permit

16. 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

17. 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

18. 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 Rules 1081 and 4702, 6.4] Federally Enforceable Through Title V Permit

19. 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. For engines that comply with a percent reduction limit, the percent reduction of NOx emissions shall also be reported. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit

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

21. 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

22. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. The permittee shall monitor and record the stack concentration of NOx, 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

24. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

25. 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

26. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

27. 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 of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

28. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

29. NOx emissions rate shall not exceed 2.00 gr/hp-hr. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

30. Source testing to measure the NOx emissions from at least one representative engine of this type (Ingersoll-Rand, model 412KVS) shall be conducted not less than once every 12 months. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

31. The permittee shall determine the NOx emissions from at least one representative engine of this type (Ingersoll-Rand, model 412KVS) at least once per month by either direct NOx measurement, or measurement of other exhaust gas concentrations (e.g. CO and O2) and engine parameters from which NOx emissions can be directly computed. NOx emissions shall be determined from every engine of this type at least once each calendar half. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-77-8 **EXPIRATION DATE:** 10/31/2009

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EQUIPMENT DESCRIPTION:
2,000 BHP INGERSOLL-RAND MODEL 412KVS LEAN-BURN NATURAL GAS-FIRED IC ENGINE WITH PRE-COMBUSTION CHAMBER POWERING A GAS COMPRESSOR (K-47 UNX# 13716)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
3. 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, 601 and 7.5] Federally Enforceable Through Title V Permit
4. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
5. Particulate matter emissions at the point of discharge shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] 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. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 7.72 lb/hr, 1.75 gr/hp-hr and 144 ppmv @ 15% O2 (equivalent to 90% NOx reduction); SOx (as SO2): 0.67 lb/hr; PM10: 0.49 lb/hr; CO: 22.05 lb/hr and 676 ppmv @ 15% O2; or VOC: 13.23 lb/hr and 710 ppmv @ 15% O2. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
8. Percent emission reductions, if used to comply with NOx emission limits, shall be calculated as follows: For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. The engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. [District Rule 4702, 5.4] Federally Enforceable Through Title V Permit
9. The operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO. [District Rule 4702, 5.5] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit

11. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit

12. If the IC engine is fired on PUC-regulated natural gas, the permittee shall maintain on file, copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

13. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

14. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

15. Source testing to measure the NOx, CO, and VOC emissions from this unit shall be conducted not less than once every 12 months. If compliance with the emission limits is demonstrated on two (2) consecutive annual source tests, the testing frequency may be reduced to not less than once every 24 months. If the unit fails to demonstrate compliance with the applicable emission limits, the testing frequency shall return to not less than once every 12 months. [District Rules 2201 and 4702, 6.3.2] Federally Enforceable Through Title V Permit

16. 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

17. 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

18. 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 Rules 1081 and 4702, 6.4] Federally Enforceable Through Title V Permit

19. 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. For engines that comply with a percent reduction limit, the percent reduction of NOx emissions shall also be reported. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit

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

21. 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

22. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. The permittee shall monitor and record the stack concentration of NOx, 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

24. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

25. 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

26. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

27. 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 of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

28. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

29. NOx emissions rate shall not exceed 2.00 gr/hp-hr. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

30. Source testing to measure the NOx emissions from at least one representative engine of this type (Ingersoll-Rand, model 412KVS) shall be conducted not less than once every 12 months. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

31. The permittee shall determine the NOx emissions from at least one representative engine of this type (Ingersoll-Rand, model 412KVS) at least once per month by either direct NOx measurement, or measurement of other exhaust gas concentrations (e.g. CO and O2) and engine parameters from which NOx emissions can be directly computed. NOx emissions shall be determined from every engine of this type at least once each calendar half. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-78-10 **EXPIRATION DATE:** 10/31/2009

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EQUIPMENT DESCRIPTION:
1,000 BHP WAUKESHA MODEL L7042 RICH-BURN NATURAL GAS-FIRED IC ENGINE WITH TURBOCHARGER AND CATALYTIC CONVERTER POWERING A GAS COMPRESSOR (K-58 UNX# 18033)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
3. 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
4. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
6. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.59 lb/hr, 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction), SOx (as SO2): 0.34 lb/hr, PM10: 0.24 lb/hr, CO: 8.82 lb/hr and 541 ppmv @ 15% O2, or VOC: 250 ppmv @ 15% O2. [District Rules 2201, 4201, and 4702; Kern County Rule 407] Federally Enforceable Through Title V Permit
7. Percent emission reductions, if used to comply with NOx emission limits, shall be calculated as follows: For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. The engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. [District Rule 4702, 5.4] Federally Enforceable Through Title V Permit
8. The operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO. [District Rule 4702, 5.5] Federally Enforceable Through Title V Permit
9. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201 and Kern County Rule 404] Federally Enforceable Through Title V Permit

11. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit

12. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

13. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

14. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

15. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. This average shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. For engines that comply with a percent reduction limit, the percent reduction of NOx emissions shall also be reported. [District Rules 2520, 9.4.2 and 4702, 6.3.3] Federally Enforceable Through Title V Permit

16. 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] Federally Enforceable Through Title V Permit

17. 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 Rules 1081 and 4702] Federally Enforceable Through Title V Permit

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

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

20. 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 Rules 2520, 9.4.2 and 4702] Federally Enforceable Through Title V Permit

21. 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 Rules 2520, 9.4.2 and 4702] Federally Enforceable Through Title V Permit

22. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrated compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, and 4702, 6.3.2] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. The permittee shall monitor and record the stack concentration of NOx, 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

24. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

25. 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

26. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

27. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2201 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

28. 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 of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

29. 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

30. 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

31. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

32. 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

33. 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

34. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

35. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

36. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

37. An Authority to Construct (ATC) to modify the VOC emissions rate so post-control VOC emissions do not exceed 20,000 lb-VOC/yr shall be fully implemented within six months of the finalized Title V permit renewal for this facility. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-79-10 **EXPIRATION DATE:** ~~10/31~~/2009

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EQUIPMENT DESCRIPTION:
1,000 BHP WAUKESHA MODEL L7042 RICH-BURN NATURAL GAS-FIRED IC ENGINE WITH TURBOCHARGER AND CATALYTIC CONVERTER POWERING A GAS COMPRESSOR (K-57 UNX# 18017)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
3. 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
4. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
6. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.59 lb/hr, 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction), SOx (as SO2): 0.34 lb/hr, PM10: 0.24 lb/hr, CO: 8.82 lb/hr and 541 ppmv @ 15% O2, or VOC: 250 ppmv @ 15% O2. [District Rules 2201, 4201, and 4702; Kern County Rule 407] Federally Enforceable Through Title V Permit
7. Percent emission reductions, if used to comply with NOx emission limits, shall be calculated as follows: For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. The engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. [District Rule 4702, 5.4] Federally Enforceable Through Title V Permit
8. The operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO. [District Rule 4702, 5.5] Federally Enforceable Through Title V Permit
9. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201 and Kern County Rule 404] Federally Enforceable Through Title V Permit

11. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit

12. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

13. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

14. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

15. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. This average shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. For engines that comply with a percent reduction limit, the percent reduction of NOx emissions shall also be reported. [District Rules 2520, 9.4.2 and 4702, 6.3.3] Federally Enforceable Through Title V Permit

16. 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] Federally Enforceable Through Title V Permit

17. 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 Rules 1081 and 4702] Federally Enforceable Through Title V Permit

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

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

20. 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 Rules 2520, 9.4.2 and 4702] Federally Enforceable Through Title V Permit

21. 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 Rules 2520, 9.4.2 and 4702] Federally Enforceable Through Title V Permit

22. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrated compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, and 4702, 6.3.2] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. The permittee shall monitor and record the stack concentration of NOx, 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

24. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

25. 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

26. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

27. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2201 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

28. 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 of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

29. 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

30. 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

31. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

32. 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

33. 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

34. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

35. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

36. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

37. An Authority to Construct (ATC) to modify the VOC emissions rate so post-control VOC emissions do not exceed 20,000 lb-VOC/yr shall be fully implemented within six months of the finalized Title V permit renewal for this facility. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-80-7 **EXPIRATION DATE:** ~~10/31/2009~~

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EQUIPMENT DESCRIPTION:
1,000 BHP WAUKESHA MODEL L7042GL LEAN-BURN NATURAL GAS-FIRED IC ENGINE WITH PRE-STRATIFIED COMBUSTION SYSTEM POWERING A GAS COMPRESSOR (K-59 UNX# 53881)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
3. 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
4. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
6. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.8 gr/hp-hr, 3.97 lb/hr and 148 ppmv @ 15% O2 (equivalent to 90% NOx reduction); SOx (as SO2): 0.01 lb/hr; PM10: 0.09 lb/hr; CO: 9.92 lb/hr and 608 ppmv @ 15% O2; or VOC: 7.00 lb/hr and 750 ppmv @ 15% O2. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
7. Percent emission reductions, if used to comply with NOx emission limits, shall be calculated as follows: For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. The engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. [District Rule 4702, 5.4] Federally Enforceable Through Title V Permit
8. The operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO. [District Rule 4702, 5.5] Federally Enforceable Through Title V Permit
9. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Particulate matter emissions at the point of discharge shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit

11. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit

12. If the IC engine is fired on PUC-regulated natural gas, the permittee shall maintain on file, copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

13. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

14. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

15. Source testing to measure the NOx, CO, and VOC emissions from this unit shall be conducted not less than once every 12 months. If compliance with the emission limits is demonstrated on two (2) consecutive annual source tests, the testing frequency may be reduced to not less than once every 24 months. If the unit fails to demonstrate compliance with the applicable emission limits, the testing frequency shall return to not less than once every 12 months. [District Rules 2201 and 4702, 6.3.2] Federally Enforceable Through Title V Permit

16. 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

17. 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

18. 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 Rules 1081 and 4702, 6.4] Federally Enforceable Through Title V Permit

19. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. For engines that comply with a percent reduction limit, the percent reduction of NOx emissions shall also be reported. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit

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

21. 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

22. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. The permittee shall monitor and record the stack concentration of NOx, 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

24. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

25. 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

26. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

27. 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 of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

28. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-81-7 **EXPIRATION DATE:** 10/31/2009

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EQUIPMENT DESCRIPTION:
1,000 BHP WAUKESHA MODEL L7042GL LEAN-BURN NATURAL GAS-FIRED IC ENGINE WITH PRE-STRATIFIED COMBUSTION SYSTEM POWERING A GAS COMPRESSOR (K-60)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
3. 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
4. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
6. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.8 gr/hp-hr, 3.97 lb/hr and 148 ppmv @ 15% O2 (equivalent to 90% NOx reduction), SOx (as SO2): 0.01 lb/hr, PM10: 0.09 lb/hr, CO: 9.92 lb/hr and 608 ppmv @ 15% O2, or VOC: 7.00 lb/hr and 750 ppmv @ 15% O2. [District Rules 2201, 4201, and 4702; Kern County Rule 407] Federally Enforceable Through Title V Permit
7. Percent emission reductions, if used to comply with NOx emission limits, shall be calculated as follows: For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. The engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. [District Rule 4702, 5.4] Federally Enforceable Through Title V Permit
8. The operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO. [District Rule 4702, 5.5] Federally Enforceable Through Title V Permit
9. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Particulate matter emissions at the point of discharge shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201 and Kern County Rule 404] Federally Enforceable Through Title V Permit

11. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit

12. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

13. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

14. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

15. Source testing to measure the NOx, CO, and VOC emissions from this unit shall be conducted not less than once every 12 months. If compliance with the emission limits is demonstrated on two (2) consecutive annual source tests, the testing frequency may be reduced to not less than once every 24 months. If the unit fails to demonstrate compliance with the applicable emission limits, the testing frequency shall return to not less than once every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, and 4702] Federally Enforceable Through Title V Permit

16. 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

17. 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

18. 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 Rules 1081 and 4702] Federally Enforceable Through Title V Permit

19. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. This average shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. For engines that comply with a percent reduction limit, the percent reduction of NOx emissions shall also be reported. [District Rules 2520, 9.4.2 and 4702, 6.3.3] Federally Enforceable Through Title V Permit

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

21. 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 Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

22. 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 Rules 2520, 9.4.2 and 4702] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. Permittee shall monitor the nitrogen oxides (NOx) concentration in the engine exhaust with a facility conducted noncertified self test at least on a monthly basis. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

24. The permittee shall monitor and record the stack concentration of NOx, 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

25. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

26. 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

27. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

28. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2201 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

29. 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 of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

30. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

31. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-82-11 **EXPIRATION DATE:** 10/31/2009

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EQUIPMENT DESCRIPTION:
1,500 BHP WAUKESHA MODEL L7042 LEAN-BURN NATURAL GAS-FIRED IC ENGINE WITH PRE-STRATIFIED COMBUSTION SYSTEM POWERING A GAS COMPRESSOR (K-70 UNX# 54508)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
3. 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
4. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
6. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.8 gr/hp-hr, 5.95 lb/hr and 148 ppmv @ 15% O2 (equivalent to 90% NOx reduction), SOx (as SO2): 0.02 lb/hr, PM10: 0.05 lb/hr, CO: 8.00 lb/hr and 327 ppmv @ 15% O2, or VOC: 6.00 lb/hr and 429 ppmv @ 15% O2. [District Rules 2201, 4201, and 4702; Kern County Rule 407] Federally Enforceable Through Title V Permit
7. Percent emission reductions, if used to comply with NOx emission limits, shall be calculated as follows: For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. The engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. [District Rule 4702, 5.4] Federally Enforceable Through Title V Permit
8. The operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO. [District Rule 4702, 5.5] Federally Enforceable Through Title V Permit
9. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Particulate matter emissions at the point of discharge shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201; Kern County Rule 404] Federally Enforceable Through Title V Permit

11. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit

12. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

13. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

14. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

15. Source testing to measure the NOx, CO, and VOC emissions from this unit shall be conducted not less than once every 12 months. If compliance with the emission limits is demonstrated on two (2) consecutive annual source tests, the testing frequency may be reduced to not less than once every 24 months. If the unit fails to demonstrate compliance with the applicable emission limits, the testing frequency shall return to not less than once every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, and 4702] Federally Enforceable Through Title V Permit

16. 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

17. 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

18. 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 Rules 1081 and 4702] Federally Enforceable Through Title V Permit

19. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. This average shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. For engines that comply with a percent reduction limit, the percent reduction of NOx emissions shall also be reported. [District Rules 2520, 9.4.2 and 4702, 6.3.3] Federally Enforceable Through Title V Permit

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

21. 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 Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

22. 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 Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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23. Permittee shall monitor the nitrogen oxides (NOx) concentration in the engine exhaust with a facility conducted noncertified self test at least on a monthly basis. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

24. The permittee shall monitor and record the stack concentration of NOx, 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

25. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

26. 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

27. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

28. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2201 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

29. 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 of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

30. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

31. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-83-10 **EXPIRATION DATE:** 10/31/2009

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EQUIPMENT DESCRIPTION:
1,500 BHP WAUKESHA MODEL L7042 LEAN-BURN NATURAL GAS-FIRED IC ENGINE WITH PRE-STRATIFIED COMBUSTION SYSTEM POWERING A GAS COMPRESSOR (K-71 UNX# 54497)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
3. 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
4. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
6. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.8 gr/hp-hr, 5.95 lb/hr and 148 ppmv @ 15% O2 (equivalent to 90% NOx reduction), SOx (as SO2): 0.02 lb/hr, PM10: 0.05 lb/hr, CO: 8.00 lb/hr and 327 ppmv @ 15% O2, or VOC: 6.00 lb/hr and 429 ppmv @ 15% O2. [District Rules 2201, 4201, and 4702; Kern County Rule 407] Federally Enforceable Through Title V Permit
7. Percent emission reductions, if used to comply with NOx emission limits, shall be calculated as follows: For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. The engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. [District Rule 4702, 5.4] Federally Enforceable Through Title V Permit
8. The operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO. [District Rule 4702, 5.5] Federally Enforceable Through Title V Permit
9. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Particulate matter emissions at the point of discharge shall not exceed 0.1 grains/dscf in concentration [District Rule 4201; Kern County Rule 404] Federally Enforceable Through Title V Permit

11. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit

12. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

13. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

14. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

15. Source testing to measure the NOx, CO, and VOC emissions from this unit shall be conducted not less than once every 12 months. If compliance with the emission limits is demonstrated on two (2) consecutive annual source tests, the testing frequency may be reduced to not less than once every 24 months. If the unit fails to demonstrate compliance with the applicable emission limits, the testing frequency shall return to not less than once every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, and 4702] Federally Enforceable Through Title V Permit

16. 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

17. 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

18. 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 Rules 1081 and 4702] Federally Enforceable Through Title V Permit

19. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. This average shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. For engines that comply with a percent reduction limit, the percent reduction of NOx emissions shall also be reported. [District Rules 2520, 9.4.2 and 4702, 6.3.3] Federally Enforceable Through Title V Permit

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

21. 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 Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

22. 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 Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. Permittee shall monitor the nitrogen oxides (NOx) concentration in the engine exhaust with a facility conducted noncertified self test at least on a monthly basis. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

24. The permittee shall monitor and record the stack concentration of NOx, 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

25. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

26. 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

27. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

28. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2201 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

29. 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 of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

30. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

31. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-84-7 **EXPIRATION DATE:** 10/31/2009

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EQUIPMENT DESCRIPTION:
490 BHP CATERPILLAR MODEL G398 RICH-BURN NATURAL GAS-FIRED IC ENGINE WITH CATALYTIC CONVERTER POWERING A GAS COMPRESSOR (K-67 UNX# 54302)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
3. 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
4. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
6. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction); SOx (as SO2): 0.6 lb/day; PM10: 10.5 lb/day; CO: 11.6 g/hp-hr and 1,592 ppmv @ 15% O2; or VOC: 58 ppmv @ 15% O2. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
7. Percent emission reductions, if used to comply with NOx emission limits, shall be calculated as follows: For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. The engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. [District Rule 4402, 5.4] Federally Enforceable Through Title V Permit
8. The operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO. [District Rule 4702, 5.5] Federally Enforceable Through Title V Permit
9. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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10. Particulate matter emissions at the point of discharge shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit

11. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit

12. If the IC engine is fired on PUC-regulated natural gas, the permittee shall maintain on file, copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

13. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

14. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

15. Source testing to measure the NOx, CO, and VOC emissions from this unit shall be conducted not less than once every 12 months. If compliance with the emission limits is demonstrated on two (2) consecutive annual source tests, the testing frequency may be reduced to not less than once every 24 months. If the unit fails to demonstrate compliance with the applicable emission limits, the testing frequency shall return to not less than once every 12 months. [District NSR Rule and District Rule 4702, 6.3.2] Federally Enforceable Through Title V Permit

16. 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

17. 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

18. 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 Rules 1081 and 4702, 6.4] Federally Enforceable Through Title V Permit

19. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. For engines that comply with a percent reduction limit, the percent reduction of NOx emissions shall also be reported. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit

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

21. 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

22. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. The permittee shall monitor and record the stack concentration of NOx, 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

24. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

25. 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

26. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

27. 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 of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

28. 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

29. 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

30. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

31. 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

32. 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

33. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

34. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-85-7 **EXPIRATION DATE:** ~~10/31/2009~~

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EQUIPMENT DESCRIPTION:
490 BHP CATERPILLAR MODEL G398 RICH-BURN NATURAL GAS-FIRED IC ENGINE WITH CATALYTIC CONVERTER POWERING A GAS COMPRESSOR (K-66 UNX# 54299)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
3. 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
4. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
5. 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
6. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction); SOx (as SO2): 0.6 lb/day; PM10: 10.5 lb/day; CO: 11.6 g/hp-hr and 1,592 ppmv @ 15% O2; or VOC: 58 ppmv @ 15% O2. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
7. Percent emission reductions, if used to comply with NOx emission limits, shall be calculated as follows: For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. The engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. [District Rule 4402, 5.4] Federally Enforceable Through Title V Permit
8. The operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO. [District Rule 4702, 5.5] Federally Enforceable Through Title V Permit
9. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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10. Particulate matter emissions at the point of discharge shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit

11. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit

12. If the IC engine is fired on PUC-regulated natural gas, the permittee shall maintain on file, copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

13. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

14. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

15. Source testing to measure the NOx, CO, and VOC emissions from this unit shall be conducted not less than once every 12 months. If compliance with the emission limits is demonstrated on two (2) consecutive annual source tests, the testing frequency may be reduced to not less than once every 24 months. If the unit fails to demonstrate compliance with the applicable emission limits, the testing frequency shall return to not less than once every 12 months. [District Rules 2201 and 4702, 6.3.2] Federally Enforceable Through Title V Permit

16. 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

17. 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

18. 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 Rules 1081 and 4702, 6.4] Federally Enforceable Through Title V Permit

19. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. For engines that comply with a percent reduction limit, the percent reduction of NOx emissions shall also be reported. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit

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

21. 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

22. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. The permittee shall monitor and record the stack concentration of NOx, 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

24. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

25. 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

26. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

27. 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 of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

28. 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

29. 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

30. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

31. 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

32. 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

33. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

34. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-86-7 **EXPIRATION DATE:** 10/31/2009

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EQUIPMENT DESCRIPTION:
490 BHP CATERPILLAR MODEL G398 RICH-BURN NATURAL GAS-FIRED IC ENGINE WITH CATALYTIC CONVERTER POWERING A GAS COMPRESSOR (K-69 UNX# 54318)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
3. 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
4. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
6. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction); SOx (as SO2): 0.6 lb/day; PM10: 10.5 lb/day; CO: 11.6 g/hp-hr and 1,592 ppmv @ 15% O2; or VOC: 58 ppmv @ 15% O2. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
7. Percent emission reductions, if used to comply with NOx emission limits, shall be calculated as follows: For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. The engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. [District Rule 4702, 5.4] Federally Enforceable Through Title V Permit
8. The operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO. [District Rule 4702, 5.5] Federally Enforceable Through Title V Permit
9. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Particulate matter emissions at the point of discharge shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit

11. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit

12. If the IC engine is fired on PUC-regulated natural gas, the permittee shall maintain on file, copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

13. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

14. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

15. Source testing to measure the NOx, CO, and VOC emissions from this unit shall be conducted not less than once every 12 months. If compliance with the emission limits is demonstrated on two (2) consecutive annual source tests, the testing frequency may be reduced to not less than once every 24 months. If the unit fails to demonstrate compliance with the applicable emission limits, the testing frequency shall return to not less than once every 12 months. [District Rules 2201 and 4702, 6.3.2] Federally Enforceable Through Title V Permit

16. 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

17. 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

18. 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 Rules 1081 and 4702, 6.4] Federally Enforceable Through Title V Permit

19. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. For engines that comply with a percent reduction limit, the percent reduction of NOx emissions shall also be reported. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit

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

21. 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

22. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. The permittee shall monitor and record the stack concentration of NOx, 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

24. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following I 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

25. 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

26. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

27. 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 of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

28. 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

29. 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

30. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

31. 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

32. 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

33. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

34. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-87-6 **EXPIRATION DATE:** 10/31/2009

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

DRAFT

EQUIPMENT DESCRIPTION:
88 BHP WAUKESHA NATURAL GAS-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR (UNX #15556)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702] Federally Enforceable Through Title V Permit
4. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
5. {2414} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
6. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
7. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
8. {842} If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rules 2201 and 4702, 3.15 and 4.2, 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
12. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702] Federally Enforceable Through Title V Permit

14. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit

15. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.), and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rules 1070 and 4702, 6.2.3] Federally Enforceable Through Title V Permit

16. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

17. On and after October 19, 2013, the permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

18. On and after October 19, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

19. On and after October 19, 2013, the engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

20. On and after October 19, 2013, the engine's spark plugs shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

21. On and after October 19, 2013, the engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

22. On and after October 19, 2013, the permittee shall maintain monthly records of all performance tests, opacity and visible emissions observations and required maintenance performed on the air pollution control and monitoring equipment. [District Rule 1070 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

23. On and after October 19, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-97-3 **EXPIRATION DATE:** 10/31/2009

DRAFT

EQUIPMENT DESCRIPTION:
1,250 HP GENERAL ELECTRIC ELECTRICALLY DRIVEN NATURAL GAS COMPRESSOR (K-81) AUTHORIZED TO OPERATE WITHIN THE GAS PLANT STATIONARY SOURCE

PERMIT UNIT REQUIREMENTS

1. If compressor is operated in VOC service or wet gas service at a natural gas processing plant as defined in 40 CFR 60.631, then 40 CFR Part 60 Subpart KKK requirements shall be fully satisfied including, but not limited to, section 60.632 performance standards, 60.635 recordkeeping requirements, section 60.636 reporting requirements and Subpart A section 60.7 notification and recordkeeping. [District Rule 4001] Federally Enforceable Through Title V Permit
2. This compressor is permitted to operate at various unspecified locations within the Elk Hills Gas Plant Stationary Source. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The operator shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
4. 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
5. Maximum VOC fugitive emissions shall not exceed 1.9 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
6. The operator shall maintain with the permit accurate fugitive component counts and resulting emissions calculated using API Publication 4322 Table E-3 and U.S. EPA publication 450/3-83-007, Table 4-1. [District NSR Rule] Federally Enforceable Through Title V Permit
7. VOC content of gas processed shall not exceed 28% by weight. Permittee shall maintain a written record of VOC content (sampled not less than annually) and shall make such records available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
8. The operator shall maintain a log noting compressor location, date the compressor was relocated, whether the location is at the gas plant and whether the compressor is located upstream of the gas plant (in wet gas service). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-98-4 **EXPIRATION DATE:** 10/31/2009

DRAFT

EQUIPMENT DESCRIPTION:
2,250 HP GENERAL ELECTRIC ELECTRICALLY DRIVEN NATURAL GAS COMPRESSOR (K-82) AUTHORIZED TO OPERATE WITHIN THE GAS PLANT STATIONARY SOURCE

PERMIT UNIT REQUIREMENTS

1. If compressor is operated in VOC service or wet gas service and is located within the boundaries of the plant site at a natural gas processing plant as defined in 40 CFR 60.631, then 40 CFR Part 60 Subpart KKK requirements shall be fully satisfied including, but not limited to, section 60.632 performance standards, 60.635 recordkeeping requirements, section 60.636 reporting requirements and Subpart A section 60.7 notification and recordkeeping. [District Rule 4001] Federally Enforceable Through Title V Permit
2. This compressor is permitted to operate at various unspecified locations within the Elk Hills Gas Plant Stationary Source. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The operator shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
4. 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
5. A leak free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit shall be reported as a deviation. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Fugitive VOC emissions rate shall be, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components from this tank. [District Rule 2201] Federally Enforceable Through Title V Permit
7. VOC fugitive emissions from the components in gas, light liquid, and light crude oil service shall not exceed 0.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Permittee shall maintain accurate records of fugitive emissions and such records shall be made readily available for District inspection upon request for a period of five years. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain a log noting compressor location, date the compressor was relocated, whether the location is at the gas plant and whether the compressor is located upstream of the gas plant (in wet gas service). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-99-4 **EXPIRATION DATE:** 10/31/2009

DRAFT

EQUIPMENT DESCRIPTION:
2,250 HP GENERAL ELECTRIC ELECTRICALLY DRIVEN NATURAL GAS COMPRESSOR (K-83) AUTHORIZED TO OPERATE WITHIN THE GAS PLANT STATIONARY SOURCE

PERMIT UNIT REQUIREMENTS

1. If compressor is operated in VOC service or wet gas service and is located within the boundaries of the plant site at a natural gas processing plant as defined in 40 CFR 60.631, then 40 CFR Part 60 Subpart KKK requirements shall be fully satisfied including, but not limited to, section 60.632 performance standards, 60.635 recordkeeping requirements, section 60.636 reporting requirements and Subpart A section 60.7 notification and recordkeeping. [District Rule 4001] Federally Enforceable Through Title V Permit
2. This compressor is permitted to operate at various unspecified locations within the Elk Hills Gas Plant Stationary Source. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The operator shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
4. 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
5. A leak free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit shall be reported as a deviation. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Fugitive VOC emissions rate shall be, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components from this tank. [District Rule 2201] Federally Enforceable Through Title V Permit
7. VOC fugitive emissions from the components in gas, light liquid, and light crude oil service shall not exceed 0.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Permittee shall maintain accurate records of fugitive emissions and such records shall be made readily available for District inspection upon request for a period of five years. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain a log noting compressor location, date the compressor was relocated, whether the location is at the gas plant and whether the compressor is located upstream of the gas plant (in wet gas service). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-100-3 **EXPIRATION DATE:** ~~10/31/2009~~

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EQUIPMENT DESCRIPTION:
300 BHP SIEMENS ELECTRICALLY DRIVEN NATURAL GAS COMPRESSOR (K-84) AUTHORIZED TO OPERATE WITHIN THE GAS PLANT STATIONARY SOURCE S-2234

PERMIT UNIT REQUIREMENTS

1. If compressor is operated in VOC service or wet gas service at a natural gas processing plant as defined in 40 CFR 60.631, then 40 CFR Part 60 Subpart KKK requirements shall be fully satisfied including, but not limited to, section 60.632 performance standards, 60.635 recordkeeping requirements, section 60.636 reporting requirements and Subpart A section 60.7 notification and recordkeeping. [District Rule 4001] Federally Enforceable Through Title V Permit
2. This compressor is permitted to operate at various unspecified locations within the Elk Hills Gas Plant Stationary Source. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The operator shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
4. 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
5. Maximum VOC fugitive emissions shall not exceed 1.0 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
6. The operator shall maintain with the permit accurate fugitive component counts and resulting emissions calculated using API Publication 4322 Table E-3 and U.S. EPA publication 450/3-83-007, Table 4-1. [District NSR Rule] Federally Enforceable Through Title V Permit
7. VOC content of gas processed shall not exceed 28% by weight. Permittee shall maintain a written record of VOC content (sampled not less than annually) and shall make such records available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
8. The operator shall maintain a log noting compressor location, date the compressor was relocated, whether the location is at the gas plant and whether the compressor is located upstream of the gas plant (in wet gas service). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-101-3 **EXPIRATION DATE:** 10/31/2009

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EQUIPMENT DESCRIPTION:
300 BHP SIEMENS ELECTRICALLY DRIVEN NATURAL GAS COMPRESSOR (K-85) AUTHORIZED TO OPERATE WITHIN THE GAS PLANT STATIONARY SOURCE S-2234

PERMIT UNIT REQUIREMENTS

1. If compressor is operated in VOC service or wet gas service at a natural gas processing plant as defined in 40 CFR 60.631, then 40 CFR Part 60 Subpart KKK requirements shall be fully satisfied including, but not limited to, section 60.632 performance standards, 60.635 recordkeeping requirements, section 60.636 reporting requirements and Subpart A section 60.7 notification and recordkeeping. [District Rule 4001] Federally Enforceable Through Title V Permit
2. This compressor is permitted to operate at various unspecified locations within the Elk Hills Gas Plant Stationary Source. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The operator shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
4. 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
5. Maximum VOC fugitive emissions shall not exceed 1.0 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
6. The operator shall maintain with the permit accurate fugitive component counts and resulting emissions calculated using API Publication 4322 Table E-3 and U.S. EPA publication 450/3-83-007, Table 4-1. [District NSR Rule] Federally Enforceable Through Title V Permit
7. VOC content of gas processed shall not exceed 28% by weight. Permittee shall maintain a written record of VOC content (sampled not less than annually) and shall make such records available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
8. The operator shall maintain a log noting compressor location, date the compressor was relocated, whether the location is at the gas plant and whether the compressor is located upstream of the gas plant (in wet gas service). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-104-3 **EXPIRATION DATE:** ~~10/31/2009~~

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

EQUIPMENT DESCRIPTION:
1,445 BHP CATERPILLAR MODEL 3512 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING A 1000KW ELECTRICAL GENERATOR

PERMIT UNIT REQUIREMENTS

1. {2414} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
2. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. Compliance with this requirement is assured by only using diesel fuel with sulfur content not exceeding 0.05% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
3. The diesel engine shall be operated with an initial injection timing setting of 16 degrees BTDC (Before Top Dead Center) or less. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Engine shall be equipped with a turbocharger. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Engine shall be equipped with an aftercooler or intercooler. [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. The engine shall not have a rain cap, that impedes vertical exhaust flow, installed on the exhaust pipe. [District Rule 4102]
8. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rule 2520, 9.3.2 and 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
9. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rules 2201 and 4702, 17 CCR 93115, and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
10. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702] Federally Enforceable Through Title V Permit
11. Emissions shall not exceed any of the following at full rated load: NOx, 9.39 g/bhp-hr; CO, 0.93 g/bhp-hr; VOC, 0.28 g/bhp-hr; PM10, 0.142 g/bhp-hr; or SOx, 0.082 g/bhp-hr. [District Rule 2201 and 17 CCR 93115] Federally Enforceable Through Title V Permit
12. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rules 2201 and 4702, 4.2, 17 CCR 93115 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

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

13. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit

14. This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702] Federally Enforceable Through Title V Permit

15. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit

16. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.), and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702, 6.2.3 and 17 CCR 93115] Federally Enforceable Through Title V Permit

17. The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [District Rules 2520, 9.4.2 and 4702, and 17 CCR 93115] Federally Enforceable Through Title V Permit

18. On and after May 3, 2013, the permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

19. On and after May 3, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

20. On and after May 3, 2013, the engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

21. On and after May 3, 2013, the engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

22. On and after May 3, 2013, the engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

23. On and after May 3, 2013, the permittee shall maintain monthly records of all performance tests, opacity and visible emissions observations and required maintenance performed on the air pollution control and monitoring equipment. [District Rule 1070 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

24. On and after May 3, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-107-5 **EXPIRATION DATE:** 10/31/2009

SECTION: NW36 **TOWNSHIP:** 30S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
2,250 BHP ELECTRICALLY DRIVEN NATURAL GAS COMPRESSOR (K-89), INCLUDING 2 SKID MOUNTED GAS/LIQUID SEPARATORS, 1 OFF SKID GAS COOLER AND FACILITY INLET GAS/LIQUID SEPARATOR

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PERMIT UNIT REQUIREMENTS

1. If compressor is operated in VOC service or wet gas service and is located within the boundaries of the plant site at a natural gas processing plant as defined in 40 CFR 60.631, then 40 CFR Part 60 Subpart KKK requirements shall be fully satisfied including, but not limited to, section 60.632 performance standards, 60.635 recordkeeping requirements, section 60.636 reporting requirements and Subpart A section 60.7 notification and recordkeeping. [District Rule 4001] Federally Enforceable Through Title V Permit
2. This compressor is permitted to operate at various unspecified locations within the Elk Hills Gas Plant Stationary Source. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The operator shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
4. 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
5. A leak free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit shall be reported as a deviation. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Fugitive VOC emissions rate shall be, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components from this tank. [District Rule 2201] Federally Enforceable Through Title V Permit
7. VOC fugitive emissions from the components in gas, light liquid, and light crude oil service shall not exceed 0.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Permittee shall maintain accurate records of fugitive emissions and such records shall be made readily available for District inspection upon request for a period of five years. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain a log noting compressor location, date the compressor was relocated, whether the location is at the gas plant and whether the compressor is located upstream of the gas plant (in wet gas service). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-108-5 **EXPIRATION DATE:** 10/31/2009

SECTION: NW36 **TOWNSHIP:** 30S **RANGE:** 23E

DRAFT

EQUIPMENT DESCRIPTION:
2,250 BHP ELECTRICALLY DRIVEN NATURAL GAS COMPRESSOR (K-90), INCLUDING 2 SKID MOUNTED GAS/LIQUID SEPARATORS AND 1 OFF SKID GAS COOLER

PERMIT UNIT REQUIREMENTS

1. If compressor is operated in VOC service or wet gas service and is located within the boundaries of the plant site at a natural gas processing plant as defined in 40 CFR 60.631, then 40 CFR Part 60 Subpart KKK requirements shall be fully satisfied including, but not limited to, section 60.632 performance standards, 60.635 recordkeeping requirements, section 60.636 reporting requirements and Subpart A section 60.7 notification and recordkeeping. [District Rule 4001] Federally Enforceable Through Title V Permit
2. This compressor is permitted to operate at various unspecified locations within the Elk Hills Gas Plant Stationary Source. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The operator shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
4. 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
5. A leak free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit shall be reported as a deviation. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Fugitive VOC emissions rate shall be, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components from this tank. [District Rule 2201] Federally Enforceable Through Title V Permit
7. VOC fugitive emissions from the components in gas, light liquid, and light crude oil service shall not exceed 0.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Permittee shall maintain accurate records of fugitive emissions and such records shall be made readily available for District inspection upon request for a period of five years. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain a log noting compressor location, date the compressor was relocated, whether the location is at the gas plant and whether the compressor is located upstream of the gas plant (in wet gas service). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-109-5 **EXPIRATION DATE:** 10/31/2009

SECTION: NW36 **TOWNSHIP:** 30S **RANGE:** 23E

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EQUIPMENT DESCRIPTION:
2,250 BHP ELECTRICALLY DRIVEN NATURAL GAS COMPRESSOR (K-91), INCLUDING 2 SKID MOUNTED GAS/LIQUID SEPARATORS AND 1 OFF SKID GAS COOLER

PERMIT UNIT REQUIREMENTS

1. If compressor is operated in VOC service or wet gas service and is located within the boundaries of the plant site at a natural gas processing plant as defined in 40 CFR 60.631, then 40 CFR Part 60 Subpart KKK requirements shall be fully satisfied including, but not limited to, section 60.632 performance standards, 60.635 recordkeeping requirements, section 60.636 reporting requirements and Subpart A section 60.7 notification and recordkeeping. [District Rule 4001] Federally Enforceable Through Title V Permit
2. This compressor is permitted to operate at various unspecified locations within the Elk Hills Gas Plant Stationary Source. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The operator shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
4. 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
5. A leak free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit shall be reported as a deviation. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Fugitive VOC emissions rate shall be, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components from this tank. [District Rule 2201] Federally Enforceable Through Title V Permit
7. VOC fugitive emissions from the components in gas, light liquid, and light crude oil service shall not exceed 0.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Permittee shall maintain accurate records of fugitive emissions and such records shall be made readily available for District inspection upon request for a period of five years. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain a log noting compressor location, date the compressor was relocated, whether the location is at the gas plant and whether the compressor is located upstream of the gas plant (in wet gas service). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-110-5 **EXPIRATION DATE:** ~~10/31~~/2009

SECTION: NW36 **TOWNSHIP:** 30S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
2,250 BHP ELECTRICALLY DRIVEN NATURAL GAS COMPRESSOR (K-92), INCLUDING 2 SKID MOUNTED GAS/LIQUID SEPARATORS AND 1 OFF SKID GAS COOLER

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PERMIT UNIT REQUIREMENTS

1. If compressor is operated in VOC service or wet gas service and is located within the boundaries of the plant site at a natural gas processing plant as defined in 40 CFR 60.631, then 40 CFR Part 60 Subpart KKK requirements shall be fully satisfied including, but not limited to, section 60.632 performance standards, 60.635 recordkeeping requirements, section 60.636 reporting requirements and Subpart A section 60.7 notification and recordkeeping. [District Rule 4001] Federally Enforceable Through Title V Permit
2. This compressor is permitted to operate at various unspecified locations within the Elk Hills Gas Plant Stationary Source. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The operator shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
4. 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
5. A leak free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit shall be reported as a deviation. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Fugitive VOC emissions rate shall be, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components from this tank. [District Rule 2201] Federally Enforceable Through Title V Permit
7. VOC fugitive emissions from the components in gas, light liquid, and light crude oil service shall not exceed 0.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Permittee shall maintain accurate records of fugitive emissions and such records shall be made readily available for District inspection upon request for a period of five years. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain a log noting compressor location, date the compressor was relocated, whether the location is at the gas plant and whether the compressor is located upstream of the gas plant (in wet gas service). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-111-5 **EXPIRATION DATE:** 10/31/2009

SECTION: NW36 **TOWNSHIP:** 30S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
2,250 BHP ELECTRICALLY DRIVEN NATURAL GAS COMPRESSOR (K-93), INCLUDING 2 SKID MOUNTED GAS/LIQUID SEPARATORS AND 1 OFF SKID GAS COOLER

PERMIT UNIT REQUIREMENTS

1. If compressor is operated in VOC service or wet gas service and is located within the boundaries of the plant site at a natural gas processing plant as defined in 40 CFR 60.631, then 40 CFR Part 60 Subpart KKK requirements shall be fully satisfied including, but not limited to, section 60.632 performance standards, 60.635 recordkeeping requirements, section 60.636 reporting requirements and Subpart A section 60.7 notification and recordkeeping. [District Rule 4001] Federally Enforceable Through Title V Permit
2. This compressor is permitted to operate at various unspecified locations within the Elk Hills Gas Plant Stationary Source. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The operator shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
4. 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
5. A leak free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit shall be reported as a deviation. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Fugitive VOC emissions rate shall be, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components from this tank. [District Rule 2201] Federally Enforceable Through Title V Permit
7. VOC fugitive emissions from the components in gas, light liquid, and light crude oil service shall not exceed 0.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Permittee shall maintain accurate records of fugitive emissions and such records shall be made readily available for District inspection upon request for a period of five years. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain a log noting compressor location, date the compressor was relocated, whether the location is at the gas plant and whether the compressor is located upstream of the gas plant (in wet gas service). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-112-5 **EXPIRATION DATE:** 10/31/2009

SECTION: NW36 **TOWNSHIP:** 30S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
2,250 BHP ELECTRICALLY DRIVEN NATURAL GAS COMPRESSOR (K-94), INCLUDING 2 SKID MOUNTED GAS/LIQUID SEPARATORS AND 1 OFF SKID GAS COOLER

DRAFT

PERMIT UNIT REQUIREMENTS

1. If compressor is operated in VOC service or wet gas service and is located within the boundaries of the plant site at a natural gas processing plant as defined in 40 CFR 60.631, then 40 CFR Part 60 Subpart KKK requirements shall be fully satisfied including, but not limited to, section 60.632 performance standards, 60.635 recordkeeping requirements, section 60.636 reporting requirements and Subpart A section 60.7 notification and recordkeeping. [District Rule 4001] Federally Enforceable Through Title V Permit
2. This compressor is permitted to operate at various unspecified locations within the Elk Hills Gas Plant Stationary Source. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The operator shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
4. 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
5. A leak free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit shall be reported as a deviation. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Fugitive VOC emissions rate shall be, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components from this tank. [District Rule 2201] Federally Enforceable Through Title V Permit
7. VOC fugitive emissions from the components in gas, light liquid, and light crude oil service shall not exceed 0.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Permittee shall maintain accurate records of fugitive emissions and such records shall be made readily available for District inspection upon request for a period of five years. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain a log noting compressor location, date the compressor was relocated, whether the location is at the gas plant and whether the compressor is located upstream of the gas plant (in wet gas service). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-114-2

EXPIRATION DATE: ~~10/31/2009~~

DRAFT

EQUIPMENT DESCRIPTION:
90,000 GALLON NATURAL GASOLINE AND BUTANE STORAGE TANK #UNX 12954

PERMIT UNIT REQUIREMENTS

1. The storage tank shall not vent directly to the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
2. This tank shall be capable of maintaining working pressures sufficient to prevent organic liquid loss of VOC loss to the atmosphere. [District Rule 4623, 3.24 and 4.1.1] Federally Enforceable Through Title V Permit
3. There shall be no leaks in excess of 10,000 ppmv when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Any tank gauging or sampling device shall be equipped with a gas-tight (as defined in District Rule 4623) cover which shall be closed at all times except during gauging or sampling. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. All piping, valves and fittings shall be constructed and maintained in a gas-tight (as defined in District Rule 4623) condition. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. 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
7. A facility operator, upon detection of a leaking component greater than 7,500 ppm when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. Leaks less than 10,000 ppmv from components which have been tagged by the facility operator for repair within 56 hours or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. Fugitive VOC emissions rate, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c , Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components shall not exceed 0.2 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection; 3) Date and emission level of recheck after leak is repaired. [District NSR Rule] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-115-2

EXPIRATION DATE: ~~10/31/2009~~

DRAFT

EQUIPMENT DESCRIPTION:
90,000 GALLON NATURAL GASOLINE AND BUTANE STORAGE TANK #UNX 12955

PERMIT UNIT REQUIREMENTS

1. The storage tank shall not vent directly to the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
2. This tank shall be capable of maintaining working pressures sufficient to prevent organic liquid loss of VOC loss to the atmosphere. [District Rule 4623, 3.24 and 4.1.1] Federally Enforceable Through Title V Permit
3. There shall be no leaks in excess of 10,000 ppmv when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Any tank gauging or sampling device shall be equipped with a gas-tight (as defined in Rule 4623) cover which shall be closed at all times except during gauging or sampling. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. All piping, valves and fittings shall be constructed and maintained in a gas-tight (as defined in 4623) condition. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. 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
7. A facility operator, upon detection of a leaking component greater than 7,500 ppm when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. Leaks less than 10,000 ppmv from components which have been tagged by the facility operator for repair within 56 hours or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. Fugitive VOC emissions rate, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c , Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components shall not exceed 0.2 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection; 3) Date and emission level of recheck after leak is repaired. [District NSR Rule] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-116-2

EXPIRATION DATE: ~~10/31/2009~~

DRAFT

EQUIPMENT DESCRIPTION:
90,000 GALLON NATURAL GASOLINE AND BUTANE STORAGE TANK #UNX 12956

PERMIT UNIT REQUIREMENTS

1. The tank shall not vent directly to the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
2. This tank shall be capable of maintaining working pressures sufficient to prevent organic liquid loss of VOC loss to the atmosphere. [District Rule 4623, 3.24 and 4.1.1] Federally Enforceable Through Title V Permit
3. There shall be no leaks in excess of 10,000 ppmv when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Any tank gauging or sampling device shall be equipped with a gas-tight (as defined in District Rule 4623) cover which shall be closed at all times except during gauging or sampling. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. All piping, valves and fittings shall be constructed and maintained in a gas-tight (as defined in District Rule 4623) condition. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. 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
7. A facility operator, upon detection of a leaking component greater than 7,500 ppm when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. Leaks less than 10,000 ppmv from components which have been tagged by the facility operator for repair within 56 hours or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. Fugitive VOC emissions rate, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c , Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components shall not exceed 0.2 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection; 3) Date and emission level of recheck after leak is repaired. [District NSR Rule] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-117-2

EXPIRATION DATE: ~~10/31/2009~~

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EQUIPMENT DESCRIPTION:
90,000 GALLON NATURAL GASOLINE AND BUTANE STORAGE TANK #UNX 12966

PERMIT UNIT REQUIREMENTS

1. The tank shall not vent directly to the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
2. This tank shall be capable of maintaining working pressures sufficient to prevent organic liquid loss of VOC loss to the atmosphere. [District Rule 4623, 3.24 and 4.1.1] Federally Enforceable Through Title V Permit
3. There shall be no leaks in excess of 10,000 ppmv when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Any tank gauging or sampling device shall be equipped with a gas-tight (as defined in DIstrict Rule 4623) cover which shall be closed at all times except during gauging or sampling. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. All piping, valves and fittings shall be constructed and maintained in a gas-tight (as defined in District Rule 4623) condition. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. 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
7. A facility operator, upon detection of a leaking component greater than 7,500 ppm when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. Leaks less than 10,000 ppmv from components which have been tagged by the facility operator for repair within 56 hours or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. Fugitive VOC emissions rate, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c , Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components shall not exceed 0.2 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection; 3) Date and emission level of recheck after leak is repaired. [District NSR Rule] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-118-2

EXPIRATION DATE: 10/31/2009

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EQUIPMENT DESCRIPTION:
96,604 GALLON NATURAL GASOLINE AND BUTANE STORAGE TANK

PERMIT UNIT REQUIREMENTS

1. The tank shall not vent directly to the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
2. This tank shall be capable of maintaining working pressures sufficient to prevent organic liquid loss of VOC loss to the atmosphere. [District Rule 4623, 3.24 and 4.1.1] Federally Enforceable Through Title V Permit
3. There shall be no leaks in excess of 10,000 ppmv when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Any tank gauging or sampling device shall be equipped with a gas-tight (as defined in District Rule 4623) cover which shall be closed at all times except during gauging or sampling. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. All piping, valves and fittings shall be constructed and maintained in a gas-tight (as defined in District Rule 4623) condition. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. 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
7. A facility operator, upon detection of a leaking component greater than 7,500 ppm when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. Leaks less than 10,000 ppmv from components which have been tagged by the facility operator for repair within 56 hours or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. Fugitive VOC emissions rate, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c , Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components shall not exceed 0.2 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection; 3) Date and emission level of recheck after leak is repaired. [District NSR Rule] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-119-2

EXPIRATION DATE: 10/31/2009

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EQUIPMENT DESCRIPTION:
96,604 GALLON NATURAL GASOLINE AND BUTANE STORAGE BULLET TANK

PERMIT UNIT REQUIREMENTS

1. The tank shall not vent directly to the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
2. This tank shall be capable of maintaining working pressures sufficient to prevent organic liquid loss of VOC loss to the atmosphere. [District Rule 4623, 3.24 and 4.1.1] Federally Enforceable Through Title V Permit
3. There shall be no leaks in excess of 10,000 ppmv when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Any tank gauging or sampling device shall be equipped with a gas-tight (as defined in Rule 4623) cover which shall be closed at all times except during gauging or sampling. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. All piping, valves and fittings shall be constructed and maintained in a gas-tight (as defined in 4623) condition. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. 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
7. A facility operator, upon detection of a leaking component greater than 7,500 ppm when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. Leaks less than 10,000 ppmv from components which have been tagged by the facility operator for repair within 56 hours or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. Fugitive VOC emissions rate, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c , Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components shall not exceed 0.2 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection; 3) Date and emission level of recheck after leak is repaired. [District NSR Rule] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-120-2

EXPIRATION DATE: ~~10/31/2009~~

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EQUIPMENT DESCRIPTION:
90,000 GALLON NATURAL GASOLINE AND BUTANE STORAGE TANK #UNX 12950

PERMIT UNIT REQUIREMENTS

1. This tank shall be capable of maintaining working pressures sufficient to prevent organic liquid loss of VOC loss to the atmosphere. [District Rule 4623, 3.24 and 4.1.1] Federally Enforceable Through Title V Permit
2. There shall be no leaks in excess of 10,000 ppmv when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Any tank gauging or sampling device shall be equipped with a gas-tight (as defined in District Rule 4623) cover which shall be closed at all times except during gauging or sampling. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
4. All piping, valves and fittings shall be constructed and maintained in a gas-tight (as defined in District Rule 4623) condition. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. 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
6. A facility operator, upon detection of a leaking component greater than 7,500 ppm when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. Leaks less than 10,000 ppmv from components which have been tagged by the facility operator for repair within 56 hours or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. Fugitive VOC emissions rate, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c , Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components shall not exceed 0.2 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
10. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection; 3) Date and emission level of recheck after leak is repaired. [District NSR Rule] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-121-2 **EXPIRATION DATE:** ~~10/31/2009~~

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EQUIPMENT DESCRIPTION:
90,000 GALLON PRESSURIZED NATURAL GASOLINE AND BUTANE STORAGE TANK #UNX 12953

PERMIT UNIT REQUIREMENTS

1. This tank shall be capable of maintaining working pressures sufficient to prevent organic liquid loss of VOC loss to the atmosphere. [District Rule 4623, 3.24 and 4.1.1] Federally Enforceable Through Title V Permit
2. There shall be no leaks in excess of 10,000 ppmv when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Any tank gauging or sampling device shall be equipped with a gas-tight (as defined in District Rule 4623) cover which shall be closed at all times except during gauging or sampling. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
4. All piping, valves and fittings shall be constructed and maintained in a gas-tight (as defined in District Rule 4623) condition. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. 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
6. A facility operator, upon detection of a leaking component greater than 7,500 ppm when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. Leaks less than 10,000 ppmv from components which have been tagged by the facility operator for repair within 56 hours or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. Fugitive VOC emissions rate, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c , Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components shall not exceed 0.2 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
10. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection; 3) Date and emission level of recheck after leak is repaired. [District NSR Rule] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-122-3 **EXPIRATION DATE:** 10/31/2009

SECTION: NW36 **TOWNSHIP:** 30S **RANGE:** 23E

DRAFT

EQUIPMENT DESCRIPTION:
GLYCOL DEHYDRATION SKID MOUNTED UNIT WITH A GLYCOL CONTACTOR, SEPARATOR COALESCER, SEVERAL GLYCOL HEAT EXCHANGERS, REBOILER/REGENERATOR EQUIPPED WITH 1.5 MMBTU/HR BURNER, GLYCOL SURGE TANK, FLASH SEPARATOR, LEAN/RICH GLYCOL EXCHANGER, VARIOUS PUMPS AND FILTERS, WITH PROCESS VENT CONNECTED TO EXISTING VACUUM GAS GATHERING SYSTEM

PERMIT UNIT REQUIREMENTS

1. Glycol reboiler heater shall be fired on natural gas containing no more than 0.75 gr S/100 scf and no more than 5% by weight hydrocarbons heavier that butane. [District Rule 2020] Federally Enforceable Through Title V Permit
2. Only glycol shall be used as the dehydration medium. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Flash tank and dehydrator vent shall be vented to gas gathering system. [District Rules 2201 and 4408] Federally Enforceable Through Title V Permit
4. Condensate handling shall be conducted in closed systems resulting in fugitive component emissions only. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The glycol dehydration system shall not be operated unless all vapors are directed to the vapor recovery system, a fuel gas system or a sales gas system, or a system in which VOC emissions are combusted by a flare, incinerator, reboiler, or thermal oxidizer. [District Rule 4408, 5.1] Federally Enforceable Through Title V Permit
6. The condensed hydrocarbon liquid stream from the glycol dehydration vent shall be stored and handled in a manner that will not cause or allow evaporation of VOC to the atmosphere. [District Rule 4408, 5.2] Federally Enforceable Through Title V Permit
7. A leak is defined as the dripping at a rate of more than three (3) drops per minute of liquid containing VOCs or a reading as methane in excess of 10,000 ppm above background when measured in accordance with EPA Method 21. [District Rule 4408, 3.8.1] Federally Enforceable Through Title V Permit
8. All control systems shall be maintained in a leak-free condition as determined by EPA Method 21. [District Rule 4408, 5.3] Federally Enforceable Through Title V Permit
9. VOC control efficiency shall be no less than 95% by weight. [District Rule 4408, 5.1] Federally Enforceable Through Title V Permit
10. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.5 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
11. 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
12. The operator shall maintain monthly records of the amount of gas dehydrated (MMSCF). [District Rule 4408, 6.1.1] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. The operator of any glycol dehydration system shall maintain the following records: facility name and APCD permit number; description of any installed VOC control system; flow diagram of dehydrator and any VOC controls; and maintenance records of the VOC control system. [District Rule 4408, 6.1.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-126-4 **EXPIRATION DATE:** ~~10/31/2009~~

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

DRAFT

EQUIPMENT DESCRIPTION:
1,834 BHP WAUKESHA MODEL #7042 NATURAL GAS-FIRED IC ENGINE DRIVING A GAS COMPRESSOR (R-21) EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION, AIR/FUEL RATIO CONTROLLER, POSITIVE CRANKCASE VENTILATION, AND OPERATES AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234 (COMPLIANT DORMANT EMISSIONS UNIT)

PERMIT UNIT REQUIREMENTS

1. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
2. 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
3. When this unit is not operated, the fuel line shall be physically disconnected from this unit. [District Rule 4702] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with NOx, CO and VOC emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4702] Federally Enforceable Through Title V Permit
5. Permittee shall notify the District at least seven (7) calendar days prior to recommencing operation of this dormant emissions unit. [District Rule 4702] Federally Enforceable Through Title V Permit
6. 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
7. 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
8. This unit shall not operate within 1,000 feet of a kindergarten through 12 grade school. [CH&SC 42301.6] 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. 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. 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) - 0.011 g/hp-hr. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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13. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The fuel consumption limit for this engine shall not exceed 241,600 scf/day. [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 non-PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D 1072, D 3031, D 4084, D 3246 or double GC. [District Rule 2201] Federally Enforceable Through Title V Permit
18. If the engine is fired on non-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. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. The elapsed operating time meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 4702] Federally Enforceable Through Title V Permit
20. Source testing to measure the stack NOx, CO, and VOC emissions from this unit shall be conducted not less than once every twelve (12) months unless the unit is in dormant status. [District Rule 2201 and 4702] Federally Enforceable Through Title V Permit
21. 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
22. 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
23. 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, ASTM D3246 or double GC for H2S and mercaptans, and EPA Method 21 for fugitive components. 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
24. 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
25. 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
26. 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
27. 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, 6.5] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

28. 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

29. Alternate monitoring shall not be required while unit is in dormant status, but shall resume upon recommencing operation of this unit. [District Rule 2201] Federally Enforceable Through Title V Permit

30. The permittee shall monitor and record the stack concentration of NOx, 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

31. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

32. 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

33. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

34. 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

35. 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

36. 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 or gallons of liquid) 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

37. All records shall be maintained, retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 2201, and 4702, 6.2.1 and 6.2.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-127-2 **EXPIRATION DATE:** ~~10/31/2009~~

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

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EQUIPMENT DESCRIPTION:
1,834 BHP WAUKESHA MODEL #7042 NATURAL GAS-FIRED IC ENGINE DRIVING A GAS COMPRESSOR (R-25) EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION, AIR/FUEL RATIO CONTROLLER, POSITIVE CRANKCASE VENTILATION, AND OPERATES AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234

PERMIT UNIT REQUIREMENTS

1. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
2. 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
3. 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
4. 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
5. This unit shall not operate within 1,000 feet of a kindergarten through 12 grade school. [CH&SC 42301.6] Federally Enforceable Through Title V Permit
6. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
7. 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
8. 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
9. 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) - 0.011 g/hp-hr. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
10. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The fuel consumption limit for this engine shall not exceed 241,600 scf/day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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

14. If the engine is fired on non-PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D 1072, D 3031, D 4084, D 3246 or double GC. [District Rule 2201] Federally Enforceable Through Title V Permit

15. If the engine is fired on non-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

16. The permittee shall install and operate a nonresettable elapsed operating time meter. The elapsed operating time meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit

17. Source testing to measure the stack NOx, CO, and VOC emissions from this unit shall be conducted not less than once every twelve (12) months. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit

18. 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

19. 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

20. 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, ASTM D3246 or double GC for H2S and mercaptans, and EPA Method 21 for fugitive components. 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

21. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. 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

22. 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

23. 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

24. 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, 6.5] Federally Enforceable Through Title V Permit

25. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

26. The permittee shall monitor and record the stack concentration of NOx, 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

27. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

28. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702] Federally Enforceable Through Title V Permit

29. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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

30. 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

31. 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

32. 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 or gallons of liquid) 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

33. All records shall be maintained, retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 2201, and 4702, 6.2.1 and 6.2.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-129-3 **EXPIRATION DATE:** ~~10/31/2009~~

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

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EQUIPMENT DESCRIPTION:
1,834 BHP WAUKESHA MODEL #7042 NATURAL GAS-FIRED IC ENGINE DRIVING A GAS COMPRESSOR (R-27) EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION, AIR/FUEL RATIO CONTROLLER, POSITIVE CRANKCASE VENTILATION, AND OPERATES AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234

PERMIT UNIT REQUIREMENTS

1. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
2. 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
3. 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
4. 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
5. This unit shall not operate within 1,000 feet of a kindergarten through 12 grade school. [CH&SC 42301.6] Federally Enforceable Through Title V Permit
6. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
7. 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
8. 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
9. 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) - 0.011 g/hp-hr. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
10. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The fuel consumption limit for this engine shall not exceed 241,600 scf/day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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

14. If the engine is fired on non-PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D 1072, D 3031, D 4084, D 3246 or double GC. [District Rule 2201] Federally Enforceable Through Title V Permit

15. If the engine is fired on non-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

16. The permittee shall install and operate a nonresettable elapsed operating time meter. The elapsed operating time meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit

17. Source testing to measure the stack NOx, CO, and VOC emissions from this unit shall be conducted not less than once every twelve (12) months. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit

18. 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

19. 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

20. 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, ASTM D3246 or double GC for H2S and mercaptans, and EPA Method 21 for fugitive components. 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

21. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. 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

22. 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

23. 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

24. 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, 6.5] Federally Enforceable Through Title V Permit

25. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

26. The permittee shall monitor and record the stack concentration of NOx, 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

27. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

28. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

29. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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

30. 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

31. 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

32. 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 or gallons of liquid) 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

33. All records shall be maintained, retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 2201, and 4702, 6.2.1 and 6.2.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-130-2 **EXPIRATION DATE:** ~~10/31/2009~~

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

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EQUIPMENT DESCRIPTION:
1,834 BHP WAUKESHA MODEL #7042 NATURAL GAS-FIRED IC ENGINE DRIVING A GAS COMPRESSOR (R-28) EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION, AIR/FUEL RATIO CONTROLLER, POSITIVE CRANKCASE VENTILATION, AND OPERATES AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234

PERMIT UNIT REQUIREMENTS

1. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
2. 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
3. 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
4. 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
5. This unit shall not operate within 1,000 feet of a kindergarten through 12 grade school. [CH&SC 42301.6] Federally Enforceable Through Title V Permit
6. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
7. 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
8. 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
9. 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) - 0.011 g/hp-hr. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
10. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The fuel consumption limit for this engine shall not exceed 241,600 scf/day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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

14. If the engine is fired on non-PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D 1072, D 3031, D 4084, D 3246 or double GC. [District Rule 2201] Federally Enforceable Through Title V Permit

15. If the engine is fired on non-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

16. The permittee shall install and operate a nonresettable elapsed operating time meter. The elapsed operating time meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit

17. Source testing to measure the stack NOx, CO, and VOC emissions from this unit shall be conducted not less than once every twelve (12) months. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit

18. 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

19. 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

20. 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, ASTM D3246 or double GC for H2S and mercaptans, and EPA Method 21 for fugitive components. 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

21. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. 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

22. 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

23. 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

24. 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, 6.5] Federally Enforceable Through Title V Permit

25. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

26. The permittee shall monitor and record the stack concentration of NOx, 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

27. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

28. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702] Federally Enforceable Through Title V Permit

29. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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

30. 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

31. 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

32. 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 or gallons of liquid) 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

33. All records shall be maintained, retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 2201, and 4702, 6.2.1 and 6.2.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-131-2 **EXPIRATION DATE:** ~~10/31/2009~~

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

DRAFT

EQUIPMENT DESCRIPTION:
1,834 BHP WAUKESHA MODEL #7042 NATURAL GAS-FIRED IC ENGINE DRIVING A GAS COMPRESSOR (R-29) EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION, AIR/FUEL RATIO CONTROLLER, POSITIVE CRANKCASE VENTILATION, AND OPERATES AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234

PERMIT UNIT REQUIREMENTS

1. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
2. 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
3. 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
4. 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
5. This unit shall not operate within 1,000 feet of a kindergarten through 12 grade school. [CH&SC 42301.6] Federally Enforceable Through Title V Permit
6. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
7. 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
8. 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
9. 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) - 0.011 g/hp-hr. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
10. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The fuel consumption limit for this engine shall not exceed 241,600 scf/day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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13. 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

14. If the engine is fired on non-PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D 1072, D 3031, D 4084, D 3246 or double GC. [District Rule 2201] Federally Enforceable Through Title V Permit

15. If the engine is fired on non-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

16. The permittee shall install and operate a nonresettable elapsed operating time meter. The elapsed operating time meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit

17. Source testing to measure the stack NOx, CO, and VOC emissions from this unit shall be conducted not less than once every twelve (12) months. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit

18. 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

19. 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

20. 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, ASTM D3246 or double GC for H2S and mercaptans, and EPA Method 21 for fugitive components. 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

21. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. 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

22. 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

23. 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

24. 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, 6.5] Federally Enforceable Through Title V Permit

25. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

26. The permittee shall monitor and record the stack concentration of NOx, 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

27. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

28. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702] Federally Enforceable Through Title V Permit

29. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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

30. 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

31. 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

32. 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 or gallons of liquid) 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

33. All records shall be maintained, retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 2201, and 4702, 6.2.1 and 6.2.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-132-2 **EXPIRATION DATE:** 10/31/2009

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

DRAFT

EQUIPMENT DESCRIPTION:
1,834 BHP WAUKESHA MODEL #7042 NATURAL GAS-FIRED IC ENGINE DRIVING A GAS COMPRESSOR (R-30) EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION, AIR/FUEL RATIO CONTROLLER, POSITIVE CRANKCASE VENTILATION, AND OPERATES AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234

PERMIT UNIT REQUIREMENTS

1. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
2. 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
3. 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
4. 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
5. This unit shall not operate within 1,000 feet of a kindergarten through 12 grade school. [CH&SC 42301.6] Federally Enforceable Through Title V Permit
6. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
7. 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
8. 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
9. 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) - 0.011 g/hp-hr. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
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12. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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

14. If the engine is fired on non-PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D 1072, D 3031, D 4084, D 3246 or double GC. [District Rule 2201] Federally Enforceable Through Title V Permit

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16. The permittee shall install and operate a nonresettable elapsed operating time meter. The elapsed operating time meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit

17. Source testing to measure the stack NOx, CO, and VOC emissions from this unit shall be conducted not less than once every twelve (12) months. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit

18. 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

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20. 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, ASTM D3246 or double GC for H2S and mercaptans, and EPA Method 21 for fugitive components. 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

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22. 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

23. 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

24. 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, 6.5] Federally Enforceable Through Title V Permit

25. 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

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26. The permittee shall monitor and record the stack concentration of NOx, 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

27. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

28. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702] Federally Enforceable Through Title V Permit

29. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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

30. 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

31. 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

32. 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 or gallons of liquid) 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

33. All records shall be maintained, retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 2201, and 4702, 6.2.1 and 6.2.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-133-2 **EXPIRATION DATE:** ~~10/31/2009~~

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

DRAFT

EQUIPMENT DESCRIPTION:
1,834 BHP WAUKESHA MODEL #7042 NATURAL GAS-FIRED IC ENGINE DRIVING A GAS COMPRESSOR (R-31) EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION, AIR/FUEL RATIO CONTROLLER, POSITIVE CRANKCASE VENTILATION, AND OPERATES AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234

PERMIT UNIT REQUIREMENTS

1. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
2. 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
3. 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
4. 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
5. This unit shall not operate within 1,000 feet of a kindergarten through 12 grade school. [CH&SC 42301.6] Federally Enforceable Through Title V Permit
6. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
7. 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
8. 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
9. 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) - 0.011 g/hp-hr. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
10. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The fuel consumption limit for this engine shall not exceed 241,600 scf/day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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

14. If the engine is fired on non-PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D 1072, D 3031, D 4084, D 3246 or double GC. [District Rule 2201] Federally Enforceable Through Title V Permit

15. If the engine is fired on non-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

16. The permittee shall install and operate a nonresettable elapsed operating time meter. The elapsed operating time meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit

17. Source testing to measure the stack NOx, CO, and VOC emissions from this unit shall be conducted not less than once every twelve (12) months. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit

18. 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

19. 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

20. 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, ASTM D3246 or double GC for H2S and mercaptans, and EPA Method 21 for fugitive components. 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

21. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. 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

22. 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

23. 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

24. 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, 6.5] Federally Enforceable Through Title V Permit

25. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

26. The permittee shall monitor and record the stack concentration of NOx, 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

27. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

28. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702] Federally Enforceable Through Title V Permit

29. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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

30. 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

31. 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

32. 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 or gallons of liquid) 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

33. All records shall be maintained, retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 2201, and 4702, 6.2.1 and 6.2.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-134-2 **EXPIRATION DATE:** ~~10/31/2009~~

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

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EQUIPMENT DESCRIPTION:
1,834 BHP WAUKESHA MODEL #7042 NATURAL GAS-FIRED IC ENGINE DRIVING A GAS COMPRESSOR (R-32) EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION, AIR/FUEL RATIO CONTROLLER, POSITIVE CRANKCASE VENTILATION, AND OPERATES AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234

PERMIT UNIT REQUIREMENTS

1. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
2. 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
3. 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
4. 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
5. This unit shall not operate within 1,000 feet of a kindergarten through 12 grade school. [CH&SC 42301.6] Federally Enforceable Through Title V Permit
6. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
7. 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
8. 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
9. 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) - 0.011 g/hp-hr. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
10. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The fuel consumption limit for this engine shall not exceed 241,600 scf/day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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

14. If the engine is fired on non-PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D 1072, D 3031, D 4084, D 3246 or double GC. [District Rule 2201] Federally Enforceable Through Title V Permit

15. If the engine is fired on non-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

16. The permittee shall install and operate a nonresettable elapsed operating time meter. The elapsed operating time meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit

17. Source testing to measure the stack NOx, CO, and VOC emissions from this unit shall be conducted not less than once every twelve (12) months. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit

18. 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

19. 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

20. 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, ASTM D3246 or double GC for H2S and mercaptans, and EPA Method 21 for fugitive components. 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

21. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. 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

22. 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

23. 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

24. 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, 6.5] Federally Enforceable Through Title V Permit

25. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

26. The permittee shall monitor and record the stack concentration of NOx, 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

27. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

28. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702] Federally Enforceable Through Title V Permit

29. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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

30. 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

31. 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

32. 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 or gallons of liquid) 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

33. All records shall be maintained, retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 2201, and 4702, 6.2.1 and 6.2.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-135-2 **EXPIRATION DATE:** 10/31/2009

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

EQUIPMENT DESCRIPTION:
1,834 BHP WAUKESHA MODEL #7042 NATURAL GAS-FIRED IC ENGINE DRIVING A GAS COMPRESSOR (R-33) EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION, AIR/FUEL RATIO CONTROLLER, POSITIVE CRANKCASE VENTILATION, AND OPERATES AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234

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PERMIT UNIT REQUIREMENTS

1. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
2. 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
3. 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
4. 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
5. This unit shall not operate within 1,000 feet of a kindergarten through 12 grade school. [CH&SC 42301.6] Federally Enforceable Through Title V Permit
6. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
7. 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
8. 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
9. 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) - 0.011 g/hp-hr. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
10. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The fuel consumption limit for this engine shall not exceed 241,600 scf/day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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13. 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

14. If the engine is fired on non-PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D 1072, D 3031, D 4084, D 3246 or double GC. [District Rule 2201] Federally Enforceable Through Title V Permit

15. If the engine is fired on non-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

16. The permittee shall install and operate a nonresettable elapsed operating time meter. The elapsed operating time meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit

17. Source testing to measure the stack NOx, CO, and VOC emissions from this unit shall be conducted not less than once every twelve (12) months. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit

18. 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

19. 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

20. 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, ASTM D3246 or double GC for H2S and mercaptans, and EPA Method 21 for fugitive components. 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

21. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. 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

22. 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

23. 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

24. 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, 6.5] Federally Enforceable Through Title V Permit

25. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

26. The permittee shall monitor and record the stack concentration of NOx, 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

27. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

28. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702] Federally Enforceable Through Title V Permit

29. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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

30. 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

31. 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

32. 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 or gallons of liquid) 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

33. All records shall be maintained, retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 2201, and 4702, 6.2.1 and 6.2.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-136-2 **EXPIRATION DATE:** ~~10/31/2009~~

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

DRAFT

EQUIPMENT DESCRIPTION:
1,834 BHP WAUKESHA MODEL #7042 NATURAL GAS-FIRED IC ENGINE DRIVING A GAS COMPRESSOR (R-34) EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION, AIR/FUEL RATIO CONTROLLER, POSITIVE CRANKCASE VENTILATION, AND OPERATES AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234

PERMIT UNIT REQUIREMENTS

1. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
2. 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
3. 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
4. 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
5. This unit shall not operate within 1,000 feet of a kindergarten through 12 grade school. [CH&SC 42301.6] Federally Enforceable Through Title V Permit
6. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
7. 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
8. 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
9. 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) - 0.011 g/hp-hr. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
10. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The fuel consumption limit for this engine shall not exceed 241,600 scf/day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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

14. If the engine is fired on non-PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D 1072, D 3031, D 4084, D 3246 or double GC. [District Rule 2201] Federally Enforceable Through Title V Permit

15. If the engine is fired on non-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

16. The permittee shall install and operate a nonresettable elapsed operating time meter. The elapsed operating time meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit

17. Source testing to measure the stack NOx, CO, and VOC emissions from this unit shall be conducted not less than once every twelve (12) months. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit

18. 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

19. 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

20. 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, ASTM D3246 or double GC for H2S and mercaptans, and EPA Method 21 for fugitive components. 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

21. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. 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

22. 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

23. 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

24. 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, 6.5] Federally Enforceable Through Title V Permit

25. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

26. The permittee shall monitor and record the stack concentration of NOx, 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

27. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

28. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702] Federally Enforceable Through Title V Permit

29. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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

30. 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

31. 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

32. 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 or gallons of liquid) 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

33. All records shall be maintained, retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 2201, and 4702, 6.2.1 and 6.2.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-137-3 **EXPIRATION DATE:** 10/31/2009

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

DRAFT

EQUIPMENT DESCRIPTION:
1,834 BHP WAUKESHA MODEL #7042 NATURAL GAS-FIRED IC ENGINE DRIVING A GAS COMPRESSOR (R-35) EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION, AIR/FUEL RATIO CONTROLLER, POSITIVE CRANKCASE VENTILATION, AND OPERATES AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234 (COMPLIANT DORMANT EMISSIONS UNIT)

PERMIT UNIT REQUIREMENTS

1. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63, ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
2. 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
3. When this unit is not operated, the fuel line shall be physically disconnected from this unit. [District Rule 4702] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with NOx, CO and VOC emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4702] Federally Enforceable Through Title V Permit
5. Permittee shall notify the District at least seven (7) calendar days prior to recommencing operation of this dormant emissions unit. [District Rule 4702] Federally Enforceable Through Title V Permit
6. 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
7. 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
8. This unit shall not operate within 1,000 feet of a kindergarten through 12 grade school. [CH&SC 42301.6] 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. 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. 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) - 0.011 g/hp-hr. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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13. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit

14. The fuel consumption limit for this engine shall not exceed 241,600 scf/day. [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 non-PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D 1072, D 3031, D 4084, D 3246 or double GC. [District Rule 2201] Federally Enforceable Through Title V Permit

18. If the engine is fired on non-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. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. The elapsed operating time meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 4702] Federally Enforceable Through Title V Permit

20. Source testing to measure the stack NOx, CO, and VOC emissions from this unit shall be conducted not less than once every twelve (12) months unless the unit is in dormant status. [District Rule 2201 and 4702] Federally Enforceable Through Title V Permit

21. 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

22. 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

23. 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, ASTM D3246 or double GC for H2S and mercaptans, and EPA Method 21 for fugitive components. 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

24. 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

25. 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

26. 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

27. 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, 6.5] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

28. 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

29. Alternate monitoring shall not be required while unit is in dormant status, but shall resume upon recommencing operation of this unit. [District Rule 2201] Federally Enforceable Through Title V Permit

30. The permittee shall monitor and record the stack concentration of NOx, 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

31. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

32. 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

33. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

34. 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

35. 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

36. 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 or gallons of liquid) 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

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-139-3 **EXPIRATION DATE:** ~~10/31/2009~~

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

DRAFT

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (R-23) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-140-3 **EXPIRATION DATE:** 10/31/2009

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

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (R-24) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

DRAFT

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-141-3 **EXPIRATION DATE:** 10/31/2009

SECTION: 03 **TOWNSHIP:** 31S **RANGE:** 24E

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-95) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

DRAFT

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-142-3 **EXPIRATION DATE:** 10/31/2009

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

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-103) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

DRAFT

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-144-3 **EXPIRATION DATE:** 10/31/2009

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

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-105) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

DRAFT

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-145-3 **EXPIRATION DATE:** 10/31/2009

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 24E

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-106) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

DRAFT

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-147-3 **EXPIRATION DATE:** ~~10/31/2009~~

SECTION: 17 **TOWNSHIP:** 30S **RANGE:** 23E

DRAFT

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-108] AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-150-3 **EXPIRATION DATE:** ~~10/31/2009~~

SECTION: 03 **TOWNSHIP:** 31S **RANGE:** 24E

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-109) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

DRAFT

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-151-3 **EXPIRATION DATE:** ~~10/31/2009~~

SECTION: 03 **TOWNSHIP:** 31S **RANGE:** 24E

DRAFT

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-110) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-152-3 **EXPIRATION DATE:** 10/31/2009

SECTION: 03 **TOWNSHIP:** 31S **RANGE:** 24E

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-111) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

DRAFT

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-153-3 **EXPIRATION DATE:** 10/31/2009

SECTION: 03 **TOWNSHIP:** 31S **RANGE:** 24E

DRAFT

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-112) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-154-3 **EXPIRATION DATE:** 10/31/2009

SECTION: 03 **TOWNSHIP:** 31S **RANGE:** 24E

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-113) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

DRAFT

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-157-2 **EXPIRATION DATE:** ~~10/31/2009~~

SECTION: 06 **TOWNSHIP:** 31S **RANGE:** 24E

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-114) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

DRAFT

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-158-2 **EXPIRATION DATE:** 10/31/2009

SECTION: 29 **TOWNSHIP:** 30S **RANGE:** 24E

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-115) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

DRAFT

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-159-2 **EXPIRATION DATE:** 10/31/2009

SECTION: 04 **TOWNSHIP:** 31S **RANGE:** 24E

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-116) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

DRAFT

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-160-2 **EXPIRATION DATE:** 10/31/2009

SECTION: 09 **TOWNSHIP:** 31S **RANGE:** 24E

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-117) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

DRAFT

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-161-2 **EXPIRATION DATE:** 10/31/2009

SECTION: 10 **TOWNSHIP:** 31S **RANGE:** 24E

DRAFT

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-118) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-162-2 **EXPIRATION DATE:** ~~10/31/2009~~

DRAFT

SECTION: 34 **TOWNSHIP:** 30S **RANGE:** 24E

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-119) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-163-2 **EXPIRATION DATE:** 10/31/2009

SECTION: 35 **TOWNSHIP:** 30S **RANGE:** 24E

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-120) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

DRAFT

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-164-2 **EXPIRATION DATE:** 10/31/2009

SECTION: 36 **TOWNSHIP:** 30S **RANGE:** 24E

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-121) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

DRAFT

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-165-2 **EXPIRATION DATE:** 10/31/2009

SECTION: 12 **TOWNSHIP:** 31S **RANGE:** 24E

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-122) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

DRAFT

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-166-2 **EXPIRATION DATE:** 10/31/2009

SECTION: 31 **TOWNSHIP:** 30S **RANGE:** 24E

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-123) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

DRAFT

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-167-2 **EXPIRATION DATE:** 10/31/2009

SECTION: 31 **TOWNSHIP:** 30S **RANGE:** 24E

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-124) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

DRAFT

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-170-2 **EXPIRATION DATE:** 10/31/2009

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

EQUIPMENT DESCRIPTION:
99 BHP CUMMINS MODEL 4BTA 3.9-G5 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING POTABLE WATER PUMPS

DRAFT

PERMIT UNIT REQUIREMENTS

1. {2414} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
2. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (except for a flapper type rain cap), roof overhang, or any other obstruction. [District Rule 4102]
3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 17 CCR 93115, and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
4. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702] Federally Enforceable Through Title V Permit
5. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801, and 17 CCR 93115] Federally Enforceable Through Title V Permit
6. Emissions from this IC engine shall not exceed any of the following limits: 4.71 g-NOx/bhp-hr, 0.37 g-CO/bhp-hr, or 0.36 g-VOC/bhp-hr. [District Rule 2201 and 17 CCR 93115] Federally Enforceable Through Title V Permit
7. The PM10 emissions rate shall not exceed 0.15 g/hp-hr based on US EPA certification using ISO 8178 test procedure. [District Rules 2201, 4102, and 17 CCR 93115] Federally Enforceable Through Title V Permit
8. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rules 2201 and 4702, 4.2, 17 CCR 93115, and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
9. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit
10. This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702] Federally Enforceable Through Title V Permit
11. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.), and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702, 6.2.3 and 17 CCR 93115] Federally Enforceable Through Title V Permit

13. The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [District Rules 2520, 9.4.2 and 4702, and 17 CCR 93115] Federally Enforceable Through Title V Permit

14. On and after May 3, 2013, the permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

15. On and after May 3, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

16. On and after May 3, 2013, the engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

17. On and after May 3, 2013, the engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

18. On and after May 3, 2013, the engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

19. On and after May 3, 2013, the permittee shall maintain monthly records of all performance tests, opacity and visible emissions observations and required maintenance performed on the air pollution control and monitoring equipment. [District Rule 1070 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

20. On and after May 3, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-172-2 **EXPIRATION DATE:** 10/31/2009

SECTION: 3 **TOWNSHIP:** 31S **RANGE:** 24E

DRAFT

EQUIPMENT DESCRIPTION:
GLYCOL DEHYDRATION OPERATION INCLUDING 1.5 MMBTU/HR BURNER, A GLYCOL SURGE TANK, FLASH VESSEL AND GLYCOL REBOILER VENT, A LEAN/RICH GLYCOL EXCHANGER, AND VARIOUS PUMPS AND FILTERS WITH PROCESS VENT CONNECTED TO VACUUM GAS GATHERING SYSTEM

PERMIT UNIT REQUIREMENTS

1. Glycol reboiler heater shall be fired on natural gas containing no more than 0.75 gr S/100 scf and no more than 5% by weight hydrocarbons heavier that butane. [District Rule 2020] Federally Enforceable Through Title V Permit
2. Only glycol shall be used as the dehydration medium. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Flash tank and dehydrator vent shall be vented to gas gathering system. [District Rules 2201 and 4408] Federally Enforceable Through Title V Permit
4. Condensate handling shall be conducted in closed systems resulting in fugitive component emissions only. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The glycol dehydration system shall not be operated unless all vapors are directed to the vapor recovery system, a fuel gas system or a sales gas system, or a system in which VOC emissions are combusted by a flare, incinerator, reboiler, or thermal oxidizer. [District Rule 4408, 5.1] Federally Enforceable Through Title V Permit
6. The condensed hydrocarbon liquid stream from the glycol dehydration vent shall be stored and handled in a manner that will not cause or allow evaporation of VOC to the atmosphere. [District Rule 4408, 5.2] Federally Enforceable Through Title V Permit
7. A leak is defined as the dripping at a rate of more than three (3) drops per minute of liquid containing VOCs or a reading as methane in excess of 10,000 ppm above background when measured in accordance with EPA Method 21. [District Rule 4408, 3.8.1] Federally Enforceable Through Title V Permit
8. All control systems shall be maintained in a leak-free condition as determined by EPA Method 21. [District Rule 4408, 5.3] Federally Enforceable Through Title V Permit
9. VOC control efficiency shall be no less than 95% by weight. [District Rule 4408, 5.1] Federally Enforceable Through Title V Permit
10. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.6 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
11. 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
12. The operator shall maintain monthly records of the amount of gas dehydrated (MMSCF). [District Rule 4408, 6.1.1] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. The operator of any glycol dehydration system shall maintain the following records: facility name and APCD permit number; description of any installed VOC control system; flow diagram of dehydrator and any VOC controls; and maintenance records of the VOC control system. [District Rule 4408, 6.1.2] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-175-3 **EXPIRATION DATE:** 10/31/2009

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

DRAFT

EQUIPMENT DESCRIPTION:
GAS DEHYDRATION SYSTEM INCLUDING: INLET GAS COALESCERS, MOLECULAR SIEVE DRYER BEDS, REGENERATION AND DRY GAS COOLERS, AND ELECTRIC MOTOR REGENERATION GAS COMPRESSOR (35R GAS PLANT)

PERMIT UNIT REQUIREMENTS

1. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 1.9 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. There shall be no leaks exceeding 10,000 ppmv VOCs. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4309] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-176-2 **EXPIRATION DATE:** 10/31/2009

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

DRAFT

EQUIPMENT DESCRIPTION:
NATURAL GAS CO2 REMOVAL SYSTEM INCLUDING: MOLECULAR SIEVE CO2 REMOVAL BEDS, FIN-FAN GAS COOLERS, NITROGEN DRYING BEDS, LIQUID KNOCKOUT VESSELS AND ELECTRIC MOTOR CO2 REMOVAL COMPRESSORS (35R GAS PLANT)

PERMIT UNIT REQUIREMENTS

1. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.5 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. There shall be no leaks exceeding 10,000 ppmv VOCs. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit
4. For all components that are subject to applicable requirements of District Rule 4409 and are included in the operator management plan and that comply with the inspection, maintenance and repair requirements as specified by Rule 4409, a Title-V permit shield for applicable Rule 4409 requirements is granted. [District Rule 4409] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-180-2 **EXPIRATION DATE:** ~~10/31/2009~~

DRAFT

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-19) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-181-2 **EXPIRATION DATE:** ~~10/31/2009~~

DRAFT

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-20) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-182-2 **EXPIRATION DATE:** 10/31/2009

DRAFT

EQUIPMENT DESCRIPTION:
1,680 BHP WAUKESHA MODEL 7044 GSI NATURAL GAS-FIRED IC ENGINE WITH NSCR AND PCV POWERING A COMPRESSOR (R-36)

PERMIT UNIT REQUIREMENTS

1. This IC engine shall only be fired on Public Utility Commission (PUC) quality natural gas. [District Rules 2201, 4702, 5.7.1, and 4801] Federally Enforceable Through Title V Permit
2. Annual fuel consumption for this natural gas-fired engine shall not exceed 104.6 MMScf per year. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Permittee shall maintain annual records of fuel consumption, in MMScf, to show compliance with the annual fuel consumption limit of 104.6 MMScf. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102]
5. 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
6. The permittee shall install and operate a nonresettable fuel flow meter to determine annual fuel usage. [District Rule 2201] Federally Enforceable Through Title V Permit
7. 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
8. Emissions from this IC engine shall not exceed any of the following limits: 0.07 g-NOx/hp-hr, 0.0094 g-SOx/hp-hr, 0.02 g-PM10/hp-hr, 0.475 g-CO/hp-hr, or 0.121 g-VOC/hp-hr. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
9. The permittee shall monitor and record the stack concentration of NOx, 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

11. 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

12. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

13. Source testing to measure gas combustion NOx and CO emissions from this unit shall be measured not less than once every 24 months. [District Rule 4702] Federally Enforceable Through Title V Permit

14. 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] Federally Enforceable Through Title V Permit

15. 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. NOx and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit

16. 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. 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 Rules 1081 and 4702] Federally Enforceable Through Title V Permit

17. 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

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

19. 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 and quantity (cubic feet of gas or gallons of liquid) 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

20. 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

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-183-2 **EXPIRATION DATE:** ~~10/31/2009~~

DRAFT

EQUIPMENT DESCRIPTION:
1,680 BHP WAUKESHA MODEL 7044 GSI NATURAL GAS-FIRED IC ENGINE WITH NSCR AND PCV POWERING A COMPRESSOR (R-37)

PERMIT UNIT REQUIREMENTS

1. This IC engine shall only be fired on Public Utility Commission (PUC) quality natural gas. [District Rules 2201, 4702, 5.7.1, and 4801] Federally Enforceable Through Title V Permit
2. Annual fuel consumption for this natural gas-fired engine shall not exceed 104.6 MMScf per year. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Permittee shall maintain annual records of fuel consumption, in MMScf, to show compliance with the annual fuel consumption limit of 104.6 MMScf. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102]
5. 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
6. The permittee shall install and operate a nonresettable fuel flow meter to determine annual fuel usage. [District Rule 2201] Federally Enforceable Through Title V Permit
7. 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
8. Emissions from this IC engine shall not exceed any of the following limits: 0.07 g-NOx/hp-hr, 0.0094 g-SOx/hp-hr, 0.02 g-PM10/hp-hr, 0.475 g-CO/hp-hr, or 0.121 g-VOC/hp-hr. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
9. The permittee shall monitor and record the stack concentration of NOx, 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit
11. 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
12. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit
13. Source testing to measure gas combustion NOx and CO emissions from this unit shall be measured not less than once every 24 months. [District Rule 4702] Federally Enforceable Through Title V Permit
14. 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] Federally Enforceable Through Title V Permit
15. 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. NOx and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
16. 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. 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 Rules 1081 and 4702] Federally Enforceable Through Title V Permit
17. 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
18. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
19. 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 and quantity (cubic feet of gas or gallons of liquid) 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
20. 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

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-184-2 **EXPIRATION DATE:** 10/31/2009

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EQUIPMENT DESCRIPTION:
1,680 BHP WAUKESHA MODEL 7044 GSI NATURAL GAS-FIRED IC ENGINE WITH NSCR AND PCV POWERING A COMPRESSOR (R-38)

PERMIT UNIT REQUIREMENTS

1. This IC engine shall only be fired on Public Utility Commission (PUC) quality natural gas. [District Rules 2201, 4702, 5.7.1, and 4801] Federally Enforceable Through Title V Permit
2. Annual fuel consumption for this natural gas-fired engine shall not exceed 104.6 MMScf per year. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Permittee shall maintain annual records of fuel consumption, in MMScf, to show compliance with the annual fuel consumption limit of 104.6 MMScf. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102]
5. 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
6. The permittee shall install and operate a nonresettable fuel flow meter to determine annual fuel usage. [District Rule 2201] Federally Enforceable Through Title V Permit
7. 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
8. Emissions from this IC engine shall not exceed any of the following limits: 0.07 g-NOx/hp-hr, 0.0094 g-SOx/hp-hr, 0.02 g-PM10/hp-hr, 0.475 g-CO/hp-hr, or 0.121 g-VOC/hp-hr. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
9. The permittee shall monitor and record the stack concentration of NOx, 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit
11. 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
12. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit
13. Source testing to measure gas combustion NOx and CO emissions from this unit shall be measured not less than once every 24 months. [District Rule 4702] Federally Enforceable Through Title V Permit
14. 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] Federally Enforceable Through Title V Permit
15. 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. NOx and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
16. 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. 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 Rules 1081 and 4702] Federally Enforceable Through Title V Permit
17. 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
18. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
19. 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 and quantity (cubic feet of gas or gallons of liquid) 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
20. 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

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-185-2 **EXPIRATION DATE:** ~~10/31/2009~~

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EQUIPMENT DESCRIPTION:
1,680 BHP WAUKESHA MODEL 7044 GSI NATURAL GAS-FIRED IC ENGINE WITH NSCR AND PCV POWERING A COMPRESSOR (R-39)

PERMIT UNIT REQUIREMENTS

1. This IC engine shall only be fired on Public Utility Commission (PUC) quality natural gas. [District Rules 2201, 4702, 5.7.1, and 4801] Federally Enforceable Through Title V Permit
2. Annual fuel consumption for this natural gas-fired engine shall not exceed 104.6 MMScf per year. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Permittee shall maintain annual records of fuel consumption, in MMScf, to show compliance with the annual fuel consumption limit of 104.6 MMScf. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102]
5. 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
6. The permittee shall install and operate a nonresettable fuel flow meter to determine annual fuel usage. [District Rule 2201] Federally Enforceable Through Title V Permit
7. 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
8. Emissions from this IC engine shall not exceed any of the following limits: 0.07 g-NOx/hp-hr, 0.0094 g-SOx/hp-hr, 0.02 g-PM10/hp-hr, 0.475 g-CO/hp-hr, or 0.121 g-VOC/hp-hr. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
9. The permittee shall monitor and record the stack concentration of NOx, 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit
11. 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
12. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit
13. Source testing to measure gas combustion NOx and CO emissions from this unit shall be measured not less than once every 24 months. [District Rule 4702] Federally Enforceable Through Title V Permit
14. 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] Federally Enforceable Through Title V Permit
15. 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. NOx and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
16. 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. 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 Rules 1081 and 4702] Federally Enforceable Through Title V Permit
17. 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
18. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
19. 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 and quantity (cubic feet of gas or gallons of liquid) 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
20. 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

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-186-2 **EXPIRATION DATE:** ~~10/31~~/2009

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EQUIPMENT DESCRIPTION:
1,680 BHP WAUKESHA MODEL 7044 GSI NATURAL GAS-FIRED IC ENGINE WITH NSCR AND PCV POWERING A COMPRESSOR (R-40)

PERMIT UNIT REQUIREMENTS

1. This IC engine shall only be fired on Public Utility Commission (PUC) quality natural gas. [District Rules 2201, 4702, 5.7.1, and 4801] Federally Enforceable Through Title V Permit
2. Annual fuel consumption for this natural gas-fired engine shall not exceed 104.6 MMScf per year. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Permittee shall maintain annual records of fuel consumption, in MMScf, to show compliance with the annual fuel consumption limit of 104.6 MMScf. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102]
5. 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
6. The permittee shall install and operate a nonresettable fuel flow meter to determine annual fuel usage. [District Rule 2201] Federally Enforceable Through Title V Permit
7. 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
8. Emissions from this IC engine shall not exceed any of the following limits: 0.07 g-NOx/hp-hr, 0.0094 g-SOx/hp-hr, 0.02 g-PM10/hp-hr, 0.475 g-CO/hp-hr, or 0.121 g-VOC/hp-hr. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
9. The permittee shall monitor and record the stack concentration of NOx, 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit
11. 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
12. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit
13. Source testing to measure gas combustion NOx and CO emissions from this unit shall be measured not less than once every 24 months. [District Rule 4702] Federally Enforceable Through Title V Permit
14. 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] Federally Enforceable Through Title V Permit
15. 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. NOx and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
16. 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. 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 Rules 1081 and 4702] Federally Enforceable Through Title V Permit
17. 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
18. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
19. 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 and quantity (cubic feet of gas or gallons of liquid) 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
20. 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

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-194-3 **EXPIRATION DATE:** 10/31/2009

SECTION: SE14 **TOWNSHIP:** 30S **RANGE:** 22E

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EQUIPMENT DESCRIPTION:
GLYCOL DEHYDRATION SKID MOUNTED UNIT WITH A GLYCOL CONTACTOR, A SEPARATOR COALESCER, SEVERAL GLYCOL HEAT EXCHANGERS, A REBOILER/REGENERATOR EQUIPPED WITH 4.7 MMBTU/HR BURNER, A GLYCOL SURGE TANK, A FLASH SEPARATOR, A LEAN/RICH GLYCOL EXCHANGER, AND VARIOUS PUMPS AND FILTERS, WITH PROCESS VENT CONNECTED TO EXISTING VACUUM GAS GATHERING SYSTEM

PERMIT UNIT REQUIREMENTS

1. Only glycol shall be used as the dehydration medium. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Condensate handling shall be conducted in closed systems resulting in fugitive component emissions only. [District Rule 2201] Federally Enforceable Through Title V Permit
3. VOC control efficiency shall be no less than 95% by weight. [District Rule 4408] Federally Enforceable Through Title V Permit
4. Permittee shall maintain with the permit accurate fugitive component counts and resulting emissions calculated using (ALR) equations for a 2,000 ppmv leak threshold included in EPA, "Protocol for Estimating Leak Emissions" (EPA - 453/R-95-017, November 1995). [District Rule 2201] Federally Enforceable Through Title V Permit
5. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 2,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated to methane in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as the dripping of organic liquid at a rate more than 3 drops per minute. A gas or liquid leak is a violation of this permit and shall be reported as a deviation. [District Rule 2201] Federally Enforceable Through Title V Permit
6. VOC fugitive emissions shall not exceed 0.56 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. VOC content of gas processed shall not exceed 100% by weight. Permittee shall maintain a written record of VOC content (sampled not less than annually) and shall make such records available for District inspection upon request for a period of two years. [District Rules 2201 and 1070] Federally Enforceable Through Title V Permit
8. VOC content of gas shall be measured using EPA Methods 25, 25a, or 25b referenced as methane. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Permittee shall comply in full with all applicable Rule 4409 requirements as shown on the facility wide permit. [District Rule 4409] Federally Enforceable Through Title V Permit
10. Permittee shall maintain daily and monthly records of gas dehydrated and records including those listed in Rule 4408 Section 6.1.2. The permittee shall make such records readily available for District inspection upon request and shall be retained on the premises for a period of not less than five years. [District Rules 2201 and 4408] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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11. Permittee shall maintain records of component leak inspections and repairs in accordance with Rule 4409. [District Rule 4409] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-200-3 **EXPIRATION DATE:** ~~10/31/2009~~

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EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (R-22) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-201-3 **EXPIRATION DATE:** 10/31/2009

DRAFT

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-107) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-202-3 **EXPIRATION DATE:** 10/31/2009

DRAFT

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-55) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-203-3 **EXPIRATION DATE:** ~~10/31/2009~~

DRAFT

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-56) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-204-2 **EXPIRATION DATE:** 10/31/2009

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

EQUIPMENT DESCRIPTION:
7,300 MMBTU/HR HIGH PRESSURE FLARE SERVING LTS #1 PLANT

DRAFT

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. The flare shall be operated only in an emergency. An emergency is defined as any situation or a condition arising from a sudden and reasonably unforeseeable and unpreventable event beyond the control of the operator. Examples include, but are not limited to, not preventable equipment failure, natural disaster, act of war or terrorism, or external power curtailment, excluding a power curtailment due to an interruptible power service agreement from a utility. A flaring event due to improperly designed equipment, lack of preventative maintenance, careless or improper operation, operator error or willful misconduct does not quality as an emergency. An emergency situation requires immediate corrective action to restore safe operation. A planned flaring event shall not be considered as an emergency. [District Rule 4311] Federally Enforceable Through Title V Permit
3. Emission rates from this unit shall not exceed any of the following limits: 0.068 lb-NOx/MMBtu; 0.00285 lb-SOx/MMBtu; 0.008 lb-PM10/MMBtu; 0.37 lb-CO/MMBtu; or 0.063 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
4. A flame shall be present at all times in the flare whenever combustible gases are vented through the flare. [District Rule 4311, 5.2] Federally Enforceable Through Title V Permit
5. The flare outlet shall be equipped with an automatic ignition system, or, shall operate with a pilot flame present at all times when combustible gases are vented through the flare, except during purge periods for automatic-ignition equipped flares. [District Rule 4311, 5.3] Federally Enforceable Through Title V Permit
6. Except for flares equipped with a flow-sensing ignition system, a heat sensing device such as a thermocouple, ultraviolet beam sensor, infrared sensor, or an equivalent device, capable of continuously detecting at least one pilot flame or the flare flame is present, shall be installed and operated. [District Rule 4311, 5.4] Federally Enforceable Through Title V Permit
7. Flares that use flow-sensing automatic ignition systems and which do not use a continuous flame pilot shall use purge gas for purging. [District Rule 4311, 5.5] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

9. Operators subject to vent gas composition monitoring requirements shall use the following test methods as appropriate, or by an alternative method approved by the APCO, ARB and EPA: Total hydrocarbon content and methane content of vent gas shall be determined using ASTM Method D 1945-96, ASTM Method UOP 539-97, EPA Method 18, or EPA Method 25A or 25B. Hydrogen sulfide content of vent gas shall be determined using ASTM Method D 1945-96, ASTM Method UOP 539-97, ASTM Method D 4084-94, or ASTM Method D 4810-88. [District Rule 4311, 6.3.4] Federally Enforceable Through Title V Permit

10. If vent gas composition is monitored with a continuous analyzer employing gas chromatography the minimum sampling frequency shall be one sample every 30 minutes. If vent gas composition is monitored using continuous analyzers not employing gas chromatography, the total reduced sulfur content of vent gas shall be determined by using EPA Method D4468-85. [District Rule 4311, 6.3.4] Federally Enforceable Through Title V Permit

11. Vent gas flow shall be determined using one or more of the following methods, or by any alternative method approved by the APCO, ARB, and EPA: 1) EPA Methods 1 and 2; 2) A verification method recommended by the manufacturer of the flow monitoring equipment installed; 3) Tracer gas dilution or velocity; or 4) Other flow monitors or process monitors that can provide comparison data on a vent stream that is being directed past the ultrasonic flow meter. [District Rule 6.3.4] Federally Enforceable Through Title V Permit

12. The operator shall monitor vent gas composition using one of the following five methods as appropriate. If flares share a common header, a sample from the header will be deemed representative of vent gas composition for all flares served by the header. The operator shall provide the APCO with access to the monitoring system to collect vent gas samples to verify the analysis. 1) Sampling that meets the following requirements: (a) If the flow rate of vent gas flared in any consecutive 15-minute period continuously exceeds 330 standard cubic feet per minute (SCFM), a sample shall be taken within 15 minutes. The sampling frequency thereafter shall be one sample every three hours and shall continue until the flow rate of vent gas flared in any consecutive 15-minute period is continuously 330 SCFM or less. In no case shall a sample be required more frequently than once every 3 hours. (b) Samples shall be analyzed using approved test methods; or 2) Integrated sampling that meets the following requirements: (a) If the flow rate of vent gas flared in any consecutive 15 minute period continuously exceeds 330 SCFM, integrated sampling shall begin within 15 minutes and shall continue until the flow rate of vent gas flared in any consecutive 15 minute period is continuously 330 SCFM or less. (b) Integrated sampling shall consist of a minimum of one aliquot for each 15-minute period until the sample container is full. If sampling is still required pursuant to part (a), a new sample container shall be placed in service within one hour after the previous sample was filled. A sample container shall not be used for a sampling period that exceeds 24 hours. (c) Samples shall be analyzed using approved test methods; or 3) Continuous analyzers that meet the following requirements: (a) The analyzers shall continuously monitor for total hydrocarbon methane, and depending upon the analytical method used pursuant to Section 6.3.4, hydrogen sulfide or total reduced sulfur. (b) The hydrocarbon analyzer shall have a full-scale range of 100% total hydrocarbon. (c) Each analyzer shall be maintained to be accurate to within 20% when compared to any field accuracy tests or to within 5% of full scale; or 4). Continuous analyzers employing gas chromatography that meet the following requirements: (a) The gas chromatography system shall monitor for total hydrocarbon, methane, and hydrogen sulfide. (b) The gas chromatography system shall be maintained to be accurate within 5% of full scale; or 5) Monitor sulfur content using a colorimetric tube system on a daily basis, and monitor vent gas hydrocarbon on a weekly basis by collecting samples and having them tested using approved test methods. [District Rule 4311, 6.6] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

14. The operator of a flare with a water seal shall monitor and record the water level and pressure of the water seal daily or as specified on the Permit to Operate. [District Rule 4311, 6.8] Federally Enforceable Through Title V Permit

15. Periods of flare monitoring system inoperation greater than 24 continuous hours shall be reported by the following working day, followed by notification of resumption of monitoring. Periods of inoperation of monitoring equipment shall not exceed 14 days per any 18-consecutive-month period. Periods of flare monitoring system inoperation do not include the periods when the system feeding the flare is not operating. [District Rule 4311, 6.9] Federally Enforceable Through Title V Permit

16. During periods of inoperation of continuous analyzers or auto-samplers, operators responsible for monitoring shall take one sample within 30 minutes of the commencement of flaring, from the flare header or from an alternate location at which samples are representative of vent gas composition and have samples analyzed using approved test methods. During periods of inoperation of flow monitors, flow shall be calculated using good engineering practices. [District Rule 4311, 6.9] Federally Enforceable Through Title V Permit

17. Permittee shall maintain and calibrate all required monitors and recording devices in accordance with the applicable manufacturer's specifications. In order to claim that a manufacturer's specification is not applicable, the person responsible for emissions must have, and follow, a written maintenance policy that was developed for the device in question. The written policy must explain and justify the difference between the written procedure and the manufacturer's procedure. [District Rule 4311, 6.9] Federally Enforceable Through Title V Permit

18. All in-line continuous analyzer and flow monitoring data must be continuously recorded by an electronic data acquisition system capable of one-minute averages. Flow monitoring data shall be recorded as one-minute averages. [District Rule 4311, 6.9] Federally Enforceable Through Title V Permit

19. Effective on and after July 1, 2012, the permittee shall maintain a copy of annual reports submitted to the APCO. [District Rule 4311, 6.1.6] Federally Enforceable Through Title V Permit

20. Permittee shall maintain records of the duration of flare operation, amount of gas burned, and the nature of the emergency situation. [District Rule 4311, 6.1.3] Federally Enforceable Through Title V Permit

21. Permittee shall maintain records of all monitoring data collected. [District Rule 4311, 6.1.7] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-205-2 **EXPIRATION DATE:** 10/31/2009

SECTION: 34 **TOWNSHIP:** 30S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
7,300 MMBTU/HR HIGH PRESSURE FLARE SERVING LTS #2 PLANT

DRAFT

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. The flare shall be operated only in an emergency. An emergency is defined as any situation or a condition arising from a sudden and reasonably unforeseeable and unpreventable event beyond the control of the operator. Examples include, but are not limited to, not preventable equipment failure, natural disaster, act of war or terrorism, or external power curtailment, excluding a power curtailment due to an interruptible power service agreement from a utility. A flaring event due to improperly designed equipment, lack of preventative maintenance, careless or improper operation, operator error or willful misconduct does not quality as an emergency. An emergency situation requires immediate corrective action to restore safe operation. A planned flaring event shall not be considered as an emergency. [District Rule 4311] Federally Enforceable Through Title V Permit
3. Emission rates from this unit shall not exceed any of the following limits: 0.068 lb-NOx/MMBtu; 0.00285 lb-SOx/MMBtu; 0.008 lb-PM10/MMBtu; 0.37 lb-CO/MMBtu; or 0.063 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
4. A flame shall be present at all times in the flare whenever combustible gases are vented through the flare. [District Rule 4311, 5.2] Federally Enforceable Through Title V Permit
5. The flare outlet shall be equipped with an automatic ignition system, or, shall operate with a pilot flame present at all times when combustible gases are vented through the flare, except during purge periods for automatic-ignition equipped flares. [District Rule 4311, 5.3] Federally Enforceable Through Title V Permit
6. Except for flares equipped with a flow-sensing ignition system, a heat sensing device such as a thermocouple, ultraviolet beam sensor, infrared sensor, or an equivalent device, capable of continuously detecting at least one pilot flame or the flare flame is present, shall be installed and operated. [District Rule 4311, 5.4] Federally Enforceable Through Title V Permit
7. Flares that use flow-sensing automatic ignition systems and which do not use a continuous flame pilot shall use purge gas for purging. [District Rule 4311, 5.5] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

9. Operators subject to vent gas composition monitoring requirements shall use the following test methods as appropriate, or by an alternative method approved by the APCO, ARB and EPA: Total hydrocarbon content and methane content of vent gas shall be determined using ASTM Method D 1945-96, ASTM Method UOP 539-97, EPA Method 18, or EPA Method 25A or 25B. Hydrogen sulfide content of vent gas shall be determined using ASTM Method D 1945-96, ASTM Method UOP 539-97, ASTM Method D 4084-94, or ASTM Method D 4810-88. [District Rule 4311, 6.3.4] Federally Enforceable Through Title V Permit

10. If vent gas composition is monitored with a continuous analyzer employing gas chromatography the minimum sampling frequency shall be one sample every 30 minutes. If vent gas composition is monitored using continuous analyzers not employing gas chromatography, the total reduced sulfur content of vent gas shall be determined by using EPA Method D4468-85. [District Rule 4311, 6.3.4] Federally Enforceable Through Title V Permit

11. Vent gas flow shall be determined using one or more of the following methods, or by any alternative method approved by the APCO, ARB, and EPA: 1) EPA Methods 1 and 2; 2) A verification method recommended by the manufacturer of the flow monitoring equipment installed; 3) Tracer gas dilution or velocity; or 4) Other flow monitors or process monitors that can provide comparison data on a vent stream that is being directed past the ultrasonic flow meter. [District Rule 6.3.4] Federally Enforceable Through Title V Permit

12. The operator shall monitor vent gas composition using one of the following five methods as appropriate. If flares share a common header, a sample from the header will be deemed representative of vent gas composition for all flares served by the header. The operator shall provide the APCO with access to the monitoring system to collect vent gas samples to verify the analysis. 1) Sampling that meets the following requirements: (a) If the flow rate of vent gas flared in any consecutive 15-minute period continuously exceeds 330 standard cubic feet per minute (SCFM), a sample shall be taken within 15 minutes. The sampling frequency thereafter shall be one sample every three hours and shall continue until the flow rate of vent gas flared in any consecutive 15-minute period is continuously 330 SCFM or less. In no case shall a sample be required more frequently than once every 3 hours. (b) Samples shall be analyzed using approved test methods; or 2) Integrated sampling that meets the following requirements: (a) If the flow rate of vent gas flared in any consecutive 15 minute period continuously exceeds 330 SCFM, integrated sampling shall begin within 15 minutes and shall continue until the flow rate of vent gas flared in any consecutive 15 minute period is continuously 330 SCFM or less. (b) Integrated sampling shall consist of a minimum of one aliquot for each 15-minute period until the sample container is full. If sampling is still required pursuant to part (a), a new sample container shall be placed in service within one hour after the previous sample was filled. A sample container shall not be used for a sampling period that exceeds 24 hours. (c) Samples shall be analyzed using approved test methods; or 3) Continuous analyzers that meet the following requirements: (a) The analyzers shall continuously monitor for total hydrocarbon methane, and depending upon the analytical method used pursuant to Section 6.3.4, hydrogen sulfide or total reduced sulfur. (b) The hydrocarbon analyzer shall have a full-scale range of 100% total hydrocarbon. (c) Each analyzer shall be maintained to be accurate to within 20% when compared to any field accuracy tests or to within 5% of full scale; or 4). Continuous analyzers employing gas chromatography that meet the following requirements: (a) The gas chromatography system shall monitor for total hydrocarbon, methane, and hydrogen sulfide. (b) The gas chromatography system shall be maintained to be accurate within 5% of full scale; or 5) Monitor sulfur content using a colorimetric tube system on a daily basis, and monitor vent gas hydrocarbon on a weekly basis by collecting samples and having them tested using approved test methods. [District Rule 4311, 6.6] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

14. The operator of a flare with a water seal shall monitor and record the water level and pressure of the water seal daily or as specified on the Permit to Operate. [District Rule 4311, 6.8] Federally Enforceable Through Title V Permit

15. Periods of flare monitoring system inoperation greater than 24 continuous hours shall be reported by the following working day, followed by notification of resumption of monitoring. Periods of inoperation of monitoring equipment shall not exceed 14 days per any 18-consecutive-month period. Periods of flare monitoring system inoperation do not include the periods when the system feeding the flare is not operating. [District Rule 4311, 6.9] Federally Enforceable Through Title V Permit

16. During periods of inoperation of continuous analyzers or auto-samplers, operators responsible for monitoring shall take one sample within 30 minutes of the commencement of flaring, from the flare header or from an alternate location at which samples are representative of vent gas composition and have samples analyzed using approved test methods. During periods of inoperation of flow monitors, flow shall be calculated using good engineering practices. [District Rule 4311, 6.9] Federally Enforceable Through Title V Permit

17. Permittee shall maintain and calibrate all required monitors and recording devices in accordance with the applicable manufacturer's specifications. In order to claim that a manufacturer's specification is not applicable, the person responsible for emissions must have, and follow, a written maintenance policy that was developed for the device in question. The written policy must explain and justify the difference between the written procedure and the manufacturer's procedure. [District Rule 4311, 6.9] Federally Enforceable Through Title V Permit

18. All in-line continuous analyzer and flow monitoring data must be continuously recorded by an electronic data acquisition system capable of one-minute averages. Flow monitoring data shall be recorded as one-minute averages. [District Rule 4311, 6.9] Federally Enforceable Through Title V Permit

19. Effective on and after July 1, 2012, the permittee shall maintain a copy of annual reports submitted to the APCO. [District Rule 4311, 6.1.6] Federally Enforceable Through Title V Permit

20. Permittee shall maintain records of the duration of flare operation, amount of gas burned, and the nature of the emergency situation. [District Rule 4311, 6.1.3] Federally Enforceable Through Title V Permit

21. Permittee shall maintain records of all monitoring data collected. [District Rule 4311, 6.1.7] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-206-2 **EXPIRATION DATE:** ~~10/31~~/2009

SECTION: 2 **TOWNSHIP:** 31S **RANGE:** 23E

DRAFT

EQUIPMENT DESCRIPTION:
762 BHP CATERPILLAR MODEL C15 TIER 2 CERTIFIED DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

PERMIT UNIT REQUIREMENTS

1. {2414} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
2. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 17 CCR 93115, and 40 CFR 60 Subpart IIII] Federally Enforceable Through Title V Permit
4. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801, 17 CCR 93115, 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
5. Emissions from this IC engine shall not exceed any of the following limits: 4.5 g-NOx/bhp-hr, 2.6 g-CO/bhp-hr, or 0.3 g-VOC/bhp-hr. [District Rule 2201, 17 CCR 93115, and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
6. Emissions from this IC engine shall not exceed 0.15 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102, 17 CCR 93115, and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
7. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702 and 40 CFR 60 Subpart IIII] Federally Enforceable Through Title V Permit
8. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rule 4702, 17 CCR 93115 and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
9. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit
10. This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702] Federally Enforceable Through Title V Permit

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

11. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit

12. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit

13. The permittee shall maintain monthly records of the type of fuel purchased. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-207-2 **EXPIRATION DATE:** ~~10/31~~/2009

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

DRAFT

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

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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 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
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: 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
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. 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
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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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 NOx, 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 NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of 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 NOx CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOX 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

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-208-2 **EXPIRATION DATE:** ~~10/31~~/2009

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

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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: 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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 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
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: 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
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. 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
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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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 NOx, 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 NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of 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 NOx CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOX 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

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-209-2 **EXPIRATION DATE:** ~~10/31~~/2009

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

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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: 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

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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 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
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: 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
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. 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
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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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 NOx, 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 NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of 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 NOx CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOX 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

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-210-2 **EXPIRATION DATE:** 10/31/2009

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

DRAFT

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. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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 114.2 MMscf per calendar year. Compliance with this limit may be shown by a record of the annul fuel usage. [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 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
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: 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
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. 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
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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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 NOx, 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 NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of 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 NOx CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOX 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

36. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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37. 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

38. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

39. 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

40. 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

41. 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

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-211-2 **EXPIRATION DATE:** ~~10/31/2009~~

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

DRAFT

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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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 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

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: 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

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. 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

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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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 NOx, 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 NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of 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 NOx CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOX 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

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-212-2 **EXPIRATION DATE:** 10/31/2009

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

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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. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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 114.2 MMscf per calendar year. Compliance with this limit may be shown by a record of the annul fuel usage. [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 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

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: 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

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. 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

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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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 NOx, 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 NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of 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 NOx CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOX 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

36. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

37. 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

38. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

39. 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

40. 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

41. 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

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-214-2 **EXPIRATION DATE:** 10/31/2009

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

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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. 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 6.5] 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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 114.2 MMscf per calendar year. Compliance with this limit may be shown by a record of the annul fuel usage. [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 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
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: 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
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. 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
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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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 NOx, 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 NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of 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 NOx CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOX 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

36. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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37. 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

38. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

39. 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

40. 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

41. 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

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ATTACHMENT B

Previous Title V Operating Permit

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

Permit to Operate

FACILITY: S-2234 **EXPIRATION DATE:** 10/31/2009

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

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

FACILITY DESCRIPTION: NATURAL GAS PROCESSING

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

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

Seyed Sadredin
Executive Director / APCO

David Warner
Director of Permit Services

Southern Regional Office • 34946 Flyover Court • Bakersfield, CA 93308 • (661) 392-5500 • Fax (661) 392-5585

FACILITY: S-2234-0-2 **EXPIRATION DATE:** 10/31/2009

FACILITY-WIDE REQUIREMENTS

1. Equipment that is in vacuum service is exempt from the control and monitoring requirements and work practice standards of District Rule 4409 and applicable NSPS requirements, provided the equipment is identified as such in the Operator Management Plan. [District Rule District Rule 4409, 4.2.8 and 40 CFR 60.482-1(d)] Federally Enforceable Through Title V Permit
2. For determining compliance with applicable NSPS requirements, the test methods and procedures at 40 CFR 60.485 shall be used. Alternative test methods may be used subject to approval pursuant to 40 CFR 60.8. [40 CFR 60.8, 40 CFR 60.485] Federally Enforceable Through Title V Permit
3. For all components that are subject to applicable NSPS requirements and are included in the permit unit addendum to the operator management plan and that comply with the applicable NSPS inspection, maintenance and repair requirements as specified by the terms and condition of this permit, a Title-V permit shield is granted for applicable requirements at 40 CFR 60, Subpart KKK. [District Rule 40 CFR 60, Subpart KKK] Federally Enforceable Through Title V Permit
4. If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements as specified in this permit unit. [District Rule 4409, 4.2.8 and 40 CFR 60.482-10(i)] Federally Enforceable Through Title V Permit
5. For open ended lines and open ended valves, subject to applicable NSPS, each open-ended valve or line shall be sealed with two (2) valves, a blind flange, a cap, or a plug at all times, except during operations requiring process fluid flow through the valve or line. Open ended lines and valves designed to open automatically in the event of an emergency are exempt from this requirement [40 CFR 60.482-6(a) and 40 CFR 60.482-6(d)] Federally Enforceable Through Title V Permit
6. For valves subject to applicable new source performance standards (NSPS), any valve in gas/vapor service or light liquid service that is designated in the Operator Management Plan as an unsafe-to-monitor valve is exempt from the monthly NSPS leak inspection requirements, provided: 1) the owner/operator demonstrates the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence, and 2) a written plan is adhered to that requires monitoring of the valve as frequently as practicable during safe-to-monitor times and at least annually and during shutdown. [40 CFR 60.482-7(g)] Federally Enforceable Through Title V Permit
7. For valves subject to applicable NSPS, any valve in gas/vapor service or light liquid service that is designated in the Operator Management Plan as a difficult-to-monitor (inaccessible) valve is exempt from the monthly NSPS leak inspection requirements, provided: 1) the owner/operator demonstrates the valve cannot be monitored without elevating the monitoring personnel more than 15 feet above a support surface, or that it is over 6 feet away from a platform , 2) the process unit within which the valve is located either becomes an affected facility through 40 CFR 60.14 or 60.15 or if the owner/operator designates less than 3.0% of the total number of valves as difficult-to-monitor, and 3) a written plan is adhered to that, requires monitoring of the valve at least annually and during shutdown. [40 CFR 60.482-7(h)] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

8. Any components of the closed vent system that are designated as unsafe to inspect are exempt from the inspection requirements specified in this permit unit if the owner or operator complies with the following: 1) the owner or operator determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with the inspection requirements; 2) the owner or operator identifies the components in the Operator Management Plan; 3) the owner or operator has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times; and 4) inspection and required repair of the components is performed at least annually and during shutdown. [District Rule 4409, 5.3.7.5 and 40 CFR 60.482-10(j)] Federally Enforceable Through Title V Permit

9. For components subject to applicable NSPS, when a leak is detected, a weatherproof and readily visible tag shall be attached, bearing the equipment identification number and date which the leak is detected. The tag on a valve shall remain in place until after it has been monitored for 2 successive months and no leak has been detected. The tag on all other equipment may be removed after repair and re-inspection document compliance with the applicable NSPS. [40 CFR 60.486(b) and 60.635(b)(1)] Federally Enforceable Through Title V Permit

10. Any leak detected on the basis of sight, smell, or sound shall be identified by the operator affixing a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until repair and reinspection document compliance, whether or not operator inspection is otherwise required by this permit. [District Rule 4409, 5.3.3 and5.3.3] Federally Enforceable Through Title V Permit

11. Any leaking component and any leak shall be repaired to a leak-free condition and reinspected within 15 calendar days. [40 CFR 60.482-7] Federally Enforceable Through Title V Permit

12. For components subject to applicable NSPS standards, except as otherwise provided by 40 CFR 60.482-9, any component leak shall be repaired to a leak-free condition, or vented to a flare satisfying the requirements of 40 CFR 60.18, or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 or EPA Method 18 within fifteen (15) calendar days of detection. A first attempt at repair shall be made no later than 5 calendar days after leak detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates necessary and sufficient actions are being taken to correct the leak within this time period. [40 CFR 60.482-2(c)(1) and (c)(2), 60.482-3(g), 60.482-7(d), 60.482-8(c), and 60.633(b)(3)] Federally Enforceable Through Title V Permit

13. For components subject to applicable NSPS, if the leaking component is an essential part of a critical process identified in the operator management plan and which cannot be immediately shut down for repairs, the operator shall minimize the leak within 15 calendar days. If the leak which has been minimized still exceeds the applicable NSPS standard, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than six months from the date of the original leak detection for pumps and one year from the date of the original leak detection for other components. Delay of repair is allowed for equipment which is isolated from the process and which does not remain in VOC service and delay of repair is is allowed pursuant to 40 CFR 60.482-2(c)(1), 40 CFR 60.482-3(g)(1), 40 CFR 60.482-4(b)(1), 40 CFR 60.482-7(d)(1),40 CFR 60.482-8(c)(1) [40 CFR 60.482- 2(c)(1). [40 CFR 40 CFR 60.482-3(g)(1), 40 CFR 60.482-4(b)(1), 40 CFR 60.482-7(d)(1),40 CFR 60.482-8(c)(1), 60.482-9(a) and (b)] Federally Enforceable Through Title V Permit

14. Delay of repair of a closed vent system for which leaks have been detected is allowed if the closed vent system is an essential part of a critical process identified in the operator management plan which cannot be immediately shut down for repairs or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. However the operator shall minimize the leak within 15 calendar days. If the leak which has been minimized still exceeds the limit in this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. [40 CFR 60.482-9] Federally Enforceable Through Title V Permit

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15. For the purpose of determining compliance with applicable NSPS, each operator shall maintain an inspection log for the components subject to NSPS inspection requirements that contains the following information: 1) instrument, operator, and equipment identification numbers; 2) date of leak detection; 3) dates and repair method of each attempt to repair the leak; 4) "above 10,000" if the maximum instrument reading after each repair attempt is equal to or greater than 10,000 ppm; 5) "repair delayed", reason for delay, signature of individual whose decision it was that repair could not be effected without a process shutdown, and expected date of successful repair if a leak is not repaired within 15 days of detection; 6) dates of process unit shutdown that occur while the equipment is unrepaired; 7) date of successful repair and emission level of recheck after leak is repaired. [District Rule 40 CFR 60.486(c) and 60.635(2)(i) through (ix)] Federally Enforceable Through Title V Permit

16. Each piece of equipment subject to requirements of this permit is presumed to be in VOC service or in wet gas service unless an owner or operator demonstrates that the piece of equipment is not in VOC service or in wet gas service. For a piece of equipment to be considered not in VOC service, it must be determined that the VOC content can be reasonably expected never to exceed 10.0 percent by weight. For a piece of equipment to be considered in wet gas service, it must be determined that it contains or contacts the field gas before the extraction step in the process. For purposes of determining the percent VOC content of the process fluid that is contained in or contacts a piece of equipment, procedures that conform to the methods described this permit shall be used. [40 CFR 60.485(d) and 60.632(f)] Federally Enforceable Through Title V Permit

17. Compliance the no detectable emission standards for this permit unit shall be determined as follows: 1) EPA Method 21 shall be followed, 2) Method 21 shall be used to determine the background level and all potential leak interfaces shall be traversed as close to the inter face as possible, and 3) the arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm to determine compliance. [40 CFR 60.485(c)] Federally Enforceable Through Title V Permit

18. For valves subject to applicable NSPS, if the operator elects to comply with the allowable percentage of leaking valves then for this permit unit, the operator shall notify the APCO 90 days before implementing these alternatives. [40 CFR 60.483-1(b)(1) and (d), 60. 483-2(a)(2), and 60.487(d)] Federally Enforceable Through Title V Permit

19. For valves subject to applicable NSPS, if the allowable percentage of leaking valves is selected, then a performance test shall be conducted initially upon designation for allowable percentage of leaking valves, annually, and at other times requested by the APCO. The performance test shall be conducted as follows: 1) all valves in gas/vapor and light liquid service shall be monitored within 1 week using EPA Method 21 and 2) the leak percentage shall be determined by dividing the number of leaking valves detected and valves for which repair has been delayed by the number of valves in gas/vapor and light liquid service in this permit unit, 3) a record must be kept of the percent of valves found leaking during each leak detection period. [40 CFR 60.483-1(b)(2) and (c) and 60. 483-2(b)(5) and (6)] Federally Enforceable Through Title V Permit

20. For compressors subject to applicable NSPS, each compressor shall meet the applicable control system requirements of 40 CFR 482-3(a) - (i), except as otherwise provided by 40 CFR 60.482-1(c) and 40 CFR 60.482-3(h) and (i). [40 CFR 60.482-3(a) through (j)], 40 CFR 60.482-1(c), 40 CFR 60.482-3(h) and (i), and 40 CFR 60.633] Federally Enforceable Through Title V Permit

21. Compressors that are subject to applicable NSPS, are exempt from requirements of 40 CFR 60.482-3(a) and 40 CFR 60.482-3(b) if the compressor is equipped with a closed vent system to capture and transport leakage from the compressor drive shaft back to a process fuel gas system or a control device. Closed vent systems piping shall comply with applicable requirements at 40 CFR 60.482-10. Closed vent vapor recovery systems shall comply with design requirements at 40 CFR 60.482-10(b). Enclosed combustion devices used by closed vent system shall comply with design requirements at 40 CFR 60.482-10(c). Flares used by closed vent systems shall comply with requirements at 40 CFR 60.482-10(d). Closed vent system control devices shall comply with monitoring requirements at 40 CFR 60.482-10(e). [40 CFR 60 .482-3, 40 CFR 60.482-10] Federally Enforceable Through Title V Permit

22. Compressors that are subject to applicable NSPS and are designated in the Operator Management Plan for no detectable leak emission, as indicated by an instrument reading of less than 500 ppm above background, is are exempt from the requirements of 40 CFR 482-3(a)-(h), provided the compressor is tested for compliance with no detectable emissions initially upon designation, annually, and at other times requested by the APCO. [40 CFR 60.482-3(i)] Federally Enforceable Through Title V Permit

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23. When determining compliance with applicable NSPS, if an instrument reading of 10,000 ppm or greater is measured, a leak is detected. [40 CFR 60.633(b)(2), 40482-7(a), (b), and (c] Federally Enforceable Through Title V Permit

24. For open ended lines or valves subject to applicable NSPS, each open-ended valve or line equipped with a second valve shall be operated so that the valve on the process fluid end is closed before the second valve is closed. [40 CFR 60.482-6(b)] Federally Enforceable Through Title V Permit

25. For equipment subject to applicable NSPS when a double block-and-bleed system is being used, the bleed valve or line may remain open only during operations that require venting the line between the block valves. [40 CFR 60.482-6(c)] Federally Enforceable Through Title V Permit

26. Except as provided by applicable NSPS, valves that are subject to NSPS that are in gas/vapor service or light liquid service shall be monitored monthly to detect leaks using EPA Method 21. Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter. If a leak is subsequently detected, monitoring shall revert to monthly. [40 CFR 60.482-7(a), (b), and (c)] Federally Enforceable Through Title V Permit

27. Any valve in gas/vapor service or light liquid service that is designated in the equipment log list for no detectable leak emission, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the monitoring requirements of 40 CFR 60.482-7(a), provided the valve: 1) has no external actuating mechanism in contact with the process fluid and 2) is tested for and meets compliance with no detectable leak emission initially upon designation, annually and at other times requested by the APCO. [40 CFR 60.482-7(f)] Federally Enforceable Through Title V Permit

28. For valves subject to applicable NSPS requirements, for a valve in gas/vapor service or light or heavy liquid service, first attempts at repair shall include the following where practicable: 1) tightening of bonnet bolts, 2) replacement of bonnet bolts, 3) tightening of packing gland nuts, and 4) injection of lubricant into lubricant packing. [40 CFR 60.482-7(e) and 60.482-8(d)] Federally Enforceable Through Title V Permit

29. For pumps and valves in heavy liquid service, pressure relief devices in light or heavy liquid service, and flanges and other connectors, that are subject to applicable NSPS requirements, if evidence of a potential leak is found by sight, sound, smell, or any other detection method then the device shall be monitored within 5 days for leak detection in accordance with EPA Method 21. A leak is detected if an instrument reading of 10,000 ppm or greater is measured. [40 CFR 60.482-8(a) and (b)] Federally Enforceable Through Title V Permit

30. In addition to the information required by Rule 4409, the operator management plan shall include an addendum for this permit unit containing the following applicable NSPS information: 1) list of identification numbers for equipment subject to the applicable NSPS requirements, 2) list of identification numbers for equipment which is designated for no detectable emissions and which is signed by the owner/operator, 3) list of equipment identification numbers for pressure relief devices which must be operated with no detectable emissions, 4) dates of each compliance test for emissions below 500 ppm, for all equipment subject to this no detectable emission limit and the background level measured and the maximum instrument reading measured at the equipment, during each test, and 5) list of identification numbers for equipment in vacuum service. [40 CFR 60.486(e) and 60.635(b)(2)(x)] Federally Enforceable Through Title V Permit

31. In addition to the information required by Rule 4409, the operator management plan shall include an addendum for this permit unit containing the following applicable NSPS information: for valves in gas/vapor service and light liquid service: 1) a list of identification numbers for valves designated "unsafe-to-monitor" and for valves designated "difficult-to monitor", 2) an explanation for each valve stating why it is so designated, and 3) the schedule for monitoring each such valve. [40 CFR 60.486(f)] Federally Enforceable Through Title V Permit

32. For valves subject to NSPS annual leak detection alternative requirements, the NSPS inspection log shall include the following information: 1) a schedule of monitoring and 2) the percent of valves found leaking during each monitoring period. [CFR 60.486(g)] Federally Enforceable Through Title V Permit

33. A log containing the following information for pumps and compressors equipped a barrier fluid seal system which includes a seal failure sensor, for which a system failure criteria is required to be established, pursuant to the requirements for this permit unit, shall be maintained and kept in a readily accessible location: 1) the design criterion required by this permit and an explanation and 2) any changes to this criterion and reasons for the changes. [40 CFR 60.486(h)] Federally Enforceable Through Title V Permit

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34. For equipment (compressors and components) subject to applicable NSPS, the operator shall maintain information and data used to demonstrate that a piece of equipment is not in VOC service and information and data used to demonstrate that a reciprocating compressor is in wet gas service. The information shall be included in the NSPS inspection log for the permit unit and shall be kept in a readily accessible location. [40 CFR 60.486(j) and 60.635(c)] Federally Enforceable Through Title V Permit

35. Vapor recovery systems (for example, condensers and absorbers) shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, whichever is less stringent. [40 CFR 60.482-10(b)] Federally Enforceable Through Title V Permit

36. Enclosed combustion devices shall be designed and operated to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816 øC. [40 CFR 60.482-10(c)] Federally Enforceable Through Title V Permit

37. If the vapor collection system or closed vent system is constructed of hard-piping, the owner or operator shall conduct an initial inspection according to the procedures specified in EPA Method 21 using the calibration gases as specified in the requirements for this permit unit. The owner or operator shall also conduct annual visual inspections for visible, audible, or olfactory indications of leaks. [40 CFR 60.482-10(f)(1) and 40 CFR 60.485(b)] Federally Enforceable Through Title V Permit

38. If the vapor collection system or closed vent system is constructed of ductwork, the owner or operator shall conduct an initial inspection and annual inspections according to the procedures specified in EPA Method 21 using the calibration gases as specified in the requirements for this permit unit. The owner or operator shall also conduct annual visual inspections for visible, audible, or olfactory indications of leaks. [40 CFR 60.482-10(f)(2) and 40 CFR 60.485(b)] Federally Enforceable Through Title V Permit

39. Any parts of the closed vent system that are designated as difficult to inspect are exempt from the inspection requirements of 40 CFR 60.482-10(f)(1) and (f)(2) if the owner or operator complies with the following: 1) the owner or operator determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and 2) the process unit within which the closed vent system is located becomes an affected facility through modification or reconstruction, as defined in 40 CFR 60.14 and 60.15, or the owner or operator designates less than 3.0 percent of the total number of closed vent system equipment as difficult to inspect; and 3) the owner or operator has a written plan that requires inspection of the equipment at least every 5 years. A closed vent system is exempt from inspection if it is operated under a vacuum. [40 CFR 60.482-10(k)] Federally Enforceable Through Title V Permit

40. Closed vent systems and control devices shall be operated at all times when emissions may be vented to them. [40 CFR 60.482-10(m)] Federally Enforceable Through Title V Permit

41. A log shall be maintained containing the following information: 1) identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment; 2) identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment; 3) for each inspection conducted in accordance with EPA Method 21 during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected; and 4) for each visual inspection conducted for visible, audible, or olfactory indications of leaks during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected. [40 CFR 60.482-10(l) and 40 CFR 60.485(b)] Federally Enforceable Through Title V Permit

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42. For components subject to applicable NSPS requirements, semiannual reports shall be submitted to the APCO containing the following information: 1) process unit identification, 2) for each month during the reporting period, number of valves, pumps, compressors, and pressure relief devices for which leaks were detected; number of valves, pumps, compressors, and pressure relief devices for which leaks were not repaired within 15 days and a first-attempt not made within 5 days of leak detection; the facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible 3) dates of process unit shutdowns which occurred within the reporting period, and 4) revisions to items reported in the initial or subsequent semiannual reports. [40 CFR 60.487(a) and (c) and 60.636(c)] Federally Enforceable Through Title V Permit

43. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit

44. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit

45. The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0]

46. Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (3/21/02). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit

47. The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.8.1 and 9.12.1] Federally Enforceable Through Title V Permit

48. A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit

49. Every application for a permit required under Rule 2010 (12/17/92) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit

50. The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit

51. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

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

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

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

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

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

58. The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.8.5] Federally Enforceable Through Title V Permit

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

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

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

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

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

64. No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (11/15/01). If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and County Rules 401 (in all eight counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit

65. No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating with a VOC content in excess of the corresponding limit specified in the Table of Standards of District Rule 4601 (10/31/01) for use or sale within the District. [District Rule 4601, 5.1] Federally Enforceable Through Title V Permit

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66. All VOC-containing materials for architectural coatings subject to Rule 4601 (10/31/01) shall be stored in closed containers when not in use. [District Rule 4601, 5.4] Federally Enforceable Through Title V Permit

67. The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.3 (10/31/01). [District Rule 4601, 6.1 and 6.3] Federally Enforceable Through Title V Permit

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

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

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

71. Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8021 and 8011] Federally Enforceable Through Title V Permit

72. Outdoor handling, storage and transport of any bulk material which emits dust shall comply with the requirements of District Rule 8031, unless specifically exempted under Section 4.0 of Rule 8031 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8031 and 8011] Federally Enforceable Through Title V Permit

73. An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8041 and 8011] Federally Enforceable Through Title V Permit

74. Whenever open areas are disturbed or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8051 and 8011] Federally Enforceable Through Title V Permit

75. Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8061 and Rule 8011] Federally Enforceable Through Title V Permit

76. Any unpaved vehicle/equipment area that anticipates more than 75 vehicle trips per day shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 100 vehicle trips per day shall comply with the requirements of Section 5.1.2 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8071 and Rule 8011] Federally Enforceable Through Title V Permit

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

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

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

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

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

82. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (11/15/01); 4601, sections 5.1, 5.2, 5.3, 5.8 and 8.0 (10/31/01); 8021 (11/15/01); 8031 (11/15/01); 8041 (11/15/01); 8051 (11/15/01); 8061 (11/15/01); and 8071 (11/15/01). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

83. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

84. The permittee shall not use any components that leak in excess of the applicable leak standards as specified in this permit. Components that have been found leaking in excess of the applicable leak standards of this rule may be used provided such leaking components have been identified with a tag for repair, are repaired, or are awaiting re-inspection after being repaired, within the applicable time period specified in this permit. [District Rule 4409, 5.1.1] Federally Enforceable Through Title V Permit

85. For valves, threaded connections, flanges, pipes, pumps, compressors, and other components not specified in this permit; a major gas leak is a detection of > 10,000 ppmv as methane; a minor gas leak is a detection of 1,000 to 10,000 ppmv as methane when the component is in liquid service; a minor gas leak is a detection of 2,000 to 10,000 ppmv as methane when the component is in gas/vapor service. [District Rule 4409, 5.1.1] Federally Enforceable Through Title V Permit

86. For pressure relief devices (PRDs); a major gas leak is a detection of > 10,000 ppmv as methane; a minor gas leak is a detection of 200 to 10,000 ppmv as methane when the component is in liquid service; a minor gas leak is a detection of 400 to 10,000 ppmv as methane when the component is in gas/vapor service. [District Rule 4409, 5.1.1] Federally Enforceable Through Title V Permit

87. For polished rod stuffing boxes (PRSBs); a major gas leak is a detection of > 10,000 ppmv as methane; a minor gas leak is a detection of 1,000 to 10,000 ppmv as methane when the component is in liquid service; a minor gas leak is a detection of 1,000 to 10,000 ppmv as methane when the component is in gas/vapor service. [District Rule 4409, 5.1.1] Federally Enforceable Through Title V Permit

88. Each hatch shall be closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4409, 5.1.2] Federally Enforceable Through Title V Permit

89. Minor gas leaks from PRSBs detected during any District inspection shall not be counted toward determination of compliance with this rule provided the permittee repairs, replaces, or removes leaking PRSBs from VOC service as soon as practicable but not later than seven calendar days. [District Rule 4409, 5.1.3.1.2] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

90. Leaks detected during quarterly operator inspections shall not be counted towards determination of compliance with the provisions of Rule 4409 provided the leaking components are repaired as soon as practicable but not later than the time frame specified in this permit. Leaks detected during quarterly operator inspections that are not repaired, replaced, or removed from operation as soon as practicable but not later than the time frame specified in this rule shall be counted toward determination of compliance with the provisions of Rule 4409. [District Rule 4409, 5.1.3.2.1 and 5.1.3.2.2] Federally Enforceable Through Title V Permit

91. Leaking components at this facility detected during annual operator inspections, as required by Rule 4409 for a specific component type, that exceed the leak standards specified in this permit, shall constitute a violation of this rule. This violation is regardless of whether or not the leaking components are repaired, replaced, or removed from operation within the allowable repair time frame specified in this permit. [District Rule 4409, 5.1.3.2.3] Federally Enforceable Through Title V Permit

92. An open-ended line, or a valve located at the end of the line, that is not sealed with either a blind flange, a plug, a cap, or a second closed valve that is not closed at all times, except during attended operations requiring process fluid flow through the open-ended line is a leak. Attended operations include draining or degassing operations, connection of temporary process equipment, sampling of process streams, emergency venting, and other normal operational needs, provided such operations are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4409, 5.1.4.1] Federally Enforceable Through Title V Permit

93. A leak from a component is when there is a major liquid leak from the component. A major liquid leak from a component is when a visible mist or a continuous flow of liquid, that is not seal lubricant, leaks from the component. [District Rule 4409, 5.1.4.2] Federally Enforceable Through Title V Permit

94. A leak from a component is when gas emissions greater than 50,000 ppmv, as methane, leaks from the component. [District Rule 4409, 5.1.4.3] Federally Enforceable Through Title V Permit

95. A minor liquid leak from a component is when more than three drops of liquid per minute, that is not seal lubricant and is not a major liquid leak, leaks from the component. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit

96. When 200 or fewer valves are inspected, a leak from a valve is when more than one valve has a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. When greater than 200 valves are inspected, a leak from a valve is when more than 0.5 % (rounded up to the nearest whole number) of the valves have a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit

97. When 200 or fewer threaded connections are inspected, a leak from a threaded connection is when more than one threaded connection has a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. When greater than 200 threaded connections are inspected, a leak from a threaded connection is when more than 0.5 % (rounded up to the nearest whole number) of the threaded connections have a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit

98. When 200 or fewer flanges are inspected, a leak from a flange is when more than one flange has a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. When greater than 200 flanges are inspected, a leak from a flange is when more than 0.5 % (rounded up to the nearest whole number) of the flanges have a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit

99. When 200 or fewer pumps are inspected, a leak from a pump is when more than two pumps have a minor liquid leak, a minor gas leak, or a gas leak greater than 10,000 ppmv and less than or equal to 50,000 ppmv. When greater than 200 pumps are inspected, a leak from a pump is when more than 1.0 % (rounded up to the nearest whole number) of the pumps have a minor liquid leak, a minor gas leak, or a gas leak greater than 10,000 ppmv and less than or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

100. When compressors, PRDs, or other components not specified in this permit are inspected, a leak from these components is when more than one component has a minor liquid leak, a minor gas leak, or a gas leak greater than 10,000 ppmv and less than or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit

101. When 200 or fewer PRSBs are inspected, a leak is when more than four have a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. When greater than 200 PRSBs are inspected, a leak is when more than 2.0 % (rounded up to the nearest whole number) of the PRSBs have a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit

102. When 200 or fewer wells at light crude oil or gas production facilities are inspected, a leak from a pipe is when more than two or more pipes have a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. When greater than 200 wells at light crude oil or gas production facilities are inspected, a leak from a pipe is when more than 1.0 % (rounded up to the nearest whole number) of the pipes have a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit

103. When pipes at natural gas processing facilities are inspected, a leak from a pipe is when more than two have a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit

104. For manned facilities all accessible operating pumps, compressors, and PRDs, in service, shall be audio-visually inspected for leaks at least once every 24 hours except when operators do not report to the facility during a 24 hour period. [District Rule 4409, 5.2.1] Federally Enforceable Through Title V Permit

105. For unmanned facilities all accessible operating pumps, compressors, and PRDs, in service, shall be audio-visually inspected for leaks at least once per calendar week. [District Rule 4409, 5.2.2] Federally Enforceable Through Title V Permit

106. All accessible operating pumps, compressors, and PRDs, in service, that are found to be leaking by audio-visual inspection shall be attempted to be repaired immediately. The leaking component shall then be tested within 24 hours and, if found leaking again, shall be repaired as soon as practicable but not later than the timeframe specified in this permit. [District Rule 4409, 5.2.3] Federally Enforceable Through Title V Permit

107. Except for inaccessible components, unsafe-to-monitor components, or pipes, all components, in service, shall be tested for leaks at least once every calendar quarter. [District Rule 4409, 5.2.4] Federally Enforceable Through Title V Permit

108. All new, replaced, or repaired fittings, flanges, and threaded connections shall be tested for leaks immediately after being placed into service. [District Rule 4409, 5.2.5] Federally Enforceable Through Title V Permit

109. All inaccessible components shall be tested for leaks at least once every 12 months. [District Rule 4409, 5.2.6] Federally Enforceable Through Title V Permit

110. All unsafe-to-monitor components shall be tested for leaks during each turnaround. [District Rule 4409, 5.2.7] Federally Enforceable Through Title V Permit

111. All pipes shall be visually inspected for leaks at least once every 12 months. [District Rule 4409, 5.2.8] Federally Enforceable Through Title V Permit

112. All pipes, in service, that are found to be leaking by visual inspection shall be attempted to be repaired immediately. The leaking pipe shall then be tested within 24 hours and, if found leaking again, shall be repaired as soon as practicable but not later than the timeframe specified in this permit. [District Rule 4409, 5.2.8.1] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

113. The annual pipe inspection required by either the Department of Oil, Gas, and Geothermal Resources (DOGGR) pursuant to California Code of Regulation Title 14, Division 2, Subchapter 2, Section 1774 (Oilfield Facilities and Equipment Maintenance), or by the Spill Prevention Control and Countermeasure Plan (SPCC) pursuant to 40 Code of Federal Regulation Part 112 (Oil Prevention and Response: Non- Transportation-Related Onshore and Offshore Facilities) can be used as the annual pipe inspection required by District Rule 4409. [District Rule 4409, 5.2.8.2] Federally Enforceable Through Title V Permit

114. Except for pumps, compressors, and PRDs, the permittee may apply for written approval from the District to change the inspection frequency of accessible components from quarterly to annually for a specific component type provided the following two qualifying requirements are met. During the previous five consecutive quarterly inspections, for the specific component type, there shall be no more leaks than as allowed by this permit. The permittee also shall not have received a Notice of Violation (NOV) from the District during the previous 12 months for violating any provisions of District Rule 4409 for the specific component type. If these two qualifying requirements have not been met, then the inspection frequency shall revert back to quarterly. The written request shall include pertinent documentation to demonstrate that the operator has successfully met the two qualifying requirements. [District Rule 4409, 5.2.9 and 5.2.10] Federally Enforceable Through Title V Permit

115. The permittee shall notify the District in writing within five calendar days after changing the inspection frequency for a specific component type. The written notification shall include the reason(s) and date of change to a quarterly inspection frequency. [District Rule 4409, 5.2.11] Federally Enforceable Through Title V Permit

116. A PRD that releases to the atmosphere shall be inspected by the permittee for leaks as soon as practicable but not later than 24 hours after the time of the release. The permittee shall reinspect the PRD for leaks not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the date of the initial release. If the PRD is found by the permittee to be leaking during either inspection, the PRD leak shall be treated as if the leak was found during the required quarterly operator inspections. [District Rule 4409, 5.2.12] Federally Enforceable Through Title V Permit

117. Except for PRDs, a component shall be inspected for leaks not later than 15 calendar days after repairing the leak or replacing the component. [District Rule 4409, 5.2.13] Federally Enforceable Through Title V Permit

118. District inspections shall not be counted as an operator inspection required by District Rule 4409. Any attempt by an operator to count such District inspections as part of the operator's mandatory inspections is considered a willful circumvention of the rule and is a violation of this rule. [District Rule 4409, 5.2.14] Federally Enforceable Through Title V Permit

119. The operator, upon detection of a leaking component, shall affix to that component a weatherproof, readily visible tag, bearing the date and time when the leak was detected and the date and time of the leak measurement. For gaseous leaks, the tag shall indicate the leak concentration in ppmv. For liquid leaks, the tag shall indicate whether it is a major liquid leak or a minor liquid leak. The tag shall indicate, when applicable, whether the component is an essential component, an unsafe-to-monitor component, or a critical component. The tag shall remain in place until the leaking component is repaired or replaced and reinspected and found to be in compliance with the requirements of this rule. [District Rule 4409, 5.3.1] Federally Enforceable Through Title V Permit

120. The operator shall minimize all component leaks immediately, to the extent possible, but not later than one hour after detection of the leak in order to stop or reduce leakage to the atmosphere. If the leak has been minimized but the leak still exceeds the applicable leak standards specified in this permit, the operator shall do one of the following within the timeframes specified within this permit: 1) repair or replace the leaking component; 2) vent the leaking component to a closed vent system; 3) or remove the leaking component from operation. A closed vent system is a District approved system that is not open to the atmosphere. It is composed of hard-piping, ductwork connections and, if necessary, flow inducing devices that transport gas or vapor from a piece or pieces of equipment to a District approved control device that has a overall VOC collection and destruction or removal efficiency of at least 95%, or that transports gases or vapors back to a process system. [District Rule 4409, 5.3.4 and 5.3.5] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

121. The operator shall repair minor gas leaks within seven days. The operator shall repair major gas leaks, which are > 10,000 ppmv but < or equal to 50,000 ppmv, within three days. The operator shall repair major gas leaks, which are > 50,000 ppmv, within two days. The operator shall repair minor liquid leaks within three days. The operator shall repair major liquid leaks within two days. The leak rate measured after leak minimization has been performed shall be the leak rate used to determine the applicable repair period. The start of the repair period shall be the time of the initial leak detection. [District Rule 4409, 5.3.4 and 5.3.5] Federally Enforceable Through Title V Permit

122. For each calendar quarter, the operator may extend the repair period for a total number of leaking components, not to exceed 0.05 % of the number of components inspected, by type, rounded upward to the nearest whole number. The repair period for minor gas leaks can be extended by seven additional days. The repair period for major gas leaks, which are > 10,000 ppmv but < or equal to 50,000 ppmv, can be extended by two additional days. [District Rule 4409, 5.3.5] Federally Enforceable Through Title V Permit

123. If a leaking component is an essential component or a critical component and which cannot be shut down immediately for repairs, the operator shall do the following: 1) minimize the leak within one hour after detection of the leak; 2) and if the leak has been minimized, but the leak still exceeds the applicable leak standards of Rule 4409 as specified in this permit, the essential component or critical component shall be repaired or replaced to eliminate the leak during the next process unit turnaround. The repair shall occur no later than one year from the date of the original leak detection. [District Rule 4409, 5.3.6] Federally Enforceable Through Title V Permit

124. For any component that has incurred five repair actions for major gas leaks or major liquid leaks, or a combination of major gas leaks and major liquid leaks within a continuous 12-month period, the operator shall do one of the following four options. Options 1a through 1f require written notification to the District, option 2 requires written notification to the District and written District approval, options 3 and 4 do not require written notification to the District: 1a) For compressors replace the existing seal with either a dual mechanical seal, an oil film seal, a gas seal, or a face-type seal; 1b) for pumps replace the pump with a seal-less pump or replace the seal with a dual mechanical seal; 1c) for PRDs replace the PRD and install a rupture disc in the line which precedes the PRD such that the PRD is in series with and follows the rupture disc; 1d) for valves replace the valve with a sealed bellows valve, or for seal rings install graphite or Teflon chevron seal rings in a live-loaded packing gland; 1e) for threaded connections weld the connections or replace threaded connections with flanges; 1f) for sampling connections replace the sampling connection with a closed-loop sampling system; 2) Replace the component with Achieved-in-Practice Best Available Control Technology (BACT) equipment; 3) Vent the component to a District approved closed-vent system; 4) Remove the component from operation. For any component that is accessible, is not unsafe-to-monitor, is not an essential component, or is not a critical component, the operator shall comply with these requirements as soon as practicable but not later than twelve months after the date of detection of the fifth major leak within a continuous 12-month period. For any component that is inaccessible, is unsafe-to-monitor, is essential, or is a critical component, the operator shall comply with these requirements as soon as practicable but not later than the next turnaround or not later than two years after the date of detection of the fifth major leak within a continuous 12-month period, whichever comes first. [District Rule 4409, 5.3.7] Federally Enforceable Through Title V Permit

125. All major components and critical components shall be physically identified clearly and visibly for inspection, repair, and recordkeeping purposes. The physical identification shall consist of labels, tags, manufacturer's nameplate identifier, serial number, or model number, or other system approved by the District that enables an operator or the District to locate each individual component. The operator shall replace physical identifications that become missing or unreadable as soon as practicable but not later than 24 hours after discovery. [District Rule 4409, 5.4.1] Federally Enforceable Through Title V Permit

126. The operator shall keep a copy of the District approved Operator Management Plan (OMP) at the facility and make it available to the District, ARB, and EPA upon request. [District Rule 4409, 6.1.2] Federally Enforceable Through Title V Permit

127. By January 30th of each year the operator shall submit to the District for approval, in writing, an annual report indicating any changes to the existing OMP on file at the District. [District Rule 4409, 6.1.4] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

128. The operator shall maintain an inspection log that has been signed and dated by the facility operator responsible for the inspection, certifying the accuracy of the information recorded in the log. The inspection log shall contain, at a minimum, all of the following information: 1) The total number of components inspected, and the total number and percentage of leaking components found by component types; 2) The location, type, name or description of each leaking component and the description of any unit where the leaking component is found; 3) Date of the leak detection and method of the leak detection; 4) For gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak; 5) The date of repair, replacement, or removal from operation of the leaking component(s); 6) The identification and location of essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes first; 7) The method(s) used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier; 8) The date of re-inspection and the leak concentration in ppmv after the component is repaired or is replaced; 9) The inspector's name, business mailing address, and business telephone number. [District Rule 4409, 6.2.1] Federally Enforceable Through Title V Permit

129. Records of leaks detected during quarterly or annual operator inspections, and each subsequent repair and re-inspection, shall be submitted to the District, ARB, and EPA upon request. [District Rule 4409, 6.2.2] Federally Enforceable Through Title V Permit

130. Records shall be maintained of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components. The records shall include a copy of the current calibration gas certification from the vendor of the calibration gas cylinder, the date of calibration, the concentration of calibration gas, the instrument reading of calibration gas before adjustment, the instrument reading of calibration gas after adjustment, the calibration gas expiration date, and the calibration gas cylinder pressure at the time of calibration. [District Rule 4409, 6.2.3] Federally Enforceable Through Title V Permit

131. All records required by this permit shall be retained on-site for a minimum of five years and made available for District, ARB, and EPA inspection upon request. [District Rule 4409, 6.2.4] Federally Enforceable Through Title V Permit

132. All measurements of gaseous leak concentrations shall be conducted according to EPA Method 21 using an appropriate portable hydrocarbon detection instrument calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in EPA Method 21 or the manufacturer's instructions not more than 30 days prior to its use. [District Rule 4409, 6.3.1] Federally Enforceable Through Title V Permit

133. The VOC content by weight percent shall be determined using ASTM D-1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 for liquids. [District Rule 4409, 6.3.2] Federally Enforceable Through Title V Permit

134. The percent by volume liquid evaporated at 302 øF (150 øC) shall be determined using ASTM D-86. [District Rule 4409, 6.3.3] Federally Enforceable Through Title V Permit

135. The TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D-323, and converting the RVP to TVP at the maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures specified in Appendix A of District Rule 4409. [District Rule 4409, 6.3.4] Federally Enforceable Through Title V Permit

136. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM D-287 or ASTM 1298. Sampling for API gravity shall be performed in accordance with ASTM D-4057. [District Rule 4409, 6.3.5] Federally Enforceable Through Title V Permit

137. The control efficiency of any VOC control device, measured and calculated as carbon, shall be determined by EPA Method 25, except when the outlet concentration must be below 50 ppm in order to meet the standard, in which case EPA Method 25a may be used. EPA Method 18 may be used in lieu of EPA Method 25 or EPA Method 25a provided the identity and approximate concentrations of the analytes/compounds in the sample gas stream are known before analysis with the gas chromatograph and the gas chromatograph is calibrated for each of those known analyte/compound to ensure that the VOC concentrations are neither under- or over-reported. [District Rule 4409, 6.3.6] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

138. Halogenated exempt compounds shall be analyzed by EPA Method 18 or ARB Method 422. [District Rule 4409, 6.3.7] Federally Enforceable Through Title V Permit

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

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-1-17 **EXPIRATION DATE:** 10/31/2009

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

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

PERMIT UNIT REQUIREMENTS

1. Operation shall include refrigerant regeneration system, glycol dehydration system, and two 27.5 MMBtu/hr process heaters F-44-301 & F-44-302 (shared with S-2234-3). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Two process heaters F-44-301 & F-44-302 shall be used on a standby basis, only during periods when one or both gas turbines (S-2234-52 & '53) are inoperative. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Fugitive VOC emission rate from the control system added to control emissions from glycol dehydrator reboiler vent, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c less than or equal to 10,000 ppm (Feb 1999), shall not exceed 0.20 lb/day. Permittee shall demonstrate compliance with specified emissions limit by calculation using the installed components and emissions factors specified above. Permittee shall maintain with the permit an accurate record by number and type of the installed fugitive components and shall make such record available for inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Fugitive VOC emission rate from the propane compressor calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c less than or equal to 10,000 ppm (Feb 1999), shall not exceed 1.9 lb/day. Permittee shall demonstrate compliance with specified emissions limit by calculation using the installed components and emissions factors specified above. Permittee shall maintain with the permit an accurate record by number and type of the installed fugitive components and shall make such record available for inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Control system(s) employed to control emissions from glycol dehydration system vent(s) shall be maintained in a leak free condition, as defined in Rule 4408. [District Rule 4408, Sections 3.8.2, 5.3 and 6.3.2] Federally Enforceable Through Title V Permit
6. The propane compressor shall be maintained in a gas-tight condition. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4409 and shall be reported as a deviation. [District Rule 2201 and Rule 4409, Section 3.20] Federally Enforceable Through Title V Permit
7. Permittee shall maintain monthly records of amount of gas dehydrated and other records as required by Rule 4408. The permittee shall make such records readily available for District inspection upon request and shall be retained on the premises for a period of not less than five years. [District Rule 4408, Sections 6.1.1, 6.1.2 and 6.1.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

8. Process heaters shall be fired exclusively by PUC quality natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Permittee shall maintain operational records of standby process heaters FF-44-301 & FF-44-302, including date, time, and total amount of natural gas consumed. These records shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
10. All process vessels and lines handling volatile organic compounds shall vent only to other process vessels, District-approved flare, or substrata injection system. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Total duration of process heater startup shall not exceed 2 hr/day. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
12. Total duration of process heater shutdown shall not exceed 2 hr/day. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
13. Duration of start-up or shutdown shall not exceed two hours each per occurrence. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. The operator shall maintain daily records of the duration of start-up and shutdown periods. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
14. Except during start-up and shutdown, emissions rates from process heater exhaust shall not exceed any of the following limits: 6 ppmvd NOx @ 3% O2 or 0.007 lb-NOx/MMBtu, 0.002 lb-SOx/MMBtu, 0.014 lb-PM10/MMBtu, 47 ppmvd @ 3% O2 or 0.037 lb-CO/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
15. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
16. Ammonia (NH3) emissions shall not exceed 10 ppmvd @ 3% O2 over a 15 minute averaging period. [District Rule 4102] Federally Enforceable Through Title V Permit
17. Exhaust stack shall be equipped with adequate provisions facilitating the collection of samples consistent with EPA test methods. [District Rule 1081] Federally Enforceable Through Title V Permit
18. Source testing to measure natural gas-combustion NOx and CO emissions, and NH3 emissions from this unit shall be conducted within 60 days of initial start-up. [District Rules 4102, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
19. Source testing to measure natural gas-combustion NOx and CO emissions, and NH3 emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4102, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
20. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
21. Continuous Emissions Monitoring (CEM) equipment shall be in place and operating whenever process heater is operating, except for CEM systems breakdowns, repairs, and required calibration checks and zero and span adjustments, in accordance with 40 CFR 60.13(e). NOx (as NO2) and O2 must be recorded continuously when the CEM equipment is operating. [District Rules 1080, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
22. Operation, calibration and data reduction for the CEM equipment shall be in accordance with the requirements of 40 CFR, Appendix P of Part 51 and Appendix B of Part 60. [District Rule 1080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. CEM records shall be retained for at least 5 years. Records shall include occurrence and duration of start-up, shutdown or malfunction; performance testing, calibrations, checks, and maintenance of CEM; and emission measurements. [District Rule 1080] Federally Enforceable Through Title V Permit

24. Daily summaries of CEM records for each calendar quarter shall be submitted to the District within 30 days of the end of the calendar quarter. Hourly fuel stack gas flow rates and/or hourly fuel flow rates shall be measured during operation and included in quarterly reports. [District Rule 1080] Federally Enforceable Through Title V Permit

25. A report shall be submitted to the District within 30 days of the end of each calendar quarter identifying the time and date of each exceedance of emission limits, the excess emissions generated, and any conversion factor used to calculate emissions. [District Rule 1080] Federally Enforceable Through Title V Permit

26. The quarterly report shall identify each period of excess emissions that occurs during startups, shutdowns, or malfunctions. The nature and cause of each malfunction, corrective action taken, and preventative measures adopted shall also be reported. [District Rule 1080] Federally Enforceable Through Title V Permit

27. Heat exchangers utilizing cooling water shall be properly maintained to prevent VOC emissions from cooling towers. [District Rule 2201] Federally Enforceable Through Title V Permit

28. The operator shall test the circulating water from the cooling tower at least every six months to determine the concentration of hexavalent chromium. The District shall be notified 48 hours in advance of any sampling of cooling water for testing. Required testing may be discontinued and an exemption sought when two consecutive required tests show hexavalent chromium concentrations less than 0.15 mg/l. [District Rule 7012] Federally Enforceable Through Title V Permit

29. Operator shall comply with other applicable requirements of District Rule 7012 (amended 12/17/92). [District Rule 7012] Federally Enforceable Through Title V Permit

30. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Amended December 16, 1993). [District Rule 1081, and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit

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

32. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit

33. Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit

34. Nitrogen oxide (NOx) emissions shall not exceed 140 lb/hr, calculated as NO2. [District Rules 4301, 5.2.2] Federally Enforceable Through Title V Permit

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

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

37. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. NOx emissions during the source test shall be calculated as the arithmetic average of three 30-consecutive-minute test runs. [District Rule 4305] Federally Enforceable Through Title V Permit

38. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. CO emissions during the source test shall be calculated as the arithmetic average of three 30-consecutive-minute test runs. [District Rule 4305] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

39. Stack gas oxygen shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4305] Federally Enforceable Through Title V Permit

40. NH3 emissions for source test purposes shall be determined using BAAQMD method ST-1B. [District Rule 4301] Federally Enforceable Through Title V Permit

41. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rules 2520, 9.4.2 and 4301, 5.2.1] Federally Enforceable Through Title V Permit

42. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested for sulfur content (as hydrogen sulfide). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

43. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6B; or Method 8; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months, however annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

44. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content (as hydrogen sulfide) of the gaseous fuel being fired in the unit shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

45. If fuel analysis is used to demonstrate compliance with the conditions of this permit, the fuel higher heating value for each fuel shall be certified by third party fuel supplier or determined by: ASTM D 240-87 or D 2382-88 for liquid hydrocarbon fuels;ASTM D 1826-88 or D 1945-81 in conjunction with ASTM D 3588-89 for gaseous fuels. [District Rule 2520, 9.4.2; 4305, 6.2.1; and 4351, 6.2.1] Federally Enforceable Through Title V Permit

46. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2; County Rules 404 (Madera), 406 (Fresno), and 407 (Kern, Kings, Merced, San Joaquin, Stanislaus, and Tulare)] Federally Enforceable Through Title V Permit

47. The requirements of 40 CFR 60 Subpart LLL do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

48. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-3-18 **EXPIRATION DATE:** 10/31/2009

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

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

PERMIT UNIT REQUIREMENTS

1. Operation shall include two 27.5 MMBtu/hr process heaters FF-44-301 & FF-44-302 (shared with S-2234-1). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Two process heaters F-44-301 & F-44-302 shall be used on a standby basis, only during periods when one or both gas turbines (S-2234-52 & '-53) are inoperative. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Fugitive VOC emission rate from the control system added to control emissions from glycol dehydrator reboiler vent, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c less than or equal to 10,000 ppm (Feb 1999), shall not exceed 0.20 lb/day. Permittee shall demonstrate compliance with specified emissions limit by calculation using the installed components and emissions factors specified above. Permittee shall maintain with the permit an accurate record by number and type of the installed fugitive components and shall make such record available for inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Fugitive VOC emission rate from the propane compressor, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c less than or equal to 10,000 ppm (Feb 1999), shall not exceed 1.9 lb/day. Permittee shall demonstrate compliance with specified emissions limit by calculation using the installed components and emissions factors specified above. Permittee shall maintain with the permit an accurate record by number and type of the installed fugitive components and shall make such record available for inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Control system(s) employed to control emissions from glycol dehydration system vent(s) shall be maintained in a leak free condition, as defined in Rule 4408. [District Rule 4408, Sections 3.8.2, 5.3 and 6.3.2] Federally Enforceable Through Title V Permit
6. The propane compressor shall be maintained in a gas-tight condition. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4409 and shall be reported as a deviation. [District Rule 2201 and Rule 4409, Section 3.20] Federally Enforceable Through Title V Permit
7. Permittee shall maintain monthly records of amount of gas dehydrated and other records as required by Rule 4408. The permittee shall make such records readily available for District inspection upon request and shall be retained on the premises for a period of not less than five years. [District Rule 4408, Sections 6.1.1, 6.1.2 and 6.1.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

8. Heaters shall be fired exclusively on PUC quality natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit

9. Permittee shall maintain operational records of standby process heaters FF-44-301 & FF-44-302 , including date, time, and total amount of natural gas consumed. These records shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

10. All process vessels and lines handling volatile organic compounds shall vent only to other process vessels, District-approved flare, or substrata injection system. [District Rule 2201] Federally Enforceable Through Title V Permit

11. Total duration of process heater startup shall not exceed 2 hr/day. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

12. Total duration of process heater shutdown shall not exceed 2 hr/day. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

13. Duration of start-up or shutdown shall not exceed two hours each per occurrence. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. The operator shall maintain daily records of the duration of start-up and shutdown periods. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

14. Except during start-up and shutdown, emissions rates from process heater exhaust shall not exceed any of the following limits: 6 ppmvd NOx @ 3% O2 or 0.007 lb-NOx/MMBtu, 0.002 lb-SOx/MMBtu, 0.014 lb-PM10/MMBtu, 47 ppmvd @ 3% O2 or 0.037 lb-CO/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

15. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

16. Heat exchangers utilizing cooling water shall be properly maintained to prevent VOC emissions from cooling towers. [District Rule 2201] Federally Enforceable Through Title V Permit

17. The operator shall test the circulating water from the cooling tower at least every six months to determine the concentration of hexavalent chromium. The District shall be notified 48 hours in advance of any sampling of cooling water for testing. Required testing may be discontinued and an exemption sought when two consecutive required tests show hexavalent chromium concentrations less than 0.15 mg/l. [District Rule 7012] Federally Enforceable Through Title V Permit

18. Operator shall comply with other applicable requirements of District Rule 7012 (amended 12/17/92). [District Rule 7012] Federally Enforceable Through Title V Permit

19. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Amended December 16, 1993). [District Rule 1081, and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit

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

21. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit

22. Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit

23. Source testing shall be performed for the boilers and heaters using EPA Method 7E or ARB Method 100. Source testing shall be conducted within two year after the issuance of this Title V permit and each unit shall be tested during each year in which the unit operates 720 hours or more. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

24. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rules 2520, 9.4.2 and 4301, 5.2.1] Federally Enforceable Through Title V Permit

25. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested for sulfur content (as hydrogen sulfide). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

26. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6B; or Method 8; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months, however annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

27. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content (as hydrogen sulfide) of the gaseous fuel being fired in the unit shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

28. If fuel analysis is used to demonstrate compliance with the conditions of this permit, the fuel higher heating value for each fuel shall be certified by third party fuel supplier or determined by: ASTM D 240-87 or D 2382-88 for liquid hydrocarbon fuels;ASTM D 1826-88 or D 1945-81 in conjunction with ASTM D 3588-89 for gaseous fuels. [District Rule 2520, 9.4.2; 4305, 6.2.1; and 4351, 6.2.1] Federally Enforceable Through Title V Permit

29. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.3.2; County Rules 404 (Madera), 406 (Fresno), and 407 (Kern, Kings, Merced, San Joaquin, Stanislaus, and Tulare)] Federally Enforceable Through Title V Permit

30. Nitrogen oxide (NOx) emissions shall not exceed 140 lb/hr, calculated as NO2. [District Rules 4301, 5.2.2] Federally Enforceable Through Title V Permit

31. The requirements of 40 CFR 60 Subpart LLL do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

32. The following conditions #34 through #75 shall be moved to the facility-wide operating permit upon incorporation of this Authority to Construct into the facility's Title V operating permit.

33. Equipment that is in vacuum service is exempt from the control and monitoring requirements and work practice standards of District Rule 4409 and applicable NSPS requirements, provided the equipment is identified as such in the Operator Management Plan. [District Rule District Rule 4409, 4.2.8 and 40 CFR 60.482-1(d)] Federally Enforceable Through Title V Permit

34. For determining compliance with applicable NSPS requirements, the test methods and procedures at 40 CFR 60.485 shall be used. Alternative test methods may be used subject to approval pursuant to 40 CFR 60.8. [40 CFR 60.8, 40 CFR 60.485] Federally Enforceable Through Title V Permit

35. For all components that are subject to applicable NSPS requirements and are included in the permit unit addendum to the operator management plan and that comply with the applicable NSPS inspection, maintenance and repair requirements as specified by the terms and condition of this permit, a Title-V permit shield is granted for applicable requirements at 40 CFR 60, Subpart KKK. [District Rule 40 CFR 60, Subpart KKK] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

36. If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements as specified in this permit unit. [District Rule 4409, 4.2.8 and 40 CFR 60.482-10(i)] Federally Enforceable Through Title V Permit

37. For open ended lines and open ended valves, subject to applicable NSPS, each open-ended valve or line shall be sealed with two (2) valves, a blind flange, a cap, or a plug at all times, except during operations requiring process fluid flow through the valve or line. Open ended lines and valves designed to open automatically in the event of an emergency are exempt from this requirement [40 CFR 60.482-6(a) and 40 CFR 60.482-6(d)] Federally Enforceable Through Title V Permit

38. For valves subject to applicable new source performance standards (NSPS), any valve in gas/vapor service or light liquid service that is designated in the Operator Management Plan as an unsafe-to-monitor valve is exempt from the monthly NSPS leak inspection requirements, provided: 1) the owner/operator demonstrates the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence, and 2) a written plan is adhered to that requires monitoring of the valve as frequently as practicable during safe-to-monitor times and at least annually and during shutdown. [40 CFR 60.482-7(g)] Federally Enforceable Through Title V Permit

39. For valves subject to applicable NSPS, any valve in gas/vapor service or light liquid service that is designated in the Operator Management Plan as a difficult-to-monitor (inaccessible) valve is exempt from the monthly NSPS leak inspection requirements, provided: 1) the owner/operator demonstrates the valve cannot be monitored without elevating the monitoring personnel more than 15 feet above a support surface, or that it is over 6 feet away from a platform , 2) the process unit within which the valve is located either becomes an affected facility through 40 CFR 60.14 or 60.15 or if the owner/operator designates less than 3.0% of the total number of valves as difficult-to-monitor, and 3) a written plan is adhered to that, requires monitoring of the valve at least annually and during shutdown. [40 CFR 60.482-7(h)] Federally Enforceable Through Title V Permit

40. Any components of the closed vent system that are designated as unsafe to inspect are exempt from the inspection requirements specified in this permit unit if the owner or operator complies with the following: 1) the owner or operator determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with the inspection requirements; 2) the owner or operator identifies the components in the Operator Management Plan; 3) the owner or operator has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times; and 4) inspection and required repair of the components is performed at least annually and during shutdown. [District Rule 4409, 5.3.7.5 and 40 CFR 60.482-10(j)] Federally Enforceable Through Title V Permit

41. For components subject to applicable NSPS, when a leak is detected, a weatherproof and readily visible tag shall be attached, bearing the equipment identification number and date which the leak is detected. The tag on a valve shall remain in place until after it has been monitored for 2 successive months and no leak has been detected. The tag on all other equipment may be removed after repair and re-inspection document compliance with the applicable NSPS. [40 CFR 60.486(b) and 60.635(b)(1)] Federally Enforceable Through Title V Permit

42. Any leak detected on the basis of sight, smell, or sound shall be identified by the operator affixing a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until repair and reinspection document compliance, whether or not operator inspection is otherwise required by this permit. [District Rule 4409, 5.3.3 and5.3.3] Federally Enforceable Through Title V Permit

43. Any leaking component and any leak shall be repaired to a leak-free condition and reinspected within 15 calendar days. [40 CFR 60.482-7] Federally Enforceable Through Title V Permit

44. For components subject to applicable NSPS standards, except as otherwise provided by 40 CFR 60.482-9, any component leak shall be repaired to a leak-free condition, or vented to a flare satisfying the requirements of 40 CFR 60.18, or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 or EPA Method 18 within fifteen (15) calendar days of detection. A first attempt at repair shall be made no later than 5 calendar days after leak detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates necessary and sufficient actions are being taken to correct the leak within this time period. [40 CFR 60.482-2(c)(1) and (c)(2), 60.482-3(g), 60.482-7(d), 60.482-8(c), and 60.633(b)(3)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

45. For components subject to applicable NSPS, if the leaking component is an essential part of a critical process identified in the operator management plan and which cannot be immediately shut down for repairs, the operator shall minimize the leak within 15 calendar days. If the leak which has been minimized still exceeds the applicable NSPS standard, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than six months from the date of the original leak detection for pumps and one year from the date of the original leak detection for other components. Delay of repair is allowed for equipment which is isolated from the process and which does not remain in VOC service and delay of repair is is allowed pursuant to 40 CFR 60.482-2(c)(1), 40 CFR 60.482-3(g)(1), 40 CFR 60.482-4(b)(1), 40 CFR 60.482-7(d)(1),40 CFR 60.482-8(c)(1) [40 CFR 60.482- 2(c)(1). [40 CFR 40 CFR 60.482-3(g)(1), 40 CFR 60.482-4(b)(1), 40 CFR 60.482-7(d)(1),40 CFR 60.482-8(c)(1), 60.482-9(a) and (b)] Federally Enforceable Through Title V Permit

46. Delay of repair of a closed vent system for which leaks have been detected is allowed if the closed vent system is an essential part of a critical process identified in the operator management plan which cannot be immediately shut down for repairs or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. However the operator shall minimize the leak within 15 calendar days. If the leak which has been minimized still exceeds the limit in this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. [40 CFR 60.482-9] Federally Enforceable Through Title V Permit

47. For the purpose of determining compliance with applicable NSPS, each operator shall maintain an inspection log for the components subject to NSPS inspection requirements that contains the following information: 1) instrument, operator, and equipment identification numbers; 2) date of leak detection; 3) dates and repair method of each attempt to repair the leak; 4) "above 10,000" if the maximum instrument reading after each repair attempt is equal to or greater than 10,000 ppm; 5) "repair delayed", reason for delay, signature of individual whose decision it was that repair could not be effected without a process shutdown, and expected date of successful repair if a leak is not repaired within 15 days of detection; 6) dates of process unit shutdown that occur while the equipment is unrepaired; 7) date of successful repair and emission level of recheck after leak is repaired. [District Rule 40 CFR 60.486(c) and 60.635(2)(i) through (ix)] Federally Enforceable Through Title V Permit

48. Each piece of equipment subject to requirements of this permit is presumed to be in VOC service or in wet gas service unless an owner or operator demonstrates that the piece of equipment is not in VOC service or in wet gas service. For a piece of equipment to be considered not in VOC service, it must be determined that the VOC content can be reasonably expected never to exceed 10.0 percent by weight. For a piece of equipment to be considered in wet gas service, it must be determined that it contains or contacts the field gas before the extraction step in the process. For purposes of determining the percent VOC content of the process fluid that is contained in or contacts a piece of equipment, procedures that conform to the methods described this permit shall be used. [40 CFR 60.485(d) and 60.632(f)] Federally Enforceable Through Title V Permit

49. Compliance the no detectable emission standards for this permit unit shall be determined as follows: 1) EPA Method 21 shall be followed, 2) Method 21 shall be used to determine the background level and all potential leak interfaces shall be traversed as close to the inter face as possible, and 3) the arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm to determine compliance. [40 CFR 60.485(c)] Federally Enforceable Through Title V Permit

50. For valves subject to applicable NSPS, if the operator elects to comply with the allowable percentage of leaking valves then for this permit unit, the operator shall notify the APCO 90 days before implementing these alternatives. [40 CFR 60.483-1(b)(1) and (d), 60. 483-2(a)(2), and 60.487(d)] Federally Enforceable Through Title V Permit

51. For valves subject to applicable NSPS, if the allowable percentage of leaking valves is selected, then a performance test shall be conducted initially upon designation for allowable percentage of leaking valves, annually, and at other times requested by the APCO. The performance test shall be conducted as follows: 1) all valves in gas/vapor and light liquid service shall be monitored within 1 week using EPA Method 21 and 2) the leak percentage shall be determined by dividing the number of leaking valves detected and valves for which repair has been delayed by the number of valves in gas/vapor and light liquid service in this permit unit, 3) a record must be kept of the percent of valves found leaking during each leak detection period. [40 CFR 60.483-1(b)(2) and (c) and 60. 483-2(b)(5) and (6)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

52. For compressors subject to applicable NSPS, each compressor shall meet the applicable control system requirements of 40 CFR 482-3(a) - (i), except as otherwise provided by 40 CFR 60.482-1(c) and 40 CFR 60.482-3(h) and (i). [40 CFR 60.482-3(a) through (j)], 40 CFR 60.482-1(c), 40 CFR 60.482-3(h) and (i), and 40 CFR 60.633] Federally Enforceable Through Title V Permit

53. Compressors that are subject to applicable NSPS, are exempt from requirements of 40 CFR 60.482-3(a) and 40 CFR 60.482-3(b) if the compressor is equipped with a closed vent system to capture and transport leakage from the compressor drive shaft back to a process fuel gas system or a control device. Closed vent systems piping shall comply with applicable requirements at 40 CFR 60.482-10. Closed vent vapor recovery systems shall comply with design requirements at 40 CFR 60.482-10(b). Enclosed combustion devices used by closed vent system shall comply with design requirements at 40 CFR 60.482-10(c). Flares used by closed vent systems shall comply with requirements at 40 CFR 60.482-10(d). Closed vent system control devices shall comply with monitoring requirements at 40 CFR 60.482-10(e). [40 CFR 60 .482-3, 40 CFR 60.482-10] Federally Enforceable Through Title V Permit

54. Compressors that are subject to applicable NSPS and are designated in the Operator Management Plan for no detectable leak emission, as indicated by an instrument reading of less than 500 ppm above background, is are exempt from the requirements of 40 CFR 482-3(a)-(h), provided the compressor is tested for compliance with no detectable emissions initially upon designation, annually, and at other times requested by the APCO. [40 CFR 60.482-3(i)] Federally Enforceable Through Title V Permit

55. When determining compliance with applicable NSPS, if an instrument reading of 10,000 ppm or greater is measured, a leak is detected. [40 CFR 60.633(b)(2), 40482-7(a), (b), and (c] Federally Enforceable Through Title V Permit

56. For open ended lines or valves subject to applicable NSPS, each open-ended valve or line equipped with a second valve shall be operated so that the valve on the process fluid end is closed before the second valve is closed. [40 CFR 60.482-6(b)] Federally Enforceable Through Title V Permit

57. For equipment subject to applicable NSPS when a double block-and-bleed system is being used, the bleed valve or line may remain open only during operations that require venting the line between the block valves. [40 CFR 60.482-6(c)] Federally Enforceable Through Title V Permit

58. Except as provided by applicable NSPS, valves that are subject to NSPS that are in gas/vapor service or light liquid service shall be monitored monthly to detect leaks using EPA Method 21. Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter. If a leak is subsequently detected, monitoring shall revert to monthly. [40 CFR 60.482-7(a), (b), and (c)] Federally Enforceable Through Title V Permit

59. Any valve in gas/vapor service or light liquid service that is designated in the equipment log list for no detectable leak emission, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the monitoring requirements of 40 CFR 60.482-7(a), provided the valve: 1) has no external actuating mechanism in contact with the process fluid and 2) is tested for and meets compliance with no detectable leak emission initially upon designation, annually and at other times requested by the APCO. [40 CFR 60.482-7(f)] Federally Enforceable Through Title V Permit

60. For valves subject to applicable NSPS requirements, for a valve in gas/vapor service or light or heavy liquid service, first attempts at repair shall include the following where practicable: 1) tightening of bonnet bolts, 2) replacement of bonnet bolts, 3) tightening of packing gland nuts, and 4) injection of lubricant into lubricant packing. [40 CFR 60.482-7(e) and 60.482-8(d)] Federally Enforceable Through Title V Permit

61. For pumps and valves in heavy liquid service, pressure relief devices in light or heavy liquid service, and flanges and other connectors, that are subject to applicable NSPS requirements, if evidence of a potential leak is found by sight, sound, smell, or any other detection method then the device shall be monitored within 5 days for leak detection in accordance with EPA Method 21. A leak is detected if an instrument reading of 10,000 ppm or greater is measured. [40 CFR 60.482-8(a) and (b)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

62. In addition to the information required by Rule 4409, the operator management plan shall include an addendum for this permit unit containing the following applicable NSPS information: 1) list of identification numbers for equipment subject to the applicable NSPS requirements, 2) list of identification numbers for equipment which is designated for no detectable emissions and which is signed by the owner/operator, 3) list of equipment identification numbers for pressure relief devices which must be operated with no detectable emissions, 4) dates of each compliance test for emissions below 500 ppm, for all equipment subject to this no detectable emission limit and the background level measured and the maximum instrument reading measured at the equipment, during each test, and 5) list of identification numbers for equipment in vacuum service. [40 CFR 60.486(e) and 60.635(b)(2)(x)] Federally Enforceable Through Title V Permit

63. In addition to the information required by Rule 4409, the operator management plan shall include an addendum for this permit unit containing the following applicable NSPS information: for valves in gas/vapor service and light liquid service: 1) a list of identification numbers for valves designated "unsafe-to-monitor" and for valves designated "difficult-to monitor", 2) an explanation for each valve stating why it is so designated, and 3) the schedule for monitoring each such valve. [40 CFR 60.486(f)] Federally Enforceable Through Title V Permit

64. For valves subject to NSPS annual leak detection alternative requirements, the NSPS inspection log shall include the following information: 1) a schedule of monitoring and 2) the percent of valves found leaking during each monitoring period. [CFR 60.486(g)] Federally Enforceable Through Title V Permit

65. A log containing the following information for pumps and compressors equipped a barrier fluid seal system which includes a seal failure sensor, for which a system failure criteria is required to be established, pursuant to the requirements for this permit unit, shall be maintained and kept in a readily accessible location: 1) the design criterion required by this permit and an explanation and 2) any changes to this criterion and reasons for the changes. [40 CFR 60.486(h)] Federally Enforceable Through Title V Permit

66. For equipment (compressors and components) subject to applicable NSPS, the operator shall maintain information and data used to demonstrate that a piece of equipment is not in VOC service and information and data used to demonstrate that a reciprocating compressor is in wet gas service. The information shall be included in the NSPS inspection log for the permit unit and shall be kept in a readily accessible location. [40 CFR 60.486(j) and 60.635(c)] Federally Enforceable Through Title V Permit

67. Vapor recovery systems (for example, condensers and absorbers) shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, whichever is less stringent. [40 CFR 60.482-10(b)] Federally Enforceable Through Title V Permit

68. Enclosed combustion devices shall be designed and operated to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816 ºC. [40 CFR 60.482-10(c)] Federally Enforceable Through Title V Permit

69. If the vapor collection system or closed vent system is constructed of hard-piping, the owner or operator shall conduct an initial inspection according to the procedures specified in EPA Method 21 using the calibration gases as specified in the requirements for this permit unit. The owner or operator shall also conduct annual visual inspections for visible, audible, or olfactory indications of leaks. [40 CFR 60.482-10(f)(1) and 40 CFR 60.485(b)] Federally Enforceable Through Title V Permit

70. If the vapor collection system or closed vent system is constructed of ductwork, the owner or operator shall conduct an initial inspection and annual inspections according to the procedures specified in EPA Method 21 using the calibration gases as specified in the requirements for this permit unit. The owner or operator shall also conduct annual visual inspections for visible, audible, or olfactory indications of leaks. [40 CFR 60.482-10(f)(2) and 40 CFR 60.485(b)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

71. Any parts of the closed vent system that are designated as difficult to inspect are exempt from the inspection requirements of 40 CFR 60.482-10(f)(1) and (f)(2) if the owner or operator complies with the following: 1) the owner or operator determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and 2) the process unit within which the closed vent system is located becomes an affected facility through modification or reconstruction, as defined in 40 CFR 60.14 and 60.15, or the owner or operator designates less than 3.0 percent of the total number of closed vent system equipment as difficult to inspect; and 3) the owner or operator has a written plan that requires inspection of the equipment at least every 5 years. A closed vent system is exempt from inspection if it is operated under a vacuum. [40 CFR 60.482-10(k)] Federally Enforceable Through Title V Permit

72. Closed vent systems and control devices shall be operated at all times when emissions may be vented to them. [40 CFR 60.482-10(m)] Federally Enforceable Through Title V Permit

73. A log shall be maintained containing the following information: 1) identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment; 2) identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment; 3) for each inspection conducted in accordance with EPA Method 21 during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected; and 4) for each visual inspection conducted for visible, audible, or olfactory indications of leaks during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected. [40 CFR 60.482-10(l) and 40 CFR 60.485(b)] Federally Enforceable Through Title V Permit

74. For components subject to applicable NSPS requirements, semiannual reports shall be submitted to the APCO containing the following information: 1) process unit identification, 2) for each month during the reporting period, number of valves, pumps, compressors, and pressure relief devices for which leaks were detected; number of valves, pumps, compressors, and pressure relief devices for which leaks were not repaired within 15 days and a first attempt not made within 5 days of leak detection; the facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible 3) dates of process unit shutdowns which occurred within the reporting period, and 4) revisions to items reported in the initial or subsequent semiannual reports. [40 CFR 60.487(a) and (c) and 60.636(c)] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-4-5 **EXPIRATION DATE:** 10/31/2009

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

EQUIPMENT DESCRIPTION:
NATURAL GASOLINE LOADOUT #2 INCLUDING A LOADING RACK WITH VAPOR RECOVERY SYSTEM

PERMIT UNIT REQUIREMENTS

1. Operation shall be equipped with two 15 hp product transfer pumps. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Loading rack shall incorporate vapor loss collection system. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Nitrogen purge system shall be a closed system such that all VOC's are displaced to the vapor control system via closed piping for reprocessing in S-2234-3. [District NSR Rule] Federally Enforceable Through Title V Permit
4. 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
5. The loading rack shall be equipped with bottom loading and a vapor collection and control system such that VOC emissions do not exceed 0.08 pounds per 1000 gallons of organic liquid with greatest vapor pressure loaded. [4624, 5.1.1 and Kern County Rule 413] Federally Enforceable Through Title V Permit
6. Vapor collection and control system shall operate such that the pressure in the delivery tank being loaded does not exceed 18 inches water column pressure and 6 inches water column vacuum. [District Rule 4624, 5.2 and Kern County Rule 413] Federally Enforceable Through Title V Permit
7. All delivery tanks which previously contained organic liquids, including gasoline, with a TVP greater than 1.5 psia at loading conditions shall be filled only at Class 1 loading facilities using bottom loading equipment with a vapor collection and control system operating such that VOC emissions do not exceed 0.08 lb/1000 gallons loaded; or Class 2 loading facilities equipped with a system to control at least 95% of VOC displaced; and which operate so the delivery tank does not exceed 18 inches water column pressure nor 6 inches water column vacuum. [District Rule 4624, 5.3 and Kern County Rule 413] Federally Enforceable Through Title V Permit
8. Loading and vapor collection and control equipment shall be designed, installed, maintained and operated such that there are no leaks or excess organic liquid drainage at disconnections. A leak shall be defined as the dripping of organic compounds at a rate of more than three drops per minute; or the detection of organic compounds in excess of 10,000 ppm above background of methane when measured at a distance of one centimeter from the potential source with a portable hydrocarbon detection instrument calibrated with methane. [District Rule 4624, 5.4 and Kern County Rule 413] Federally Enforceable Through Title V Permit
9. Construction, reconstruction (as defined in District Rule 4001, amended January 19, 1995), or expansion of any top loading facility shall not be allowed. [District Rule 4624, 5.5 and Kern County Rule 413] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. During the loading of organic liquids, the operator shall perform and record the results of monthly leak inspections of the loading and vapor collection equipment at each loading arm. Leak inspections shall be conducted using sight, sound, smell and instrument methods to detect leaks. Instrument detection shall be conducted using EPA Method 21 and shall be measured at a distance of one centimeter from the potential source. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: A) Zero air (less than 10 ppm of hydrocarbon in air); and B) Mixture of methane and air at a concentration of about, but less than, 10,000 ppm methane. [District Rules 2520, 9.3.2 and 4624, 6.2.2] Federally Enforceable Through Title V Permit
11. Corrective steps shall be taken at any time the operator observes excess drainage at disconnect. In addition, the operator shall perform and record the results of monthly drainage inspections at disconnect for each loading arm. If no excess drainage conditions are found during five consecutive monthly inspections, the drainage inspection frequency may be changed from monthly to quarterly. However, if one or more excess drainage condition is found during a quarterly inspection, the inspection frequency shall return to monthly. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. Drainage inspections shall be completed before 10:00 AM the day of inspection. Compliance shall be demonstrated by collecting all drainage at disconnect in a spouted container. The drainage shall be transferred to a graduated cylinder and the volume determined within one (1) minute of collection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
13. Each detected leak shall be repaired within 15 calendar days of detection. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
14. The loading rack's vapor collection and control system (VCCS) shall be tested annually to demonstrate the pressure in the delivery tanks being loaded complies with the requirements specified in this permit. Compliance shall be determined by calibrating and installing a liquid manometer, magnehelic device, or other instrument demonstrated to be equivalent, capable of measuring up to 500 mm water gauge pressure with a precision of + or - 2.5 mm water gauge, on the terminal's VCCS at a pressure tap as close as possible to the connection with the product tank truck. The highest instantaneous pressure measurement as well as all pressure measurements at 5 minute intervals during delivery vessel loading must be recorded. Every loading position must be tested at least once during the annual performance test. [District Rules 2520, 9.4.2 and 4624, 6.2.2] Federally Enforceable Through Title V Permit
15. Analysis of halogenated exempt compounds shall be by ARB Method 432. [District Rule 4624, 6.2.1 and Kern County Rule 413] Federally Enforceable Through Title V Permit
16. The permittee shall maintain an inspection log containing at least the following: A) dates of leak and drainage inspections, B) leak determination method, C) findings, D) corrective action (date each leak or excess drainage condition repaired, reasons for any leak repair interval in excess of 15 days), and E) inspector name and signature. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
17. All records necessary to determine compliance with the VOC emission limit for this unit shall be maintained for a period of at least 5 years and shall include component counts and recognized emission factors for fugitive emission sources. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
18. Compliance with these permit conditions in the Title V permit shall be deemed compliance with the requirements of Kern County Rule 413. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
19. Compliance with these permit conditions in the Title V permit shall be deemed compliance with the following requirements: District Rule 4624 (as amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-8-2 **EXPIRATION DATE:** 10/31/2009

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

EQUIPMENT DESCRIPTION:
104.6 MMBTU/HR LOW PRESSURE FLARE SERVING LTS #2 PLANT

PERMIT UNIT REQUIREMENTS

1. This flare shall be inspected every two weeks while in operation for visible emissions. If visible emissions are observed, corrective action shall be taken. If visible emissions continue, an EPA Method 9 test shall be conducted within 72 hours. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. Flare shall be operated only in an emergency condition during upsets or breakdowns. [District NSR Rule and District Rule 4311, 5.1] Federally Enforceable Through Title V Permit
4. A flame shall be present at all times in the flare whenever combustible gases are vented through the flare. [District Rule 4311, 5.2] Federally Enforceable Through Title V Permit
5. The flare shall operate with a pilot flame present at all times when combustible gases are vented through the flare, except during purge periods for automatic-ignition equipped flares. [District Rule 4311, 5.3] Federally Enforceable Through Title V Permit
6. Except for flares equipped with a flow-sensing ignition system, a heat sensing device such as a thermocouple, ultraviolet beam sensor, infrared sensor, or an equivalent device, capable of continuously detecting at least one pilot flame or the flare flame is present shall be installed and operated. [District Rule 4311, 5.4] Federally Enforceable Through Title V Permit
7. Flares that use flow-sensing automatic ignition systems and which do not use a continuous flame pilot shall use purge gas for purging. [District Rule 4311, 5.5] Federally Enforceable Through Title V Permit
8. The permittee shall maintain records of the duration of flare operation, amount of gas burned, the nature of the emergency situation and any corrective action take to rectify the process upset of breakdown that necessitated the use of the flare. [District Rules 2520, 9.4.2 and 4311, 6.2.3] Federally Enforceable Through Title V Permit
9. Records of flare maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. Compliance with the requirements for this permit unit shall be deemed compliance with District Rules 4201. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-9-7 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
5,500 BHP INGERSOLL-RAND MODEL 616KVR LEAN BURN NATURAL GAS FIRED I.C. ENGINE, WITH PRE-COMBUSTION CHAMBER, POWERING A GAS COMPRESSOR (K-40 UNX #16652)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
4. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 20.00 lb/hr, 1.65 gr/hp-hr and 136 ppmv @ 15% O2 (equivalent to 90% NOx reduction), SOx (as SO2): 1.86 lb/hr, PM10: 1.33 lb/hr, CO: 60.63 lb/hr and 676 ppmv @ 15% O2, or VOC: 36.38 lb/hr and 710 ppmv @ 15% O2. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
5. NOx emissions rate shall not exceed 2.00 gr/hp-hr. [PSD SJ 77-42] Federally Enforceable Through Title V Permit
6. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit
7. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201; Kern County Rule 404] Federally Enforceable Through Title V Permit
8. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit
9. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
11. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
12. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, VOC, and CO. This mean shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. [District Rules 2520, 9.4.2 & 4702, 6.3.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit

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

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

16. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified in the Inspection and Maintenance (I & M) plan submitted to the District. [District Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

17. 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 no later than 14 days after the change for approval. 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 Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

18. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrate compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, 4701 and 4702, 6.3.2; and PSD SJ 77-42] Federally Enforceable Through Title V Permit

19. Permittee shall monitor the nitrogen oxides (NOx) concentration in the engine exhaust with a facility conducted noncertified self test at least on a monthly basis. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

20. The permittee shall monitor and record the stack concentration of CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

21. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

23. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2520, 9.4.2 and NSR] Federally Enforceable Through Title V Permit

24. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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 Rules 4701 and 4702] Federally Enforceable Through Title V Permit

25. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

26. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

27. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-10-7 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
5,500 BHP INGERSOLL-RAND MODEL 616KVR LEAN BURN NATURAL GAS FIRED I.C. ENGINE, WITH PRE-COMBUSTION CHAMBER, POWERING A GAS COMPRESSOR (K-41 UNX #16651)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
4. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 20.00 lb/hr, 1.65 gr/hp-hr and 136 ppmv @ 15% O2 (equivalent to 90% NOx reduction), SOx (as SO2): 1.86 lb/hr, PM10: 1.33 lb/hr, CO: 60.63 lb/hr and 676 ppmv @ 15% O2, or VOC: 36.38 lb/hr and 710 ppmv @ 15% O2. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
5. NOx emissions rate shall not exceed 2.00 gr/hp-hr. [PSD SJ 77-42] Federally Enforceable Through Title V Permit
6. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit
7. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201; Kern County Rule 404] Federally Enforceable Through Title V Permit
8. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit
9. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
11. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
12. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, VOC, and CO. This mean shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. [District Rules 2520, 9.4.2 & 4702, 6.3.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit

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

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

16. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified in the Inspection and Maintenance (I & M) plan submitted to the District. [District Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

17. 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 no later than 14 days after the change for approval. 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 Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

18. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrate compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, 4701 and 4702, 6.3.2; and PSD SJ 77-42] Federally Enforceable Through Title V Permit

19. Permittee shall monitor the nitrogen oxides (NOx) concentration in the engine exhaust with a facility conducted noncertified self test at least on a monthly basis. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

20. The permittee shall monitor and record the stack concentration of CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

21. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

23. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2520, 9.4.2 and NSR] Federally Enforceable Through Title V Permit

24. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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 Rules 4701 and 4702] Federally Enforceable Through Title V Permit

25. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

26. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

27. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-11-7 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
5,500 BHP INGERSOLL-RAND MODEL 616KVR LEAN BURN NATURAL GAS FIRED I.C. ENGINE, WITH PRE-COMBUSTION CHAMBER, POWERING A GAS COMPRESSOR (K-42 UNX #16650)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
4. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 20.00 lb/hr, 1.65 gr/hp-hr and 136 ppmv @ 15% O2 (equivalent to 90% NOx reduction), SOx (as SO2): 1.86 lb/hr, PM10: 1.33 lb/hr, CO: 60.63 lb/hr and 676 ppmv @ 15% O2, or VOC: 36.38 lb/hr and 710 ppmv @ 15% O2. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
5. NOx emissions rate shall not exceed 2.00 gr/hp-hr. [PSD SJ 77-42] Federally Enforceable Through Title V Permit
6. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit
7. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201; Kern County Rule 404] Federally Enforceable Through Title V Permit
8. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit
9. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
11. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
12. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, VOC, and CO. This mean shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. [District Rules 2520, 9.4.2 & 4702, 6.3.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit

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

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

16. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified in the Inspection and Maintenance (I & M) plan submitted to the District. [District Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

17. 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 no later than 14 days after the change for approval. 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 Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

18. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrate compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, 4701 and 4702, 6.3.2; and PSD SJ 77-42] Federally Enforceable Through Title V Permit

19. Permittee shall monitor the nitrogen oxides (NOx) concentration in the engine exhaust with a facility conducted noncertified self test at least on a monthly basis. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

20. The permittee shall monitor and record the stack concentration of CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

21. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

23. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2520, 9.4.2 and NSR] Federally Enforceable Through Title V Permit

24. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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 Rules 4701 and 4702] Federally Enforceable Through Title V Permit

25. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

26. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

27. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-12-7 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
2,000 BHP INGERSOLL-RAND MODEL 412KVS LEAN BURN NATURAL GAS FIRED I.C. ENGINE, WITH PRE-COMBUSTION CHAMBER, POWERING A GAS COMPRESSOR (K-43 UNX #13694)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. Particulate matter emissions at the point of discharge shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
5. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 7.72 lb/hr, 1.75 gr/hp-hr and 144 ppmv @ 15% O2 (equivalent to 90% NOx reduction); SOx (as SO2): 0.67 lb/hr; PM10: 0.49 lb/hr; CO: 22.05 lb/hr and 676 ppmv @ 15% O2; or VOC: 13.23 lb/hr and 710 ppmv @ 15% O2. [District NSR Rule and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
6. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
7. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
8. If the IC engine is fired on PUC-regulated natural gas, the permittee shall maintain on file, copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. Source testing to measure the NOx, CO, and VOC emissions from this unit shall be conducted not less than once every 12 months. If compliance with the emission limits is demonstrated on two (2) consecutive annual source tests, the testing frequency may be reduced to not less than once every 24 months. If the unit fails to demonstrate compliance with the applicable emission limits, the testing frequency shall return to not less than once every 12 months. [District NSR Rule and District Rule 4702, 6.3.2] Federally Enforceable Through Title V Permit
12. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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

14. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100; CO (ppmv) - EPA Method 10 or ARB Method 100; stack gas oxygen - EPA Method 3 or 3A or ARB Method 100; and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081 and 4702, 6.4] Federally Enforceable Through Title V Permit

15. 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

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

17. 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, 5.6.8 and 6.5] Federally Enforceable Through Title V Permit

18. 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, 5.6.8 and 6.5.8] Federally Enforceable Through Title V Permit

19. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

20. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

21. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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

23. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

24. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

25. NOx emissions rate shall not exceed 2.00 gr/hp-hr. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

26. Source testing to measure the NOx emissions from at least one representative engine of this type (Ingersoll-Rand, model 412KVS) shall be conducted not less than once every 12 months. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

27. The permittee shall determine the NOx emissions from at least one representative engine of this type (Ingersoll-Rand, model 412KVS) at least once per month by either direct NOx measurement, or measurement of other exhaust gas concentrations (e.g. CO and O2) and engine parameters from which NOx emissions can be directly computed. NOx emissions shall be determined from every engine of this type at least once each calendar half. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

28. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702, 6.2.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-14-2 **EXPIRATION DATE:** 10/31/2009

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

EQUIPMENT DESCRIPTION:
105.6 MMBTU/HR LOW PRESSURE FLARE SERVING LTS #1

PERMIT UNIT REQUIREMENTS

1. This flare shall be inspected every two weeks while in operation for visible emissions. If visible emissions are observed, corrective action shall be taken. If visible emissions continue, an EPA Method 9 test shall be conducted within 72 hours. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. Flare shall be operated only in an emergency condition during upsets or breakdowns. [District NSR Rule and District Rule 4311, 5.1] Federally Enforceable Through Title V Permit
4. A flame shall be present at all times in the flare whenever combustible gases are vented through the flare. [District Rule 4311, 5.2] Federally Enforceable Through Title V Permit
5. The flare shall operate with a pilot flame present at all times when combustible gases are vented through the flare, except during purge periods for automatic-ignition equipped flares. [District Rule 4311, 5.3] Federally Enforceable Through Title V Permit
6. Except for flares equipped with a flow-sensing ignition system, a heat sensing device such as a thermocouple, ultraviolet beam sensor, infrared sensor, or an equivalent device, capable of continuously detecting at least one pilot flame or the flare flame is present shall be installed and operated. [District Rule 4311, 5.4] Federally Enforceable Through Title V Permit
7. Flares that use flow-sensing automatic ignition systems and which do not use a continuous flame pilot shall use purge gas for purging. [District Rule 4311, 5.5] Federally Enforceable Through Title V Permit
8. The permittee shall maintain records of the duration of flare operation, amount of gas burned, the nature of the emergency situation and any corrective action take to rectify the process upset of breakdown that necessitated the use of the flare. [District Rules 2520, 9.4.2 and 4311, 6.2.3] Federally Enforceable Through Title V Permit
9. Records of flare maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. Compliance with the requirements for this permit unit shall be deemed compliance with District Rules 4201. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-15-7 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
5,500 BHP INGERSOLL-RAND MODEL 616KVR LEAN BURN NATURAL GAS FIRED I.C. ENGINE, WITH PRE-COMBUSTION CHAMBER, POWERING A GAS COMPRESSOR (K-36 UNX #13675)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
4. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 20.00 lb/hr, 1.65 gr/hp-hr and 136 ppmv @ 15% O2 (equivalent to 90% NOx reduction), SOx (as SO2): 1.86 lb/hr, PM10: 1.33 lb/hr, CO: 60.63 lb/hr and 676 ppmv @ 15% O2, or VOC: 36.38 lb/hr and 710 ppmv @ 15% O2. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
5. NOx emissions rate shall not exceed 2.00 gr/hp-hr. [PSD SJ 77-42] Federally Enforceable Through Title V Permit
6. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit
7. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201; Kern County Rule 404] Federally Enforceable Through Title V Permit
8. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit
9. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
11. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
12. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, VOC, and CO. This mean shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. [District Rules 2520, 9.4.2 & 4702, 6.3.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit

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

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

16. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified in the Inspection and Maintenance (I & M) plan submitted to the District. [District Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

17. 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 no later than 14 days after the change for approval. 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 Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

18. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrate compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, 4701 and 4702, 6.3.2; and PSD SJ 77-42] Federally Enforceable Through Title V Permit

19. Permittee shall monitor the nitrogen oxides (NOx) concentration in the engine exhaust with a facility conducted noncertified self test at least on a monthly basis. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

20. The permittee shall monitor and record the stack concentration of CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

21. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

23. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2520, 9.4.2 and NSR] Federally Enforceable Through Title V Permit

24. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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 Rules 4701 and 4702] Federally Enforceable Through Title V Permit

25. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

26. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

27. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-16-7 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
5,500 BHP INGERSOLL-RAND MODEL 616KVR LEAN BURN NATURAL GAS FIRED I.C. ENGINE, WITH PRE-COMBUSTION CHAMBER, POWERING A GAS COMPRESSOR (K-37 UNX #13674)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
4. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 20.00 lb/hr, 1.65 gr/hp-hr and 136 ppmv @ 15% O2 (equivalent to 90% NOx reduction), SOx (as SO2): 1.86 lb/hr, PM10: 1.33 lb/hr, CO: 60.63 lb/hr and 676 ppmv @ 15% O2, or VOC: 36.38 lb/hr and 710 ppmv @ 15% O2. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
5. NOx emissions rate shall not exceed 2.00 gr/hp-hr. [PSD SJ 77-42] Federally Enforceable Through Title V Permit
6. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit
7. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201; Kern County Rule 404] Federally Enforceable Through Title V Permit
8. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit
9. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
11. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
12. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 forty-minute test runs for NOx, VOC, and CO. This mean shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit

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

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

16. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified in the Inspection and Maintenance (I & M) plan submitted to the District. [District Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

17. 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 no later than 14 days after the change for approval. 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 Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

18. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrate compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, 4701 and 4702, 6.3.2; and PSD SJ 77-42] Federally Enforceable Through Title V Permit

19. Permittee shall monitor the nitrogen oxides (NOx) concentration in the engine exhaust with a facility conducted noncertified self test at least on a monthly basis. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

20. The permittee shall monitor and record the stack concentration of CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

21. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

23. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2520, 9.4.2 and NSR] Federally Enforceable Through Title V Permit

24. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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 Rules 4701 and 4702] Federally Enforceable Through Title V Permit

25. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

26. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

27. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-17-7 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
5,500 BHP INGERSOLL-RAND MODEL 616KVR LEAN BURN NATURAL GAS FIRED I.C. ENGINE, WITH PRE-COMBUSTION CHAMBER, POWERING A GAS COMPRESSOR (K-38 UNX #13673)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
4. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 20.00 lb/hr, 1.65 gr/hp-hr and 136 ppmv @ 15% O2 (equivalent to 90% NOx reduction), SOx (as SO2): 1.86 lb/hr, PM10: 1.33 lb/hr, CO: 60.63 lb/hr and 676 ppmv @ 15% O2, or VOC: 36.38 lb/hr and 710 ppmv @ 15% O2. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
5. NOx emissions rate shall not exceed 2.00 gr/hp-hr. [PSD SJ 77-42] Federally Enforceable Through Title V Permit
6. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit
7. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201; Kern County Rule 404] Federally Enforceable Through Title V Permit
8. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit
9. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
11. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
12. To demonstrate compliance with Rule 4702, 90 percent NOx reduction requirement, percent reduction shall be calculated as follows: 1) The operator shall document the unit's typical operating parameters, loading, and duty cycle. 2) The documented conditions shall be repeated at each successive post-control source test. 3) Source test results will be tabulated to compare uncontrolled and post-controlled emission rates and to verify percent reduction limit. [District Rule 4702, 5.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, VOC, and CO. This mean shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. [District Rules 2520, 9.4.2 & 4702, 6.3.3] Federally Enforceable Through Title V Permit

14. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit

15. 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

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

17. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified in the Inspection and Maintenance (I & M) plan submitted to the District. [District Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

18. 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 no later than 14 days after the change for approval. 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 Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

19. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrate compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, 4701 and 4702, 6.3.2; and PSD SJ 77-42] Federally Enforceable Through Title V Permit

20. Permittee shall monitor the nitrogen oxides (NOx) concentration in the engine exhaust with a facility conducted noncertified self test at least on a monthly basis. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

21. The permittee shall monitor and record the stack concentration of CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

22. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

24. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2520, 9.4.2 and NSR] Federally Enforceable Through Title V Permit

25. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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 Rules 4701 and 4702] Federally Enforceable Through Title V Permit

26. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

27. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

28. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-18-7 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
2,000 BHP INGERSOLL-RAND MODEL 412KVS LEAN BURN NATURAL GAS FIRED I.C. ENGINE, WITH PRE-COMBUSTION CHAMBER, POWERING A GAS COMPRESSOR (K-39 UNX #13672)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. Particulate matter emissions at the point of discharge shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
5. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 7.72 lb/hr, 1.75 gr/hp-hr and 144 ppmv @ 15% O2 (equivalent to 90% NOx reduction); SOx (as SO2): 0.67 lb/hr; PM10: 0.49 lb/hr; CO: 22.05 lb/hr and 676 ppmv @ 15% O2; or VOC: 13.23 lb/hr and 710 ppmv @ 15% O2. [District NSR Rule and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
6. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
7. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
8. If the IC engine is fired on PUC-regulated natural gas, the permittee shall maintain on file, copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. Source testing to measure the NOx, CO, and VOC emissions from this unit shall be conducted not less than once every 12 months. If compliance with the emission limits is demonstrated on two (2) consecutive annual source tests, the testing frequency may be reduced to not less than once every 24 months. If the unit fails to demonstrate compliance with the applicable emission limits, the testing frequency shall return to not less than once every 12 months. [District NSR Rule and District Rule 4702, 6.3.2] Federally Enforceable Through Title V Permit
12. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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

14. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100; CO (ppmv) - EPA Method 10 or ARB Method 100; stack gas oxygen - EPA Method 3 or 3A or ARB Method 100; and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081 and 4702, 6.4] Federally Enforceable Through Title V Permit

15. 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

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

17. 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, 5.6.8 and 6.5] Federally Enforceable Through Title V Permit

18. 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, 5.6.8 and 6.5.8] Federally Enforceable Through Title V Permit

19. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

20. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

21. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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

23. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

24. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

25. NOx emissions rate shall not exceed 2.00 gr/hp-hr. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

26. Source testing to measure the NOx emissions from at least one representative engine of this type (Ingersoll-Rand, model 412KVS) shall be conducted not less than once every 12 months. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

27. The permittee shall determine the NOx emissions from at least one representative engine of this type (Ingersoll-Rand, model 412KVS) at least once per month by either direct NOx measurement, or measurement of other exhaust gas concentrations (e.g. CO and O2) and engine parameters from which NOx emissions can be directly computed. NOx emissions shall be determined from every engine of this type at least once each calendar half. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

28. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702, 6.2.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-19-12 **EXPIRATION DATE:** 10/31/2009

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

EQUIPMENT DESCRIPTION:
35R GAS PLANT WITH LEAN OIL RECLAIMING STILL, FOUR AIR COMPRESSORS, ABSORBER, RICH OIL RECTIFIER, STRIPPER, DE-ETHANIZER AND DE-PROPANIZER

PERMIT UNIT REQUIREMENTS

1. Operation shall include 3 absorption columns, rich absorption oil rectifier, absorption oil stripper, de-ethanizer, de-propanizer, de-butanizer, de-isobutanizer, 36 associated vessels, 32 heat exchangers, 31 process pumps, gas compressor K-8, and associated piping. [District Rule 2201] Federally Enforceable Through Title V Permit
2. All process vessels and lines handling volatile organic compounds shall vent only to other process vessels, District-approved flare, or substrata injection system. [District Rule 2201] Federally Enforceable Through Title V Permit
3. 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
4. Heat exchangers utilizing cooling water shall be properly maintained to prevent VOC contamination of cooling water and resultant emissions from cooling towers. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The operator shall test the circulating water from the cooling tower at least every six months to determine the concentration of hexavalent chromium. The District shall be notified 48 hours in advance of any sampling of cooling water for testing. Required testing may be discontinued and an exemption sought when two consecutive required tests show hexavalent chromium concentrations less than 0.15 mg/l. [District Rule 7012]
6. Operator shall comply with other applicable requirements of District Rule 7012 (amended 12/17/92). [District Rule 7012]
7. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Amended December 16, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
8. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit
9. VOC emissions from absorption column C-1C, its associated piping, and components shall consist only of fugitive emissions and shall not exceed 0.8 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
10. VOC emissions from gas compressor K-8, its associated piping, and components shall consist only of fugitive emissions and shall not exceed 6.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Permittee shall maintain with the permit accurate fugitive component counts and resulting emissions calculated using API Publication 450-3-83-007, Table E-3, for compressor K-8, its associated piping, and components, and for absorption column C-1C, its associated piping and components. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Permittee shall maintain a written record of VOC content (sampled not less than annually) of the gas processed through absorption column C-1C, its associated piping and components. Such records available for District inspection upon request for a period of five years. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. For absorption column C-1C, its associated piping, and components leak shall be defined as a reading as methane in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter from the potential source. [40 CFR 60.482(b), 60.633(b)(2)] Federally Enforceable Through Title V Permit

14. Flanges and threaded connections associated with absorption column C-1C shall be inspected at least annually to detect any leaks and shall be monitored within 5 days by the method 21 if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method. [40 CFR 60.482-8(a)] Federally Enforceable Through Title V Permit

15. Valves associated with absorption column C-1C shall be initially monitored monthly for leak detection and if a no leak is detected for 2 successive months valves may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected. If a leak is detected, the valves shall be monitored monthly until no leak is detected for 2 successive months. After 5 consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0, the inspection frequency may be changed from quarterly to annually. If the percent of valves found leaking during any annual or other inspection, is greater than 2.0, the owner or operator shall comply with the requirements as described in $^{\perp}$ 60.482-7 but can again elect to use annual monitoring. The percent of valves leaking shall be determined by dividing the sum of valves found leaking during current monitoring and valves for which repair has been delayed by the total number of valves subject to the requirements. [40 CFR 60.483-2(b)(1) & 40 CFR 60.483-1(b)(3)(4)(5)] Federally Enforceable Through Title V Permit

16. An owner or operator must keep a record of the percent of valves found leaking during each leak detection period. [40 CFR 60.483(b)(6)] Federally Enforceable Through Title V Permit

17. Each pressure relief device associated with absorption column C-1C shall be monitored at least quarterly for leak detection and shall be inspected within one (1) working day after venting to atmosphere. [40 CFR 60.633(b)(1)] Federally Enforceable Through Title V Permit

18. For absorption column C-1C, its associated piping, and components, a leaking component shall be identified by affixing a weatherproof and readily visible tag, marked with the equipment identification number and date on which leak is detected. The leak shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the following best practices where practicable: (1) Tightening of bonnet bolts; (2) Replacement of bonnet bolts; (3) Tightening of packing gland nuts; (4) Injection of lubricant into lubricated packing. [40 CFR 60.482-7(d)(2), (e), 40 CFR 60.486(b)(1), 40 CFR 60.635(b)(1)] Federally Enforceable Through Title V Permit

19. For absorption column C-1C, delay of repair for valves will be allowed until the next process unit turnaround, but in no case later than one year from the date of the original leak detection, if: (1) The owner or operator demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and (2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with $^{\perp}$ 60.482-10. [40 CFR 60.482-9(c)] Federally Enforceable Through Title V Permit

20. For absorption column C-1C, the identification on a valve may be removed after it has been monitored for 2 successive months as specified in $^{\perp}$ 60.482-7(c) and no leaks has been detected during those 2 months. [40 CFR 60.486(b)(3)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

21. For absorption column C-1C, the following information shall be recorded in a log and shall be kept for 5 years in a readily accessible location: (1) A schedule of monitoring. (2) The percent of valves found leaking during each monitoring period. (3) The instrument and operator identification numbers and the equipment identification number. (4) The date the leak was detected and the dates of each attempt to repair the leak. (5) Repair methods applied in each attempt to repair the leak. (6) "Above 10,000" if the maximum instrument reading measured by the methods specified in ⊥ 60.485(a) after each repair attempt is equal to or greater than 10,000 ppm. (7) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak. (8) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown. (9) The expected date of successful repair of the leak if a leak is not repaired within 15 days. (10) Dates of process unit shutdown that occur while the equipment is un-repaired. (11) The date of successful repair of the leak. [40 CFR 60.486(c), (g)] Federally Enforceable Through Title V Permit

22. For absorption column C-1C, semi-annual reporting must include following for the reporting period. (1) Process unit identification. (2) Number of pressure relief devices for which leaks were detected as required in ⊥ 60.633(b)(2) and (3) Number of pressure relief devices for which leaks were not repaired as required in ⊥ 60.633(b)(3). (4) Number of valves for which leaks were detected as described in ⊥ 60.482(7)(b) or ⊥ 60.483-2, (5) Number of valves for which leaks were not repaired as required in ⊥ 60.482-7(d)(1). (6) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible. (7) Dates of process unit shutdowns which occurred within the semiannual reporting period. [40 CFR 60.636(c) & 60.487(c)] Federally Enforceable Through Title V Permit

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

24. The requirements of 40 CFR 60 Subpart LLL do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-27-6 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
4,000 BHP DELAVAL MODEL HVA12 LEAN BURN NATURAL GAS FIRED I.C. ENGINE, WITH PRE-COMBUSTION CHAMBER, POWERING A GAS COMPRESSOR (K-9 UNX #11726)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
4. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 14.55 lb/hr, 1.65 gr/hp-hr and 136 ppmv @ 15% O2 (equivalent to 90% NOx reduction), SOx (as SO2): 10 lb/day, PM10: 85.5 lb/day, CO: 453 ppmv @ 15% O2, or VOC: 436 ppmv @ 15% O2. [District Rules 2201, 4201, 4701 and 4702; Kern County Rule 407] Federally Enforceable Through Title V Permit
5. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit
6. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201; Kern County Rule 404] Federally Enforceable Through Title V Permit
7. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit
8. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
11. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, VOC, and CO. This mean shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. [District Rules 2520, 9.4.2 & 4702, 6.3.3] Federally Enforceable Through Title V Permit
12. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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

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

15. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified in the Inspection and Maintenance (I & M) plan submitted to the District. [District Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

16. 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 no later than 14 days after the change for approval. 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 Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

17. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrated compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, 4701 and 4702, 6.3.2] Federally Enforceable Through Title V Permit

18. Permittee shall monitor the nitrogen oxides (NOx) concentration in the engine exhaust with a facility conducted noncertified self test at least on a monthly basis. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

19. The permittee shall monitor and record the stack concentration of CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

20. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

21. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

22. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2520, 9.4.2 and NSR] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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 Rules 4701 and 4702] Federally Enforceable Through Title V Permit

24. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

25. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

26. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-28-7 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
4,000 BHP DELAVAL MODEL HVA12 LEAN BURN NATURAL GAS FIRED I.C. ENGINE, WITH PRE-COMBUSTION CHAMBER, POWERING A GAS COMPRESSOR (K-10 UNX #11718)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
4. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 14.55 lb/hr, 1.65 gr/hp-hr and 136 ppmv @ 15% O2 (equivalent to 90% NOx reduction), SOx (as SO2): 10 lb/day, PM10: 85.5 lb/day, CO: 453 ppmv @ 15% O2, or VOC: 436 ppmv @ 15% O2. [District Rules 2201, 4201, 4701 and 4702; Kern County Rule 407] Federally Enforceable Through Title V Permit
5. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit
6. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201; Kern County Rule 404] Federally Enforceable Through Title V Permit
7. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit
8. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
11. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, VOC, and CO. This mean shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. [District Rules 2520, 9.4.2 & 4702, 6.3.3] Federally Enforceable Through Title V Permit
12. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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

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

15. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified in the Inspection and Maintenance (I & M) plan submitted to the District. [District Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

16. 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 no later than 14 days after the change for approval. 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 Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

17. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrated compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, 4701 and 4702, 6.3.2] Federally Enforceable Through Title V Permit

18. Permittee shall monitor the nitrogen oxides (NOx) concentration in the engine exhaust with a facility conducted noncertified self test at least on a monthly basis. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

19. The permittee shall monitor and record the stack concentration of CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

20. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

21. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

22. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2520, 9.4.2 and NSR] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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 Rules 4701 and 4702] Federally Enforceable Through Title V Permit

24. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

25. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

26. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-29-10 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
1,000 BHP WAUKESHA MODEL L7042GSI RICH BURN NATURAL GAS FIRED I.C. ENGINE, WITH TURBOCHARGER, ENLARGED TURBOCHARGER NOZZLE RING, AND CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-11 UNX #13198)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
4. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.59 lb/hr, 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction), SOx (as SO2): 0.34 lb/hr, PM10: 0.24 lb/hr, CO: 8.82 lb/hr and 541 ppmv @ 15% O2, or VOC: 2.33 lb/hr and 250 ppmv @ 15% O2. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
5. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit
6. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201; Kern County Rule 404] Federally Enforceable Through Title V Permit
7. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit
8. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
11. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, VOC, and CO. This mean shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. [District Rules 2520, 9.4.2 & 4702, 6.3.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit

13. 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

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

15. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified in the Inspection and Maintenance (I & M) plan submitted to the District. [District Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

16. 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 no later than 14 days after the change for approval. 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 Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

17. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrated compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, 4701 and 4702, 6.3.2] Federally Enforceable Through Title V Permit

18. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. [In-stack O2 monitors may be allowed if approved by the APCO.] Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

19. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

20. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

21. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2520, 9.4.2 and NSR] Federally Enforceable Through Title V Permit

22. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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 Rules 4701 and 4702] Federally Enforceable Through Title V Permit

23. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

24. 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

25. 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

26. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

27. 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

28. 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

29. 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

30. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

31. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-30-10 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
1,000 BHP WAUKESHA MODEL L7042GSIU RICH BURN NATURAL GAS FIRED I.C. ENGINE, WITH TURBOCHARGER, ENLARGED TURBOCHARGER NOZZLE RING, AND CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-12 UNX #12493)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
4. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.59 lb/hr, 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction), SOx (as SO2): 0.34 lb/hr, PM10: 0.24 lb/hr, CO: 8.82 lb/hr and 541 ppmv @ 15% O2, or VOC: 2.33 lb/hr and 250 ppmv @ 15% O2. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
5. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit
6. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201; Kern County Rule 404] Federally Enforceable Through Title V Permit
7. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit
8. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
11. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, VOC, and CO. This mean shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. [District Rules 2520, 9.4.2 & 4702, 6.3.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit

13. 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

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

15. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified in the Inspection and Maintenance (I & M) plan submitted to the District. [District Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

16. 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 no later than 14 days after the change for approval. 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 Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

17. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrated compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, 4701 and 4702, 6.3.2] Federally Enforceable Through Title V Permit

18. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. [In-stack O2 monitors may be allowed if approved by the APCO.] Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

19. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

20. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

21. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2520, 9.4.2 and NSR] Federally Enforceable Through Title V Permit

22. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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 Rules 4701 and 4702] Federally Enforceable Through Title V Permit

23. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

24. 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

25. 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

26. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

27. 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

28. 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

29. 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

30. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

31. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-31-10 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
1,000 BHP WAUKESHA MODEL L7042GSI RICH BURN NATURAL GAS FIRED I.C. ENGINE, WITH TURBOCHARGER, ENLARGED TURBOCHARGER NOZZLE RING, AND CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-13 UNX #13409)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
4. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.59 lb/hr, 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction), SOx (as SO2): 0.34 lb/hr, PM10: 0.24 lb/hr, CO: 8.82 lb/hr and 541 ppmv @ 15% O2, or VOC: 2.33 lb/hr and 250 ppmv @ 15% O2. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
5. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit
6. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201; Kern County Rule 404] Federally Enforceable Through Title V Permit
7. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit
8. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
11. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, VOC, and CO. This mean shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. [District Rules 2520, 9.4.2 & 4702, 6.3.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit

13. 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

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

15. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified in the Inspection and Maintenance (I & M) plan submitted to the District. [District Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

16. 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 no later than 14 days after the change for approval. 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 Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

17. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrated compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, 4701 and 4702, 6.3.2] Federally Enforceable Through Title V Permit

18. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. [In-stack O2 monitors may be allowed if approved by the APCO.] Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

19. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

20. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

21. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2520, 9.4.2 and NSR] Federally Enforceable Through Title V Permit

22. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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 Rules 4701 and 4702] Federally Enforceable Through Title V Permit

23. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

24. 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

25. 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

26. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

27. 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

28. 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

29. 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

30. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

31. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-38-3 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
310 BHP CUMMINS DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIREWATER PUMP (UNX #51392)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
3. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 4.3.1 and 17 CCR 93115] Federally Enforceable Through Title V Permit
6. This engine shall be operated using only CARB certified diesel fuel. [District Rule 2520, 9.3.2 and 17 CCR 93115] Federally Enforceable Through Title V Permit
7. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. For testing purposes, the engine shall only be operated the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 - "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems", 1998 edition. Total hours of operation for all maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rule 4702, 4.3.1 and 17 CCR 93115] Federally Enforceable Through Title V Permit
8. The permittee shall maintain records of hours of emergency and non-emergency operation. Records shall include the date, the initial start-up hours, the number of hours of operation, and the purpose of the operation (e.g., load testing, weekly testing, rolling blackout, general area power outage, etc.). For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702, 6.2.3 and 17 CCR 93115] Federally Enforceable Through Title V Permit
9. The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [District Rule 2520, 9.4.2 and 17 CCR 93115] Federally Enforceable Through Title V Permit
10. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702, 6.2.3 and 17 CCR 93115] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Rule 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

12. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 402 (Madera) and 404 (Fresno, Merced, Kern, Kings, San Joaquin, Stanislaus, Tulare). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-39-3 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
310 BHP CUMMINS DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIREWATER PUMP (UNX #14535)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
3. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 4.3.1 and 17 CCR 93115] Federally Enforceable Through Title V Permit
6. This engine shall be operated using only CARB certified diesel fuel. [District Rule 2520, 9.3.2 and 17 CCR 93115] Federally Enforceable Through Title V Permit
7. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. For testing purposes, the engine shall only be operated the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 - "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems", 1998 edition. Total hours of operation for all maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rule 4702, 4.3.1 and 17 CCR 93115] Federally Enforceable Through Title V Permit
8. The permittee shall maintain records of hours of emergency and non-emergency operation. Records shall include the date, the initial start-up hours, the number of hours of operation, and the purpose of the operation (e.g., load testing, weekly testing, rolling blackout, general area power outage, etc.). For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702, 6.2.3 and 17 CCR 93115] Federally Enforceable Through Title V Permit
9. The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [District Rule 2520, 9.4.2 and 17 CCR 93115] Federally Enforceable Through Title V Permit
10. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702, 6.2.3 and 17 CCR 93115] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Rule 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

12. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 402 (Madera) and 404 (Fresno, Merced, Kern, Kings, San Joaquin, Stanislaus, Tulare). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-43-3 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
227 BHP CATERPILLAR DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR (P4)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
3. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.7.4 and 17 CCR 93115] Federally Enforceable Through Title V Permit
6. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702, 5.7.2] Federally Enforceable Through Title V Permit
7. This engine shall be operated using only CARB certified diesel fuel. [District Rule 2520, 6.3.2 and 17 CCR 93115] Federally Enforceable Through Title V Permit
8. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [District Rule 4702, 4.2.1 and 17 CCR 93115] Federally Enforceable Through Title V Permit
9. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702, 5.7.3] Federally Enforceable Through Title V Permit
10. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.), and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702, 6.2.3 and 17 CCR 93115] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [District Rule 2520, 9.4.2 and 17 CCR 93115] Federally Enforceable Through Title V Permit

12. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702, 6.2.3 and 17 CCR 93115] Federally Enforceable Through Title V Permit

13. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Rule 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

14. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 402 (Madera) and 404 (Fresno, Merced, Kern, Kings, San Joaquin, Stanislaus, Tulare). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-44-4 **EXPIRATION DATE:** 10/31/2009

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

EQUIPMENT DESCRIPTION:
773 BHP WAUKESHA NATURAL GAS-FIRED STANDBY IC ENGINE (UNX #14166)

PERMIT UNIT REQUIREMENTS

1. Permittee shall bring this engine into compliance with the requirements of District Rule 4702, Internal Combustion Engines - Phase 2, in accordance with the approved emission control plan that was submitted to the District. [District Rule 4702, 6.1 and 7.6] Federally Enforceable Through Title V Permit
2. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
5. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
6. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
7. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
8. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
11. The engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 200 hours per year. [District NSR Rule and District Rule 4701, 3.22 and 4.2.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. The permittee shall maintain records of hours of emergency and non-emergency operation. Records shall include the date, the number of hours of operation, the purpose of the operation (e.g., load testing, weekly testing, rolling blackout, general area power outage, etc.), the type, quantity and sulfur content of fuel used, and records of operational characteristics monitoring. [District Rules 1070 and 4701, 6.2.2] Federally Enforceable Through Title V Permit

13. The operator of an internal combustion (IC) engine shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4701, 6.2.3] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-45-3 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
310 HP CUMMINS DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIREWATER PUMP (UNX #12052)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
3. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 4.3.1 and 17 CCR 93115] Federally Enforceable Through Title V Permit
6. This engine shall be operated using only CARB certified diesel fuel. [District Rule 2520, 9.3.2 and 17 CCR 93115] Federally Enforceable Through Title V Permit
7. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. For testing purposes, the engine shall only be operated the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 - "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems", 1998 edition. Total hours of operation for all maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rule 4702, 4.3.1 and 17 CCR 93115] Federally Enforceable Through Title V Permit
8. The permittee shall maintain records of hours of emergency and non-emergency operation. Records shall include the date, the initial start-up hours, the number of hours of operation, and the purpose of the operation (e.g., load testing, weekly testing, rolling blackout, general area power outage, etc.). For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702, 6.2.3 and 17 CCR 93115] Federally Enforceable Through Title V Permit
9. The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [District Rule 2520, 9.4.2 and 17 CCR 93115] Federally Enforceable Through Title V Permit
10. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702, 6.2.3 and 17 CCR 93115] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Rule 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

12. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 402 (Madera) and 404 (Fresno, Merced, Kern, Kings, San Joaquin, Stanislaus, Tulare). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-46-5 **EXPIRATION DATE:** 10/31/2009

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

EQUIPMENT DESCRIPTION:
793 BHP WAUKESHA NATURAL GAS-FIRED STANDBY IC ENGINE (UNX #13397)

PERMIT UNIT REQUIREMENTS

1. Permittee shall bring this engine into compliance with the requirements of District Rule 4702, Internal Combustion Engines - Phase 2, in accordance with the approved emission control plan that was submitted to the District. [District Rule 4702, 6.1 and 7.6] Federally Enforceable Through Title V Permit
2. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
5. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
6. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
7. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
8. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
11. The engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 200 hours per year. [District NSR Rule and District Rule 4701, 3.22 and 4.2.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. The permittee shall maintain records of hours of emergency and non-emergency operation. Records shall include the date, the number of hours of operation, the purpose of the operation (e.g., load testing, weekly testing, rolling blackout, general area power outage, etc.), the type, quantity and sulfur content of fuel used, and records of operational characteristics monitoring. [District Rules 1070 and 4701, 6.2.2] Federally Enforceable Through Title V Permit

13. The operator of an internal combustion (IC) engine shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4701, 6.2.3] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-47-5 **EXPIRATION DATE:** 10/31/2009

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

EQUIPMENT DESCRIPTION:
793 BHP WAUKESHA NATURAL GAS-FIRED STANDBY IC ENGINE (UNX #14772)

PERMIT UNIT REQUIREMENTS

1. Permittee shall bring this engine into compliance with the requirements of District Rule 4702, Internal Combustion Engines - Phase 2, in accordance with the approved emission control plan that was submitted to the District. [District Rule 4702, 6.1 and 7.6] Federally Enforceable Through Title V Permit
2. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
5. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
6. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
7. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
8. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
11. The engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 200 hours per year. [District NSR Rule and District Rule 4701, 3.22 and 4.2.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. The permittee shall maintain records of hours of emergency and non-emergency operation. Records shall include the date, the number of hours of operation, the purpose of the operation (e.g., load testing, weekly testing, rolling blackout, general area power outage, etc.), the type, quantity and sulfur content of fuel used, and records of operational characteristics monitoring. [District Rules 1070 and 4701, 6.2.2] Federally Enforceable Through Title V Permit

13. The operator of an internal combustion (IC) engine shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4701, 6.2.3] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-48-5 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
490 BHP CATERPILLAR MODEL G398 RICH BURN NATURAL GAS FIRED I.C. ENGINE, POWERING A GAS COMPRESSOR (K-68 UNX #54313)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. Particulate matter emissions at the point of discharge shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
5. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction); SOx (as SO2): 0.6 lb/day; PM10: 10.5 lb/day; CO: 11.6 g/hp-hr and 1,592 ppmv @ 15% O2; or VOC: 58 ppmv @ 15% O2. [District NSR Rule and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
6. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
7. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
8. If the IC engine is fired on PUC-regulated natural gas, the permittee shall maintain on file, copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. Source testing to measure the NOx, CO, and VOC emissions from this unit shall be conducted not less than once every 12 months. If compliance with the emission limits is demonstrated on two (2) consecutive annual source tests, the testing frequency may be reduced to not less than once every 24 months. If the unit fails to demonstrate compliance with the applicable emission limits, the testing frequency shall return to not less than once every 12 months. [District NSR Rule and District Rule 4702, 6.3.2] Federally Enforceable Through Title V Permit
12. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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

14. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100; CO (ppmv) - EPA Method 10 or ARB Method 100; stack gas oxygen - EPA Method 3 or 3A or ARB Method 100; and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081 and 4702, 6.4] Federally Enforceable Through Title V Permit

15. 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

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

17. 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, 5.6.8 and 6.5] Federally Enforceable Through Title V Permit

18. 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, 5.6.8 and 6.5.8] Federally Enforceable Through Title V Permit

19. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

20. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

21. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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

23. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

24. 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

25. 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

26. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

27. 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

28. 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

29. 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

30. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

31. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702, 6.2.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-52-8 **EXPIRATION DATE:** 10/31/2009

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

EQUIPMENT DESCRIPTION:
ONE 24.5 MW NATURAL GAS FIRED GAS TURBINE COGENERATION SYSTEM, INCLUDING 250 MMBTU/HR GENERAL ELECTRIC MODEL LM-2500 GAS TURBINE, 103 MMBTU/HR DUCT BURNER ASSEMBLY, 150,000 LB/HR HEAT RECOVERY STEAM GENERATOR, AND 6 MW STEAM TURBINE SERVING S-2234-52 AND S-2234-53

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained and operated according to manufacturers' recommendations. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Circular cross section exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and equipped with flow straighteners, if necessary, to minimize turbulence. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Gas turbine engine and duct burner assembly shall be equipped with continuously recording fuel gas flowmeters. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Gas turbine engine shall be equipped with continuously recording NOx and O2 monitors for engine exhaust gas stream after duct burners and catalyst beds. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Startup and shutdown of gas turbine engine, as defined in 40 CFR Subpart A 60.2, shall not exceed a time period of one hour and one hour, respectively, per occurrence. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Gas turbine engine combustor steam injection system shall be equipped with continuously recording steam-to-fuel injection rate monitoring system accurate to within +/- 5%. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Except during periods of gas turbine engine startup/shutdown, gas turbine engine steam injection rate shall be maintained at steam-to-fuel ratio range documented to result in compliance with emission limits. [District Rule 2201] Federally Enforceable Through Title V Permit
8. All exhaust from gas turbine engine and duct burners shall flow through both SCR and oxidation catalyst beds. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Gas temperatures at SCR and oxidation catalyst inlets shall be monitored by operational temperature indicators. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Except during periods of gas turbine engine startup/shutdown, inlet gas temperatures of SCR and oxidation catalyst beds shall be maintained within ranges recommended by the catalyst manufacturers. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Ammonia injection grid shall be equipped with operational ammonia flowmeter and injection pressure indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Installed SCR and oxidation catalyst beds shall provide space for additional catalyst if source operation cannot achieve emission sampling limits of NOx, VOC, and CO. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. Except during periods of gas turbine engine startup/shutdown, gas turbine engine shall be shut down if steam injection or SCR system is inoperative. [District Rule 2201] Federally Enforceable Through Title V Permit

14. Ammonia injection rate shall be controlled to maintain ammonia "breakthrough" to less than 20 ppmv (3-hr rolling average) from gas turbine exhaust. [District Rule 4102]

15. Excess emissions shall be defined as any operating hour in which 4-hour rolling average NOx concentration exceeds applicable emissions limit and a period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx or O2 (or both). [40 CFR 60.334(J)(1)(iii)] Federally Enforceable Through Title V Permit

16. Reduced Load Period shall be defined as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate not exceeding one hour. [District Rule 4703, 3.19] Federally Enforceable Through Title V Permit

17. Thermal Stabilization Period shall be defined as the start up or shut down time during which the exhaust gas is not within the normal operating temperature range, not to exceed two hours. [District Rule 4703, 3.25] Federally Enforceable Through Title V Permit

18. No more than 6.00 MMscf/day of natural gas shall be consumed by gas turbine and no more than 2.47 MMscf/day of natural gas shall be consumed by duct burners. [District Rule 2201] Federally Enforceable Through Title V Permit

19. Maximum emissions from turbines S-2234-52 & -53 and standby boilers/heaters S-2234-1 & '3 shall not exceed the following daily emission limitations (DEL): PM10: 50.6 lb/day, NOx (as NO2): 245.7 lb/day, VOC: 51.4 lb/day, and CO: 544.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

20. During days of gas turbine startup/shutdown, daily NO2 and CO emissions shall be calculated by natural gas consumption rates, CEM results, and emission factors for standby boilers/heaters. [District Rule 2201] Federally Enforceable Through Title V Permit

21. During days of gas turbine startup/shutdown, permittee shall maintain accurate daily records of natural gas consumption in gas turbines for normal operation and startup/shutdown periods, and in LTS-1 & LTS-2 gas plant standby boilers/heaters. [District Rule 2201] Federally Enforceable Through Title V Permit

22. Permittee shall maintain daily records of NO2 and CO emission calculations during days of gas turbine startup/shutdown, and such records shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

23. Permittee shall maintain accurate records of CEM printouts, and daily natural gas consumption in gas turbine & duct burners, and shall make such records readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

24. Permittee shall report the following emission exceedences to the District: emission rates of NOx and CO on a 3-hr rolling average, NSPS NOx emission rate on one hour average, and DEL of NOx & CO during days of gas turbine engine startup/shutdown. [District Rule 2201] Federally Enforceable Through Title V Permit

25. Gas turbine lube oil system atmospheric vent shall be equipped with aerosol/smoke control provisions. [District Rule 2201] Federally Enforceable Through Title V Permit

26. Emission rates from gas turbine lube oil vent shall not exceed the following: PM10: 0.02 lb/hr and VOC: 0.00 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit

27. PM10 and VOC emissions from lube oil vent shall be measured by source testing within 60 days upon detection of visible emissions in excess of 5% opacity or Ringelmann 1/4 from gas turbine lube oil vent. [District Rule 2201] Federally Enforceable Through Title V Permit

28. Except during periods of startup/shutdown, emission rates (3-hr rolling average) from gas turbine combustion shall not exceed: PM10: 0.004 lb/MMBtu, NOx as NO2: 0.013 lb/MMBtu & 3.75 ppmvd @ 15% O2, VOC: 0.004 lb/MMBtu, and CO: 0.043 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

29. Except during periods of startup/shutdown, emission rates (3-hr rolling average) from duct burner combustion shall not exceed: PM10: 0.001 lb/MMBtu, NOx as NO2: 0.008 lb/MMBtu, VOC: 0.001 lb/MMBtu, and CO: 0.007 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit

30. If NOx CEM data & source testing results show compliance at lower NOx emission than 3.75 ppmvd @ 15% O2, District may adjust permitted NOx emission rate 12 months after complete implementation of this approval according to CEM data & testing results. [District Rule 2201] Federally Enforceable Through Title V Permit

31. NOx, VOC, CO, and ammonia emissions shall be measured by source testing annually 60 days prior to permit anniversary. [District Rule 2201] Federally Enforceable Through Title V Permit

32. Permittee shall maintain steam to fuel ratio during annual compliance testing to within +/- 5% of the average daily values recorded during the 60 day period prior to annual testing. [District Rule 2201] Federally Enforceable Through Title V Permit

33. Permittee shall maintain exhaust gas temperatures at SCR and oxidation catalyst inlets to within +/- 5% of the average daily values recorded during the 60 day period prior to annual testing. [District Rule 2201] Federally Enforceable Through Title V Permit

34. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

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

36. LTS-1 and LTS-2 gas plants (S-2234-3 & '1) standby boilers/heaters shall only be used when one or both gas turbines (S-2234-52 & '53) are inoperative. [District Rule 2201] Federally Enforceable Through Title V Permit

37. Gas turbine engine shall be equipped with G.E. Steward Stevenson turbine combustor steam injection system, Mitsubishi/Applied Thermal Systems selective catalytic reduction (SCR) with ammonia injection, and Grace oxidation catalyst system. [District Rule 2201] Federally Enforceable Through Title V Permit

38. Unit shall be fired exclusively on PUC-quality natural gas which has a sulfur content of less than or equal to 0.0026% by weight. [40 CFR 60.333(a) & (b); 60.332(a)] Federally Enforceable Through Title V Permit

39. Operator shall not discharge into the atmosphere combustion contaminants (PM) exceeding in concentration at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit

40. Operator shall not exceed a NOx emission rate of: A. (If Rating<10 MW) 42 ppmvd @ 15% O2, excluding the thermal stabilization periods or reduced load periods; B. (If Rating>10 MW)(9 X EFF/25)ppmvd @ 15% O2, under load conditions, excluding thermal stabilization periods or reduced load periods, where EFF(efficiency) is the higher of EFF1 {100%x(3412 Btu/kW-hr)/(Actual Heat Rate at HHV, Btu/kW-hr)} or EFF2 {EFFmfr x (LHV/HHV)} where actual heat rate is a ratio of the heat input to power output taking into account the manufacturer's higher heating value of the fuel, LHV is the lower heating value of the fuel, and EFFmfr is the manufacturer's continuous rated percent efficiency of the gas turbine with air pollution equipment at LHV. An EFF that is less than 25 shall be assigned a value of 25. [40 CFR 60.332(a)(1) & 60.332(a)(2);District Rule 4703,5.1.1] Federally Enforceable Through Title V Permit

41. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the monitoring devices required by this rule to ensure that such devices are functioning properly. [District Rule 1080, 11.0] Federally Enforceable Through Title V Permit

42. Operator shall be required to conform to the compliance testing procedures described in District Rule 1081. [District Rule 1081] Federally Enforceable Through Title V Permit

43. If the turbine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the turbine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2, 40 CFR 60.335(d)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

44. If the turbine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [40 CFR 60.334(b)(2)] Federally Enforceable Through Title V Permit

45. The HHV and LHV of the fuel shall be determined using ASTM D3588-91, ASTM 1826-88, OR ASTM 1945-81. [40 CFR 60.332(a),(b) and District Rule 4703, 6.4.5] Federally Enforceable Through Title V Permit

46. Performance testing shall be conducted annually to measure NOx and CO emission concentrations using the following test methods: EPA Methods 7E or 20 for NOx emissions, EPA Methods 10 or 10B for CO emissions, EPA Methods 3, 3A, or 20 for Oxygen content of the exhaust gas. The 9-run tests shall be performed at highest physically achievable load of the gas turbine. [40 CFR 60.335(a), (b)(7) and District Rule 4703, 6.3.1, 6.4.1, 6.4.2, & 6.4.3] Federally Enforceable Through Title V Permit

47. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and date recording) for each successive 15-minute period or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [40 CFR 60.334(b)(2) and District Rule 1081, 6.4] Federally Enforceable Through Title V Permit

48. Results of the CEM system shall be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance with all applicable requirements of CFR 60.13. [40 CFR 60.13 and District Rule 4703, 5.1, 6.4] Federally Enforceable Through Title V Permit

49. Any gas turbine with an intermittently operated auxiliary burner shall determine compliance with the auxiliary burner both on and off. [40 CFR 60.335(b) and District Rule 4703, 6.3.2] Federally Enforceable Through Title V Permit

50. The NOx and O2 CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specifications 2 and 3, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [40 CFR 60.334(b)(1) and, District Rule 1080, 6.3, 6.5, 6.6, & 7.2] Federally Enforceable Through Title V Permit

51. The CEMS shall be linked to a data logger which is compatible with the District's Data acquisition system. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080, 7.1] Federally Enforceable Through Title V Permit

52. Records shall be maintained and shall contain: the occurrence and duration of any start-up, shutdown, performance testing, evaluations, calibrations, checks, adjustments, any periods during which a continuous monitoring system or monitoring device is inoperative, maintenance of any CEM's that have been installed pursuant to District Rule 1080, and emission measurements. [District Rule 1080, 7.3; 40 CFR 60.7 (b)] Federally Enforceable Through Title V Permit

53. If the turbine is fired on PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

54. The operator of a stationary gas turbine system shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit

55. Results of continuous emission monitoring must be averaged in accordance with the requirements of 40 CFR 60.13. [40 CFR 60.334(a),(b),(c) and District Rule 4703, 5.0] Federally Enforceable Through Title V Permit

56. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation and quantity of fuel used. [40 CFR 60.332(a),(b) and District Rule 4703, 6.2.4] Federally Enforceable Through Title V Permit

57. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: 40 CFR 60.333 (a) and (b); 60.334(a),(b), and (c)(1); SJVUAPCD Rule 4703, Section 6.2.2 and 1080, 7.3. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

58. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rule 4201, 1081 and 1080, Sections 6.5, 7.2, 8.0, 9.0, and 10.0; 40 CFR 60.332(c) and (d); 60.334(b) and (c)(2); 60.335(d). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

59. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rule 4703, sections 5.0, 5.1.1, 6.2.1, 6.2.4, 6.3, 6.4.1, 6.4.3, 6.4.5, and 6.4.6. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

60. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: 40 CFR 60.332(a), (b); 60.335(a), (b), (c), and (e). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

61. Operator shall install, operate and maintain in calibration a system which continuously measures and records: control system operating parameters, elapsed time of operation, the exhaust gas NOx and O2 concentrations. [40 CFR 60.334(a),(b)] Federally Enforceable Through Title V Permit

62. A violation of NOx emission standards indicated by the NOx CEM shall be reported by the operator to the APCO within 96 hours. [District Rule 1080, 9.0] Federally Enforceable Through Title V Permit

63. Operator shall submit a semiannual report listing any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8% by weight. [40 CFR 60.334(c)(2)] Federally Enforceable Through Title V Permit

64. Operator shall notify the APCO no later than eight hours after the detection of a breakdown of the CEM. Operator shall inform the APCO of the intent to shut down the CEM at least 24 hours prior to the event. [District Rule 1080, 10.0] Federally Enforceable Through Title V Permit

65. Operators of CEM's installed at the direction of the APCO shall submit a written report for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include: A. time intervals, data and magnitude of excess emissions, nature and cause of excess (if known), corrective actions taken and preventive measures adopted; B. averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; C. applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; D. a negative declaration when no excess emissions occurred. [District Rule 1080, 8.0] Federally Enforceable Through Title V Permit

66. NOx and carbon monoxide daily emissions shall be measured by use of CEM data, fuel rate data, and daily hours of operation data. A written record of the required compliance demonstrations shall be maintained and made available for District inspection for a period of five years. [District Rule 2201] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-53-6 **EXPIRATION DATE:** 10/31/2009

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

EQUIPMENT DESCRIPTION:
ONE 24.5 MW NATURAL GAS FIRED GAS TURBINE COGENERATION SYSTEM, INCLUDING 250 MMBTU/HR GENERAL ELECTRIC MODEL LM-2500 GAS TURBINE, 103 MMBTU/HR DUCT BURNER ASSEMBLY, AND 150,000 LB/HR HEAT RECOVERY STEAM GENERATOR

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained and operated according to manufacturers' recommendations. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Circular cross section exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and equipped with flow straighteners, if necessary, to minimize turbulence. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Gas turbine engine and duct burner assembly shall be equipped with continuously recording fuel gas flowmeters. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Gas turbine engine shall be equipped with continuously recording NOx and O2 monitors for engine exhaust gas stream after duct burners and catalyst beds. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Startup and shutdown of gas turbine engine, as defined in 40 CFR Subpart A 60.2, shall not exceed a time period of one hour and one hour, respectively, per occurrence. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Gas turbine engine combustor steam injection system shall be equipped with continuously recording steam-to-fuel injection rate monitoring system accurate to within +/- 5%. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Except during periods of gas turbine engine startup/shutdown, gas turbine engine steam injection rate shall be maintained at steam-to-fuel ratio range documented to result in compliance with emission limits. [District Rule 2201] Federally Enforceable Through Title V Permit
8. All exhaust from gas turbine engine and duct burners shall flow through both SCR and oxidation catalyst beds. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Gas temperatures at SCR and oxidation catalyst inlets shall be monitored by operational temperature indicators. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Except during periods of gas turbine engine startup/shutdown, inlet gas temperatures of SCR and oxidation catalyst beds shall be maintained within ranges recommended by the catalyst manufacturers. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Ammonia injection grid shall be equipped with operational ammonia flowmeter and injection pressure indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Installed SCR and oxidation catalyst beds shall provide space for additional catalyst if source operation cannot achieve emission sampling limits of NOx, VOC, and CO. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. Except during periods of gas turbine engine startup/shutdown, gas turbine engine shall be shut down if steam injection or SCR system is inoperative. [District Rule 2201] Federally Enforceable Through Title V Permit

14. Ammonia injection rate shall be controlled to maintain ammonia "breakthrough" to less than 20 ppmv (3-hr rolling average) from gas turbine exhaust. [District Rule 4102]

15. Excess emissions shall be defined as any operating hour in which 4-hour rolling average NOx concentration exceeds applicable emissions limit and a period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx or O2 (or both). [40 CFR 60.334(J)(1)(iii)] Federally Enforceable Through Title V Permit

16. Reduced Load Period shall be defined as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate not exceeding one hour. [District Rule 4703, 3.19] Federally Enforceable Through Title V Permit

17. Thermal Stabilization Period shall be defined as the start up or shut down time during which the exhaust gas is not within the normal operating temperature range, not to exceed two hours. [District Rule 4703, 3.25] Federally Enforceable Through Title V Permit

18. No more than 6.00 MMscf/day of natural gas shall be consumed by gas turbine and no more than 2.47 MMscf/day of natural gas shall be consumed by duct burners. [District Rule 2201] Federally Enforceable Through Title V Permit

19. Maximum emissions from turbines S-2234-52 & -53 and standby boilers/heaters S-2234-1 & '3 shall not exceed the following daily emission limitations (DEL): PM10: 50.6 lb/day, NOx (as NO2): 245.7 lb/day, VOC: 51.4 lb/day, and CO: 544.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

20. During days of gas turbine startup/shutdown, daily NO2 and CO emissions shall be calculated by natural gas consumption rates, CEM results, and emission factors for standby boilers/heaters. [District Rule 2201] Federally Enforceable Through Title V Permit

21. During days of gas turbine startup/shutdown, permittee shall maintain accurate daily records of natural gas consumption in gas turbines for normal operation and startup/shutdown periods, and in LTS-1 & LTS-2 gas plant standby boilers/heaters. [District Rule 2201] Federally Enforceable Through Title V Permit

22. Permittee shall maintain daily records of NO2 and CO emission calculations during days of gas turbine startup/shutdown, and such records shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

23. Permittee shall maintain accurate records of CEM printouts, and daily natural gas consumption in gas turbine & duct burners, and shall make such records readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

24. Permittee shall report the following emission exceedences to the District: emission rates of NOx and CO on a 3-hr rolling average, NSPS NOx emission rate on one hour average, and DEL of NOx & CO during days of gas turbine engine startup/shutdown. [District Rule 2201] Federally Enforceable Through Title V Permit

25. Gas turbine lube oil system atmospheric vent shall be equipped with aerosol/smoke control provisions. [District Rule 2201] Federally Enforceable Through Title V Permit

26. Emission rates from gas turbine lube oil vent shall not exceed the following: PM10: 0.02 lb/hr and VOC: 0.00 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit

27. PM10 and VOC emissions from lube oil vent shall be measured by source testing within 60 days upon detection of visible emissions in excess of 5% opacity or Ringelmann 1/4 from gas turbine lube oil vent. [District Rule 2201] Federally Enforceable Through Title V Permit

28. Except during periods of startup/shutdown, emission rates (3-hr rolling average) from gas turbine combustion shall not exceed: PM10: 0.004 lb/MMBtu, NOx as NO2: 0.013 lb/MMBtu & 3.75 ppmvd @ 15% O2, VOC: 0.004 lb/MMBtu, and CO: 0.043 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

29. Except during periods of startup/shutdown, emission rates (3-hr rolling average) from duct burner combustion shall not exceed: PM10: 0.001 lb/MMBtu, NOx as NO2: 0.008 lb/MMBtu, VOC: 0.001 lb/MMBtu, and CO: 0.007 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit

30. If NOx CEM data & source testing results show compliance at lower NOx emission than 3.75 ppmvd @ 15% O2, District may adjust permitted NOx emission rate 12 months after complete implementation of this approval according to CEM data & testing results. [District Rule 2201] Federally Enforceable Through Title V Permit

31. NOx, VOC, CO, and ammonia emissions shall be measured by source testing annually 60 days prior to permit anniversary. [District Rule 2201] Federally Enforceable Through Title V Permit

32. Permittee shall maintain steam to fuel ratio during annual compliance testing to within +/- 5% of the average daily values recorded during the 60 day period prior to annual testing. [District Rule 2201] Federally Enforceable Through Title V Permit

33. Permittee shall maintain exhaust gas temperatures at SCR and oxidation catalyst inlets to within +/- 5% of the average daily values recorded during the 60 day period prior to annual testing. [District Rule 2201] Federally Enforceable Through Title V Permit

34. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

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

36. LTS-1 and LTS-2 gas plants (S-2234-3 & '1) standby boilers/heaters shall only be used when one or both gas turbines (S-2234-52 & '53) are inoperative. [District Rule 2201] Federally Enforceable Through Title V Permit

37. Gas turbine engine shall be equipped with G.E. Steward Stevenson turbine combustor steam injection system, Mitsubishi/Applied Thermal Systems selective catalytic reduction (SCR) with ammonia injection, and Grace oxidation catalyst system. [District Rule 2201] Federally Enforceable Through Title V Permit

38. Unit shall be fired exclusively on PUC-quality natural gas which has a sulfur content of less than or equal to 0.0026% by weight. [40 CFR 60.333(a) & (b); 60.332(a)] Federally Enforceable Through Title V Permit

39. Operator shall not discharge into the atmosphere combustion contaminants (PM) exceeding in concentration at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit

40. Operator shall not exceed a NOx emission rate of: A. (If Rating<10 MW) 42 ppmvd @ 15% O2, excluding the thermal stabilization periods or reduced load periods; B. (If Rating>10 MW)(9 X EFF/25)ppmvd @ 15% O2, under load conditions, excluding thermal stabilization periods or reduced load periods, where EFF(efficiency) is the higher of EFF1 {100%x(3412 Btu/kW-hr)/(Actual Heat Rate at HHV, Btu/kW-hr)} or EFF2 {EFFmfr x (LHV/HHV)} where actual heat rate is a ratio of the heat input to power output taking into account the manufacturer's higher heating value of the fuel, LHV is the lower heating value of the fuel, and EFFmfr is the manufacturer's continuous rated percent efficiency of the gas turbine with air pollution equipment at LHV. An EFF that is less than 25 shall be assigned a value of 25. [40 CFR 60.332(a)(1) & 60.332(a)(2);District Rule 4703,5.1.1] Federally Enforceable Through Title V Permit

41. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the monitoring devices required by this rule to ensure that such devices are functioning properly. [District Rule 1080, 11.0] Federally Enforceable Through Title V Permit

42. Operator shall be required to conform to the compliance testing procedures described in District Rule 1081. [District Rule 1081] Federally Enforceable Through Title V Permit

43. If the turbine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the turbine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2, 40 CFR 60.335(d)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

44. If the turbine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [40 CFR 60.334(b)(2)] Federally Enforceable Through Title V Permit

45. The HHV and LHV of the fuel shall be determined using ASTM D3588-91, ASTM 1826-88, OR ASTM 1945-81. [40 CFR 60.332(a),(b) and District Rule 4703, 6.4.5] Federally Enforceable Through Title V Permit

46. Performance testing shall be conducted annually to measure NOx and CO emission concentrations using the following test methods: EPA Methods 7E or 20 for NOx emissions, EPA Methods 10 or 10B for CO emissions, EPA Methods 3, 3A, or 20 for Oxygen content of the exhaust gas. The 9-run tests shall be performed at highest physically achievable load of the gas turbine. [40 CFR 60.335(a), (b)(7) and District Rule 4703, 6.3.1, 6.4.1, 6.4.2, & 6.4.3] Federally Enforceable Through Title V Permit

47. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and date recording) for each successive 15-minute period or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [40 CFR 60.334(b)(2) and District Rule 1081, 6.4] Federally Enforceable Through Title V Permit

48. Results of the CEM system shall be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance with all applicable requirements of CFR 60.13. [40 CFR 60.13 and District Rule 4703, 5.1, 6.4] Federally Enforceable Through Title V Permit

49. Any gas turbine with an intermittently operated auxiliary burner shall determine compliance with the auxiliary burner both on and off. [40 CFR 60.335(b) and District Rule 4703, 6.3.2] Federally Enforceable Through Title V Permit

50. The NOx and O2 CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specifications 2 and 3, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [40 CFR 60.334(b)(1) and, District Rule 1080, 6.3, 6.5, 6.6, & 7.2] Federally Enforceable Through Title V Permit

51. The CEMS shall be linked to a data logger which is compatible with the District's Data acquisition system. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080, 7.1] Federally Enforceable Through Title V Permit

52. Records shall be maintained and shall contain: the occurrence and duration of any start-up, shutdown, performance testing, evaluations, calibrations, checks, adjustments, any periods during which a continuous monitoring system or monitoring device is inoperative, maintenance of any CEM's that have been installed pursuant to District Rule 1080, and emission measurements. [District Rule 1080, 7.3; 40 CFR 60.7 (b)] Federally Enforceable Through Title V Permit

53. If the turbine is fired on PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

54. The operator of a stationary gas turbine system shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit

55. Results of continuous emission monitoring must be averaged in accordance with the requirements of 40 CFR 60.13. [40 CFR 60.334(a),(b),(c) and District Rule 4703, 5.0] Federally Enforceable Through Title V Permit

56. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation and quantity of fuel used. [40 CFR 60.332(a),(b) and District Rule 4703, 6.2.4] Federally Enforceable Through Title V Permit

57. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: 40 CFR 60.333 (a) and (b); 60.334(a),(b), and (c)(1); SJVUAPCD Rule 4703, Section 6.2.2 and 1080, 7.3. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

58. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rule 4201, 1081 and 1080, Sections 6.5, 7.2, 8.0, 9.0, and 10.0; 40 CFR 60.332(c) and (d); 60.334(b) and (c)(2); 60.335(d). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

59. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rule 4703, sections 5.0, 5.1.1, 6.2.1, 6.2.4, 6.3, 6.4.1, 6.4.3, 6.4.5, and 6.4.6. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

60. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: 40 CFR 60.332(a), (b); 60.335(a), (b), (c), and (e). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

61. Operator shall install, operate and maintain in calibration a system which continuously measures and records: control system operating parameters, elapsed time of operation, the exhaust gas NOx and O2 concentrations. [40 CFR 60.334(a),(b)] Federally Enforceable Through Title V Permit

62. A violation of NOx emission standards indicated by the NOx CEM shall be reported by the operator to the APCO within 96 hours. [District Rule 1080, 9.0] Federally Enforceable Through Title V Permit

63. Operator shall submit a semiannual report listing any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8% by weight. [40 CFR 60.334(c)(2)] Federally Enforceable Through Title V Permit

64. Operator shall notify the APCO no later than eight hours after the detection of a breakdown of the CEM. Operator shall inform the APCO of the intent to shut down the CEM at least 24 hours prior to the event. [District Rule 1080, 10.0] Federally Enforceable Through Title V Permit

65. Operators of CEM's installed at the direction of the APCO shall submit a written report for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include: A. time intervals, data and magnitude of excess emissions, nature and cause of excess (if known), corrective actions taken and preventive measures adopted; B. averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; C. applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; D. a negative declaration when no excess emissions occurred. [District Rule 1080, 8.0] Federally Enforceable Through Title V Permit

66. NOx and carbon monoxide daily emissions shall be measured by use of CEM data, fuel rate data, and daily hours of operation data. A written record of the required compliance demonstrations shall be maintained and made available for District inspection for a period of five years. [District Rule 2201] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-57-10 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
1,000 BHP NATURAL GAS FIRED WAUKESHA MODEL L7042 RICH BURN I.C. ENGINE WITH TURBOCHARGER, ENLARGED NOZZLE RING, AIR/FUEL RATIO CONTROL UNIT, AND A NONSELECTIVE THREE WAY CATALYTIC REDUCTION (NSCR) SYSTEM (K-53 UNX #13444)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. Particulate matter emissions at the point of discharge shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
5. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.59 lb/hr, 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction); SOx (as SO2): 0.34 lb/hr; PM10: 0.24 lb/hr; CO: 8.82 lb/hr and 541 ppmv @ 15% O2; or VOC: 2.33 lb/hr and 250 ppmv @ 15% O2. [District NSR Rule and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
6. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
7. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
8. If the IC engine is fired on PUC-regulated natural gas, the permittee shall maintain on file, copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. Source testing to measure the NOx, CO, and VOC emissions from this unit shall be conducted not less than once every 12 months. If compliance with the emission limits is demonstrated on two (2) consecutive annual source tests, the testing frequency may be reduced to not less than once every 24 months. If the unit fails to demonstrate compliance with the applicable emission limits, the testing frequency shall return to not less than once every 12 months. [District NSR Rule and District Rule 4702, 6.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. 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

13. 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

14. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100; CO (ppmv) - EPA Method 10 or ARB Method 100; stack gas oxygen - EPA Method 3 or 3A or ARB Method 100; and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081 and 4702, 6.4] Federally Enforceable Through Title V Permit

15. 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

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

17. 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, 5.6.8 and 6.5] Federally Enforceable Through Title V Permit

18. 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, 5.6.8 and 6.5.8] Federally Enforceable Through Title V Permit

19. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

20. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

21. 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
22. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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
23. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit
24. 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
25. 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
26. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit
27. 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
28. 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
29. 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
30. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
31. NOx emissions rate shall not exceed 8.00 gr/hp-hr. [PSD SJ 77-42] Federally Enforceable Through Title V Permit
32. Source testing to measure the NOx emissions from at least one representative engine of this type (Waukesha, model L7042GSI) shall be conducted not less than once every 12 months. [PSD SJ 77-42] Federally Enforceable Through Title V Permit
33. The permittee shall determine the NOx emissions from at least one representative engine of this type (Waukesha, model L7042GSI) at least once per month by either direct NOx measurement, or measurement of other exhaust gas concentrations (e.g. CO and O2) and engine parameters from which NOx emissions can be directly computed. NOx emissions shall be determined from every engine of this type at least once each calendar half. [PSD SJ 77-42] 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. [District Rule 4702, 6.2.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-58-12 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
1,000 BHP WAUKESHA MODEL L7042-GSIU RICH BURN NATURAL GAS FIRED I.C. ENGINE, WITH CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-49 UNX# 51286)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
4. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.59 lb/hr, 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction), SOx (as SO2): 0.34 lb/hr, PM10: 0.24 lb/hr, CO: 8.82 lb/hr and 541 ppmv @ 15% O2, or VOC: 2.33 lb/hr and 250 ppmv @ 15% O2. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
5. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit
6. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201; Kern County Rule 404] Federally Enforceable Through Title V Permit
7. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit
8. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
11. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, VOC, and CO. This mean shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. [District Rules 2520, 9.4.2 & 4702, 6.3.3] Federally Enforceable Through Title V Permit
12. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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

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

15. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified in the Inspection and Maintenance (I & M) plan submitted to the District. [District Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

16. 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 no later than 14 days after the change for approval. 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 Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

17. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrated compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, 4701 and 4702, 6.3.2] Federally Enforceable Through Title V Permit

18. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. [In-stack O2 monitors may be allowed if approved by the APCO.] Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

19. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

20. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

21. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2520, 9.4.2 and NSR] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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 Rules 4701 and 4702] Federally Enforceable Through Title V Permit

23. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

24. 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

25. 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

26. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

27. 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

28. 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

29. 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

30. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

31. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-59-11 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
1,000 BHP WAUKESHA MODEL L7042-GSI RICH BURN NATURAL GAS FIRED I.C. ENGINE, WITH CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-29 UNX# 13207)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
4. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.59 lb/hr, 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction), SOx (as SO2): 0.34 lb/hr, PM10: 0.24 lb/hr, CO: 8.82 lb/hr and 541 ppmv @ 15% O2, or VOC: 2.33 lb/hr and 250 ppmv @ 15% O2. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
5. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit
6. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201; Kern County Rule 404] Federally Enforceable Through Title V Permit
7. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit
8. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
11. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, VOC, and CO. This mean shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. [District Rules 2520, 9.4.2 & 4702, 6.3.3] Federally Enforceable Through Title V Permit
12. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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

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

15. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified in the Inspection and Maintenance (I & M) plan submitted to the District. [District Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

16. 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 no later than 14 days after the change for approval. 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 Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

17. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrated compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, 4701 and 4702, 6.3.2] Federally Enforceable Through Title V Permit

18. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. [In-stack O2 monitors may be allowed if approved by the APCO.] Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

19. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

20. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

21. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2520, 9.4.2 and NSR] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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 Rules 4701 and 4702] Federally Enforceable Through Title V Permit

23. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

24. 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

25. 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

26. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

27. 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

28. 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

29. 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

30. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

31. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-60-6 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
650 BHP WAUKESHA MODEL L7042-GU RICH BURN NATURAL GAS FIRED I.C. ENGINE, WITH CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-54 UNX# 12877)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. Particulate matter emissions at the point of discharge shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
5. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.03 lb/hr, 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction); SOx (as SO2): 1.6 lb/day; PM10: 13.9 lb/day; CO: 2.1 g/hp-hr and 289 ppmv @ 15% O2; or VOC: 67 ppmv @ 15% O2. [District NSR Rule and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
6. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
7. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
8. If the IC engine is fired on PUC-regulated natural gas, the permittee shall maintain on file, copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. Source testing to measure the NOx, CO, and VOC emissions from this unit shall be conducted not less than once every 12 months. If compliance with the emission limits is demonstrated on two (2) consecutive annual source tests, the testing frequency may be reduced to not less than once every 24 months. If the unit fails to demonstrate compliance with the applicable emission limits, the testing frequency shall return to not less than once every 12 months. [District NSR Rule and District Rule 4702, 6.3.2] Federally Enforceable Through Title V Permit
12. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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

14. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100; CO (ppmv) - EPA Method 10 or ARB Method 100; stack gas oxygen - EPA Method 3 or 3A or ARB Method 100; and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081 and 4702, 6.4] Federally Enforceable Through Title V Permit

15. 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

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

17. 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, 5.6.8 and 6.5] Federally Enforceable Through Title V Permit

18. 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, 5.6.8 and 6.5.8] Federally Enforceable Through Title V Permit

19. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

20. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

21. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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

23. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

24. 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

25. 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

26. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

27. 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

28. 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

29. 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

30. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

31. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702, 6.2.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-61-10 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
1,000 BHP WAUKESHA MODEL L7042GSI RICH BURN NATURAL GAS FIRED I.C. ENGINE, WITH TURBOCHARGER AND CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-52 UNX# 15676)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. Particulate matter emissions at the point of discharge shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
5. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.59 lb/hr, 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction); SOx (as SO2): 0.34 lb/hr; PM10: 0.24 lb/hr; CO: 8.82 lb/hr and 541 ppmv @ 15% O2; or VOC: 2.33 lb/hr and 250 ppmv @ 15% O2. [District NSR Rule and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
6. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
7. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
8. If the IC engine is fired on PUC-regulated natural gas, the permittee shall maintain on file, copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. Source testing to measure the NOx, CO, and VOC emissions from this unit shall be conducted not less than once every 12 months. If compliance with the emission limits is demonstrated on two (2) consecutive annual source tests, the testing frequency may be reduced to not less than once every 24 months. If the unit fails to demonstrate compliance with the applicable emission limits, the testing frequency shall return to not less than once every 12 months. [District NSR Rule and District Rule 4702, 6.3.2] Federally Enforceable Through Title V Permit
12. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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

14. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100; CO (ppmv) - EPA Method 10 or ARB Method 100; stack gas oxygen - EPA Method 3 or 3A or ARB Method 100; and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081 and 4702, 6.4] Federally Enforceable Through Title V Permit

15. 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

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

17. 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, 5.6.8 and 6.5] Federally Enforceable Through Title V Permit

18. 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, 5.6.8 and 6.5.8] Federally Enforceable Through Title V Permit

19. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

20. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

21. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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

23. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

24. 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

25. 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

26. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

27. 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

28. 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

29. 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

30. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

31. NOx emissions rate shall not exceed 8.00 gr/hp-hr. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

32. Source testing to measure the NOx emissions from at least one representative engine of this type (Waukesha, model L7042GSI) shall be conducted not less than once every 12 months. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

33. The permittee shall determine the NOx emissions from at least one representative engine of this type (Waukesha, model L7042GSI) at least once per month by either direct NOx measurement, or measurement of other exhaust gas concentrations (e.g. CO and O2) and engine parameters from which NOx emissions can be directly computed. NOx emissions shall be determined from every engine of this type at least once each calendar half. [PSD SJ 77-42] 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. [District Rule 4702, 6.2.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-62-7 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
2,000 BHP INGERSOLL-RAND MODEL 412KVS LEAN BURN NATURAL GAS FIRED I.C. ENGINE, WITH PRE-COMBUSTION CHAMBER, POWERING A GAS COMPRESSOR (K-44 UNX# 13701)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. Particulate matter emissions at the point of discharge shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
5. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 7.72 lb/hr, 1.75 gr/hp-hr and 144 ppmv @ 15% O2 (equivalent to 90% NOx reduction); SOx (as SO2): 0.67 lb/hr; PM10: 0.49 lb/hr; CO: 22.05 lb/hr and 676 ppmv @ 15% O2; or VOC: 13.23 lb/hr and 710 ppmv @ 15% O2. [District NSR Rule and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
6. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
7. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
8. If the IC engine is fired on PUC-regulated natural gas, the permittee shall maintain on file, copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. Source testing to measure the NOx, CO, and VOC emissions from this unit shall be conducted not less than once every 12 months. If compliance with the emission limits is demonstrated on two (2) consecutive annual source tests, the testing frequency may be reduced to not less than once every 24 months. If the unit fails to demonstrate compliance with the applicable emission limits, the testing frequency shall return to not less than once every 12 months. [District NSR Rule and District Rule 4702, 6.3.2] Federally Enforceable Through Title V Permit
12. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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

14. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100; CO (ppmv) - EPA Method 10 or ARB Method 100; stack gas oxygen - EPA Method 3 or 3A or ARB Method 100; and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081 and 4702, 6.4] Federally Enforceable Through Title V Permit

15. 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

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

17. 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, 5.6.8 and 6.5] Federally Enforceable Through Title V Permit

18. 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, 5.6.8 and 6.5.8] Federally Enforceable Through Title V Permit

19. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

20. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

21. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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

23. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

24. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

25. NOx emissions rate shall not exceed 2.00 gr/hp-hr. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

26. Source testing to measure the NOx emissions from at least one representative engine of this type (Ingersoll-Rand, model 412KVS) shall be conducted not less than once every 12 months. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

27. The permittee shall determine the NOx emissions from at least one representative engine of this type (Ingersoll-Rand, model 412KVS) at least once per month by either direct NOx measurement, or measurement of other exhaust gas concentrations (e.g. CO and O2) and engine parameters from which NOx emissions can be directly computed. NOx emissions shall be determined from every engine of this type at least once each calendar half. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

28. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702, 6.2.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-63-10 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
1,000 BHP WAUKESHA MODEL L7042-GSIU RICH BURN NATURAL GAS FIRED I.C. ENGINE, WITH TURBOCHARGER AND CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-48 UNX# 13435)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
4. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.59 lb/hr, 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction), SOx (as SO2): 0.34 lb/hr, PM10: 0.24 lb/hr, CO: 8.82 lb/hr and 541 ppmv @ 15% O2, or VOC: 2.33 lb/hr and 250 ppmv @ 15% O2. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
5. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit
6. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201; Kern County Rule 404] Federally Enforceable Through Title V Permit
7. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit
8. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
11. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, VOC, and CO. This mean shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. [District Rules 2520, 9.4.2 & 4702, 6.3.3] Federally Enforceable Through Title V Permit
12. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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

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

15. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified in the Inspection and Maintenance (I & M) plan submitted to the District. [District Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

16. 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 no later than 14 days after the change for approval. 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 Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

17. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrated compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, 4701 and 4702, 6.3.2] Federally Enforceable Through Title V Permit

18. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. [In-stack O2 monitors may be allowed if approved by the APCO.] Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

19. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

20. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

21. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2520, 9.4.2 and NSR] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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 Rules 4701 and 4702] Federally Enforceable Through Title V Permit

23. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

24. 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

25. 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

26. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

27. 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

28. 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

29. 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

30. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

31. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-64-8 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
650 BHP WAUKESHA MODEL L7042-GU RICH BURN NATURAL GAS FIRED I.C. ENGINE, WITH CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-26 UNX# 11554)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. Particulate matter emissions at the point of discharge shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
5. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.03 lb/hr, 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction); SOx (as SO2): 1.6 lb/day, PM10: 13.9 lb/day; CO: 2.1 g/hp-hr and 289 ppmv; or VOC: 67 ppmv. [District NSR Rule and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
6. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
7. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
8. If the IC engine is fired on PUC-regulated natural gas, the permittee shall maintain on file, copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. Source testing to measure the NOx, CO, and VOC emissions from this unit shall be conducted not less than once every 12 months. If compliance with the emission limits is demonstrated on two (2) consecutive annual source tests, the testing frequency may be reduced to not less than once every 24 months. If the unit fails to demonstrate compliance with the applicable emission limits, the testing frequency shall return to not less than once every 12 months. [District NSR Rule and District Rule 4702, 6.3.2] Federally Enforceable Through Title V Permit
12. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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

14. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100; CO (ppmv) - EPA Method 10 or ARB Method 100; stack gas oxygen - EPA Method 3 or 3A or ARB Method 100; and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081 and 4702, 6.4] Federally Enforceable Through Title V Permit

15. 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

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

17. 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, 5.6.8 and 6.5] Federally Enforceable Through Title V Permit

18. 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, 5.6.8 and 6.5.8] Federally Enforceable Through Title V Permit

19. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

20. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

21. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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
23. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit
24. 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
25. 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
26. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit
27. 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
28. 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
29. 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
30. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
31. NOx emissions rate shall not exceed 8.00 gr/hp-hr. [PSD SJ 77-42] Federally Enforceable Through Title V Permit
32. Source testing to measure the NOx emissions from at least one representative engine of this type (Waukesha, model L7042GU) shall be conducted not less than once every 12 months. [PSD SJ 77-42] Federally Enforceable Through Title V Permit
33. The permittee shall determine the NOx emissions from at least one representative engine of this type (Waukesha, model L7042GU) at least once per month by either direct NOx measurement, or measurement of other exhaust gas concentrations (e.g. CO and O2) and engine parameters from which NOx emissions can be directly computed. NOx emissions shall be determined from every engine of this type at least once each calendar half. [PSD SJ 77-42] 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. [District Rule 4702, 6.2.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-65-8 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
650 BHP WAUKESHA MODEL L7042-GU RICH BURN NATURAL GAS FIRED I.C. ENGINE, WITH CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-27 UNX #12705)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. Particulate matter emissions at the point of discharge shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
5. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.03 lb/hr, 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction); SOx (as SO2): 1.6 lb/day, PM10: 13.9 lb/day; CO: 2.1 g/hp-hr and 289 ppmv; or VOC: 67 ppmv. [District NSR Rule and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
6. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
7. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
8. If the IC engine is fired on PUC-regulated natural gas, the permittee shall maintain on file, copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. Source testing to measure the NOx, CO, and VOC emissions from this unit shall be conducted not less than once every 12 months. If compliance with the emission limits is demonstrated on two (2) consecutive annual source tests, the testing frequency may be reduced to not less than once every 24 months. If the unit fails to demonstrate compliance with the applicable emission limits, the testing frequency shall return to not less than once every 12 months. [District NSR Rule and District Rule 4702, 6.3.2] Federally Enforceable Through Title V Permit
12. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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

14. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100; CO (ppmv) - EPA Method 10 or ARB Method 100; stack gas oxygen - EPA Method 3 or 3A or ARB Method 100; and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081 and 4702, 6.4] Federally Enforceable Through Title V Permit

15. 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

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

17. 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, 5.6.8 and 6.5] Federally Enforceable Through Title V Permit

18. 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, 5.6.8 and 6.5.8] Federally Enforceable Through Title V Permit

19. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

20. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

21. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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
23. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit
24. 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
25. 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
26. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit
27. 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
28. 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
29. 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
30. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
31. NOx emissions rate shall not exceed 8.00 gr/hp-hr. [PSD SJ 77-42] Federally Enforceable Through Title V Permit
32. Source testing to measure the NOx emissions from at least one representative engine of this type (Waukesha, model L7042GU) shall be conducted not less than once every 12 months. [PSD SJ 77-42] Federally Enforceable Through Title V Permit
33. The permittee shall determine the NOx emissions from at least one representative engine of this type (Waukesha, model L7042GU) at least once per month by either direct NOx measurement, or measurement of other exhaust gas concentrations (e.g. CO and O2) and engine parameters from which NOx emissions can be directly computed. NOx emissions shall be determined from every engine of this type at least once each calendar half. [PSD SJ 77-42] 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. [District Rule 4702, 6.2.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-66-8 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
650 BHP WAUKESHA MODEL L7042-GU RICH BURN NATURAL GAS FIRED I.C. ENGINE, EQUIPPED WITH CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-28 UNX# 12850)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. Particulate matter emissions at the point of discharge shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
5. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.03 lb/hr, 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction); SOx (as SO2): 1.6 lb/day, PM10: 13.9 lb/day; CO: 2.1 g/hp-hr and 289 ppmv; or VOC: 67 ppmv. [District NSR Rule and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
6. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
7. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
8. If the IC engine is fired on PUC-regulated natural gas, the permittee shall maintain on file, copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. Source testing to measure the NOx, CO, and VOC emissions from this unit shall be conducted not less than once every 12 months. If compliance with the emission limits is demonstrated on two (2) consecutive annual source tests, the testing frequency may be reduced to not less than once every 24 months. If the unit fails to demonstrate compliance with the applicable emission limits, the testing frequency shall return to not less than once every 12 months. [District NSR Rule and District Rule 4702, 6.3.2] Federally Enforceable Through Title V Permit
12. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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

14. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100; CO (ppmv) - EPA Method 10 or ARB Method 100; stack gas oxygen - EPA Method 3 or 3A or ARB Method 100; and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081 and 4702, 6.4] Federally Enforceable Through Title V Permit

15. 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

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

17. 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, 5.6.8 and 6.5] Federally Enforceable Through Title V Permit

18. 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, 5.6.8 and 6.5.8] Federally Enforceable Through Title V Permit

19. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

20. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

21. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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

23. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

24. 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

25. 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

26. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

27. 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

28. 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

29. 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

30. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

31. NOx emissions rate shall not exceed 8.00 gr/hp-hr. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

32. Source testing to measure the NOx emissions from at least one representative engine of this type (Waukesha, model L7042GU) shall be conducted not less than once every 12 months. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

33. The permittee shall determine the NOx emissions from at least one representative engine of this type (Waukesha, model L7042GU) at least once per month by either direct NOx measurement, or measurement of other exhaust gas concentrations (e.g. CO and O2) and engine parameters from which NOx emissions can be directly computed. NOx emissions shall be determined from every engine of this type at least once each calendar half. [PSD SJ 77-42] 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. [District Rule 4702, 6.2.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-67-10 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
1,000 BHP WAUKESHA MODEL L7042-GSIU RICH BURN NATURAL GAS FIRED I.C. ENGINE, WITH TURBOCHARGER AND CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-30 UNX# 13426)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. Particulate matter emissions at the point of discharge shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
5. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.59 lb/hr, 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction); SOx (as SO2): 0.34 lb/hr; PM10: 0.24 lb/hr; CO: 8.82 lb/hr and 541 ppmv @ 15% O2; or VOC: 2.33 lb/hr and 250 ppmv @ 15% O2. [District NSR Rule and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
6. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
7. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
8. If the IC engine is fired on PUC-regulated natural gas, the permittee shall maintain on file, copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. Source testing to measure the NOx, CO, and VOC emissions from this unit shall be conducted not less than once every 12 months. If compliance with the emission limits is demonstrated on two (2) consecutive annual source tests, the testing frequency may be reduced to not less than once every 24 months. If the unit fails to demonstrate compliance with the applicable emission limits, the testing frequency shall return to not less than once every 12 months. [District NSR Rule and District Rule 4702, 6.3.2] Federally Enforceable Through Title V Permit
12. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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

14. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100; CO (ppmv) - EPA Method 10 or ARB Method 100; stack gas oxygen - EPA Method 3 or 3A or ARB Method 100; and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081 and 4702, 6.4] Federally Enforceable Through Title V Permit

15. 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

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

17. 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, 5.6.8 and 6.5] Federally Enforceable Through Title V Permit

18. 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, 5.6.8 and 6.5.8] Federally Enforceable Through Title V Permit

19. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

20. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

21. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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

23. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

24. 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

25. 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

26. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

27. 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

28. 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

29. 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

30. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

31. NOx emissions rate shall not exceed 8.00 gr/hp-hr. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

32. Source testing to measure the NOx emissions from at least one representative engine of this type (Waukesha, model L7042GSI) shall be conducted not less than once every 12 months. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

33. The permittee shall determine the NOx emissions from at least one representative engine of this type (Waukesha, model L7042GSI) at least once per month by either direct NOx measurement, or measurement of other exhaust gas concentrations (e.g. CO and O2) and engine parameters from which NOx emissions can be directly computed. NOx emissions shall be determined from every engine of this type at least once each calendar half. [PSD SJ 77-42] 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. [District Rule 4702, 6.2.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-68-10 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
1,000 BHP WAUKESHA MODEL L7042-GSIU RICH BURN NATURAL GAS FIRED I.C. ENGINE, WITH TURBOCHARGER AND CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-31 UNX# 11553)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
4. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.59 lb/hr, 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction), SOx (as SO2): 0.34 lb/hr, PM10: 0.24 lb/hr, CO: 8.82 lb/hr and 541 ppmv @ 15% O2, or VOC: 2.33 lb/hr and 250 ppmv @ 15% O2. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
5. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit
6. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201; Kern County Rule 404] Federally Enforceable Through Title V Permit
7. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit
8. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
11. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, VOC, and CO. This mean shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. [District Rules 2520, 9.4.2 & 4702, 6.3.3] Federally Enforceable Through Title V Permit
12. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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

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

15. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified in the Inspection and Maintenance (I & M) plan submitted to the District. [District Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

16. 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 no later than 14 days after the change for approval. 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 Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

17. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrated compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, 4701 and 4702, 6.3.2] Federally Enforceable Through Title V Permit

18. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. [In-stack O2 monitors may be allowed if approved by the APCO.] Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

19. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

20. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

21. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2520, 9.4.2 and NSR] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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 Rules 4701 and 4702] Federally Enforceable Through Title V Permit

23. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

24. 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

25. 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

26. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

27. 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

28. 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

29. 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

30. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

31. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-69-10 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
1,000 BHP WAUKESHA MODEL L7042-GSIU RICH BURN NATURAL GAS FIRED I.C. ENGINE, WITH TURBOCHARGER AND CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-32 UNX# 18028)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
4. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.59 lb/hr, 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction), SOx (as SO2): 0.34 lb/hr, PM10: 0.24 lb/hr, CO: 8.82 lb/hr and 541 ppmv @ 15% O2, or VOC: 2.33 lb/hr and 250 ppmv @ 15% O2. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
5. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit
6. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201; Kern County Rule 404] Federally Enforceable Through Title V Permit
7. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit
8. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
11. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, VOC, and CO. This mean shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. [District Rules 2520, 9.4.2 & 4702, 6.3.3] Federally Enforceable Through Title V Permit
12. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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

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

15. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified in the Inspection and Maintenance (I & M) plan submitted to the District. [District Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

16. 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 no later than 14 days after the change for approval. 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 Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

17. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrated compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, 4701 and 4702, 6.3.2] Federally Enforceable Through Title V Permit

18. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. [In-stack O2 monitors may be allowed if approved by the APCO.] Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

19. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

20. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

21. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2520, 9.4.2 and NSR] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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 Rules 4701 and 4702] Federally Enforceable Through Title V Permit

23. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

24. 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

25. 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

26. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

27. 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

28. 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

29. 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

30. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

31. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-70-11 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
1,000 BHP WAUKESHA MODEL L7042-GSIU RICH BURN NATURAL GAS FIRED I.C. ENGINE, WITH TURBOCHARGER AND CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-33 UNX# 16453)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
4. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.59 lb/hr, 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction), SOx (as SO2): 0.34 lb/hr, PM10: 0.24 lb/hr, CO: 8.82 lb/hr and 541 ppmv @ 15% O2, or VOC: 2.33 lb/hr and 250 ppmv @ 15% O2. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
5. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit
6. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201; Kern County Rule 404] Federally Enforceable Through Title V Permit
7. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit
8. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
11. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, VOC, and CO. This mean shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. [District Rules 2520, 9.4.2 & 4702, 6.3.3] Federally Enforceable Through Title V Permit
12. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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

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

15. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified in the Inspection and Maintenance (I & M) plan submitted to the District. [District Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

16. 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 no later than 14 days after the change for approval. 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 Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

17. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrated compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, 4701 and 4702, 6.3.2] Federally Enforceable Through Title V Permit

18. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. [In-stack O2 monitors may be allowed if approved by the APCO.] Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

19. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

20. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

21. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2520, 9.4.2 and NSR] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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 Rules 4701 and 4702] Federally Enforceable Through Title V Permit

23. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

24. 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

25. 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

26. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

27. 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

28. 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

29. 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

30. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

31. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-71-11 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
1,000 BHP WAUKESHA MODEL L7042-GSIU RICH BURN NATURAL GAS FIRED I.C. ENGINE, WITH TURBOCHARGER AND CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-34 UNX# 13417)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
4. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.59 lb/hr, 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction), SOx (as SO2): 0.34 lb/hr, PM10: 0.24 lb/hr, CO: 8.82 lb/hr and 541 ppmv @ 15% O2, or VOC: 2.33 lb/hr and 250 ppmv @ 15% O2. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
5. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit
6. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201; Kern County Rule 404] Federally Enforceable Through Title V Permit
7. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit
8. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
11. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, VOC, and CO. This mean shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. [District Rules 2520, 9.4.2 & 4702, 6.3.3] Federally Enforceable Through Title V Permit
12. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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

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

15. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified in the Inspection and Maintenance (I & M) plan submitted to the District. [District Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

16. 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 no later than 14 days after the change for approval. 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 Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

17. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrated compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, 4701 and 4702, 6.3.2] Federally Enforceable Through Title V Permit

18. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. [In-stack O2 monitors may be allowed if approved by the APCO.] Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

19. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

20. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

21. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2520, 9.4.2 and NSR] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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 Rules 4701 and 4702] Federally Enforceable Through Title V Permit

23. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

24. 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

25. 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

26. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

27. 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

28. 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

29. 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

30. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

31. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-72-10 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
1,000 BHP WAUKESHA MODEL L7042-GSIU RICH BURN NATURAL GAS FIRED I.C. ENGINE, WITH TURBOCHARGER AND CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-35 UNX# 54626)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
4. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.59 lb/hr, 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction), SOx (as SO2): 0.34 lb/hr, PM10: 0.24 lb/hr, CO: 8.82 lb/hr and 541 ppmv @ 15% O2, or VOC: 2.33 lb/hr and 250 ppmv @ 15% O2. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
5. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit
6. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201; Kern County Rule 404] Federally Enforceable Through Title V Permit
7. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit
8. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
11. To demonstrate compliance with Rule 4702, 96 percent NOx reduction requirement, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. [District Rule 4702, 5.3.1] Federally Enforceable Through Title V Permit
12. The owner of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO. [District Rule 4702, 5.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, VOC, and CO. This mean shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. [District Rules 2520, 9.4.2 & 4702, 6.3.3] Federally Enforceable Through Title V Permit

14. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit

15. 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

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

17. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified in the Inspection and Maintenance (I & M) plan submitted to the District. [District Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

18. 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 no later than 14 days after the change for approval. 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 Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

19. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrated compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, 4701 and 4702, 6.3.2] Federally Enforceable Through Title V Permit

20. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. [In-stack O2 monitors may be allowed if approved by the APCO.] Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

21. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
23. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2520, 9.4.2 and NSR] Federally Enforceable Through Title V Permit
24. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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 Rules 4701 and 4702] Federally Enforceable Through Title V Permit
25. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit
26. 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
27. 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
28. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit
29. 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
30. 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
31. 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
32. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
33. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-73-10 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
1,000 BHP WAUKESHA MODEL L7042-GSIU RICH BURN NATURAL GAS FIRED I.C. ENGINE, WITH TURBOCHARGER AND CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-51 UNX# 13793)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
4. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.59 lb/hr, 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction), SOx (as SO2): 0.34 lb/hr, PM10: 0.24 lb/hr, CO: 8.82 lb/hr and 541 ppmv @ 15% O2, or VOC: 2.33 lb/hr and 250 ppmv @ 15% O2. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
5. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit
6. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201; Kern County Rule 404] Federally Enforceable Through Title V Permit
7. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit
8. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
11. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, VOC, and CO. This mean shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. [District Rules 2520, 9.4.2 & 4702, 6.3.3] Federally Enforceable Through Title V Permit
12. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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

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

15. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified in the Inspection and Maintenance (I & M) plan submitted to the District. [District Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

16. 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 no later than 14 days after the change for approval. 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 Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

17. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrated compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, 4701 and 4702, 6.3.2] Federally Enforceable Through Title V Permit

18. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. [In-stack O2 monitors may be allowed if approved by the APCO.] Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

19. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

20. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

21. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2520, 9.4.2 and NSR] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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 Rules 4701 and 4702] Federally Enforceable Through Title V Permit

23. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

24. 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

25. 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

26. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

27. 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

28. 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

29. 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

30. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

31. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-74-10 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
1,000 BHP WAUKESHA MODEL L7042-GSIU RICH BURN NATURAL GAS FIRED I.C. ENGINE, WITH TURBOCHARGER AND CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-50 UNX# 13401)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
4. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.59 lb/hr, 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction), SOx (as SO2): 0.34 lb/hr, PM10: 0.24 lb/hr, CO: 8.82 lb/hr and 541 ppmv @ 15% O2, or VOC: 2.33 lb/hr and 250 ppmv @ 15% O2. [District Rules 2201, 4701 and 4702] Federally Enforceable Through Title V Permit
5. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit
6. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201; Kern County Rule 404] Federally Enforceable Through Title V Permit
7. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit
8. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
11. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, VOC, and CO. This mean shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. [District Rules 2520, 9.4.2 & 4702, 6.3.3] Federally Enforceable Through Title V Permit
12. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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

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

15. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified in the Inspection and Maintenance (I & M) plan submitted to the District. [District Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

16. 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 no later than 14 days after the change for approval. 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 Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

17. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrated compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, 4701 and 4702, 6.3.2] Federally Enforceable Through Title V Permit

18. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. [In-stack O2 monitors may be allowed if approved by the APCO.] Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

19. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

20. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

21. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2520, 9.4.2 and NSR] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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 Rules 4701 and 4702] Federally Enforceable Through Title V Permit

23. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

24. 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

25. 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

26. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

27. 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

28. 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

29. 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

30. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

31. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-75-7 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
2,000 BHP INGERSOLL-RAND MODEL 412KVS LEAN BURN NATURAL GAS FIRED I.C. ENGINE, WITH PRE-COMBUSTION CHAMBER, POWERING A GAS COMPRESSOR (K-45 UNX# 13706)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. Particulate matter emissions at the point of discharge shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
5. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 7.72 lb/hr, 1.75 gr/hp-hr and 144 ppmv @ 15% O2 (equivalent to 90% NOx reduction); SOx (as SO2): 0.67 lb/hr; PM10: 0.49 lb/hr; CO: 22.05 lb/hr and 676 ppmv @ 15% O2; or VOC: 13.23 lb/hr and 710 ppmv @ 15% O2. [District NSR Rule and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
6. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
7. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
8. If the IC engine is fired on PUC-regulated natural gas, the permittee shall maintain on file, copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. Source testing to measure the NOx, CO, and VOC emissions from this unit shall be conducted not less than once every 12 months. If compliance with the emission limits is demonstrated on two (2) consecutive annual source tests, the testing frequency may be reduced to not less than once every 24 months. If the unit fails to demonstrate compliance with the applicable emission limits, the testing frequency shall return to not less than once every 12 months. [District NSR Rule and District Rule 4702, 6.3.2] Federally Enforceable Through Title V Permit
12. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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

14. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100; CO (ppmv) - EPA Method 10 or ARB Method 100; stack gas oxygen - EPA Method 3 or 3A or ARB Method 100; and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081 and 4702, 6.4] Federally Enforceable Through Title V Permit

15. 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

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

17. 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, 5.6.8 and 6.5] Federally Enforceable Through Title V Permit

18. 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, 5.6.8 and 6.5.8] Federally Enforceable Through Title V Permit

19. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

20. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

21. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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

23. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

24. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

25. NOx emissions rate shall not exceed 2.00 gr/hp-hr. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

26. Source testing to measure the NOx emissions from at least one representative engine of this type (Ingersoll-Rand, model 412KVS) shall be conducted not less than once every 12 months. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

27. The permittee shall determine the NOx emissions from at least one representative engine of this type (Ingersoll-Rand, model 412KVS) at least once per month by either direct NOx measurement, or measurement of other exhaust gas concentrations (e.g. CO and O2) and engine parameters from which NOx emissions can be directly computed. NOx emissions shall be determined from every engine of this type at least once each calendar half. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

28. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702, 6.2.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-76-7 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
2,000 BHP INGERSOLL-RAND MODEL 412KVS LEAN BURN NATURAL GAS FIRED I.C. ENGINE, WITH PRE-COMBUSTION CHAMBER, POWERING A GAS COMPRESSOR (K-46 UNX# 13715)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. Particulate matter emissions at the point of discharge shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
5. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 7.72 lb/hr, 1.75 gr/hp-hr and 144 ppmv @ 15% O2 (equivalent to 90% NOx reduction); SOx (as SO2): 0.67 lb/hr; PM10: 0.49 lb/hr; CO: 22.05 lb/hr and 676 ppmv @ 15% O2; or VOC: 13.23 lb/hr and 710 ppmv @ 15% O2. [District NSR Rule and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
6. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
7. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
8. If the IC engine is fired on PUC-regulated natural gas, the permittee shall maintain on file, copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. Source testing to measure the NOx, CO, and VOC emissions from this unit shall be conducted not less than once every 12 months. If compliance with the emission limits is demonstrated on two (2) consecutive annual source tests, the testing frequency may be reduced to not less than once every 24 months. If the unit fails to demonstrate compliance with the applicable emission limits, the testing frequency shall return to not less than once every 12 months. [District NSR Rule and District Rule 4702, 6.3.2] Federally Enforceable Through Title V Permit
12. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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

14. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100; CO (ppmv) - EPA Method 10 or ARB Method 100; stack gas oxygen - EPA Method 3 or 3A or ARB Method 100; and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081 and 4702, 6.4] Federally Enforceable Through Title V Permit

15. 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

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

17. 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, 5.6.8 and 6.5] Federally Enforceable Through Title V Permit

18. 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, 5.6.8 and 6.5.8] Federally Enforceable Through Title V Permit

19. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

20. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

21. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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

23. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

24. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

25. NOx emissions rate shall not exceed 2.00 gr/hp-hr. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

26. Source testing to measure the NOx emissions from at least one representative engine of this type (Ingersoll-Rand, model 412KVS) shall be conducted not less than once every 12 months. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

27. The permittee shall determine the NOx emissions from at least one representative engine of this type (Ingersoll-Rand, model 412KVS) at least once per month by either direct NOx measurement, or measurement of other exhaust gas concentrations (e.g. CO and O2) and engine parameters from which NOx emissions can be directly computed. NOx emissions shall be determined from every engine of this type at least once each calendar half. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

28. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702, 6.2.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-77-7 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
2,000 BHP INGERSOLL-RAND MODEL 412KVS LEAN BURN NATURAL GAS FIRED I.C. ENGINE, WITH PRE-COMBUSTION CHAMBER, POWERING A GAS COMPRESSOR (K-47 UNX# 13716)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. Particulate matter emissions at the point of discharge shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
5. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 7.72 lb/hr, 1.75 gr/hp-hr and 144 ppmv @ 15% O2 (equivalent to 90% NOx reduction); SOx (as SO2): 0.67 lb/hr; PM10: 0.49 lb/hr; CO: 22.05 lb/hr and 676 ppmv @ 15% O2; or VOC: 13.23 lb/hr and 710 ppmv @ 15% O2. [District NSR Rule and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
6. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
7. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
8. If the IC engine is fired on PUC-regulated natural gas, the permittee shall maintain on file, copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. Source testing to measure the NOx, CO, and VOC emissions from this unit shall be conducted not less than once every 12 months. If compliance with the emission limits is demonstrated on two (2) consecutive annual source tests, the testing frequency may be reduced to not less than once every 24 months. If the unit fails to demonstrate compliance with the applicable emission limits, the testing frequency shall return to not less than once every 12 months. [District NSR Rule and District Rule 4702, 6.3.2] Federally Enforceable Through Title V Permit
12. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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

14. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100; CO (ppmv) - EPA Method 10 or ARB Method 100; stack gas oxygen - EPA Method 3 or 3A or ARB Method 100; and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081 and 4702, 6.4] Federally Enforceable Through Title V Permit

15. 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

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

17. 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, 5.6.8 and 6.5] Federally Enforceable Through Title V Permit

18. 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, 5.6.8 and 6.5.8] Federally Enforceable Through Title V Permit

19. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

20. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

21. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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

23. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

24. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

25. NOx emissions rate shall not exceed 2.00 gr/hp-hr. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

26. Source testing to measure the NOx emissions from at least one representative engine of this type (Ingersoll-Rand, model 412KVS) shall be conducted not less than once every 12 months. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

27. The permittee shall determine the NOx emissions from at least one representative engine of this type (Ingersoll-Rand, model 412KVS) at least once per month by either direct NOx measurement, or measurement of other exhaust gas concentrations (e.g. CO and O2) and engine parameters from which NOx emissions can be directly computed. NOx emissions shall be determined from every engine of this type at least once each calendar half. [PSD SJ 77-42] Federally Enforceable Through Title V Permit

28. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702, 6.2.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-78-9 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
1,000 BHP WAUKESHA MODEL L7042 RICH BURN NATURAL GAS FIRED I.C. ENGINE, WITH TURBOCHARGER AND CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-58 UNX# 18033)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
4. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.59 lb/hr, 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction), SOx (as SO2): 0.34 lb/hr, PM10: 0.24 lb/hr, CO: 8.82 lb/hr and 541 ppmv @ 15% O2, or VOC: 250 ppmv @ 15% O2. [District Rules 2201, 4201, 4701 and 4702; Kern County Rule 407] Federally Enforceable Through Title V Permit
5. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit
6. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201; Kern County Rule 404] Federally Enforceable Through Title V Permit
7. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit
8. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
11. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, VOC, and CO. This mean shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. [District Rules 2520, 9.4.2 & 4702, 6.3.3] Federally Enforceable Through Title V Permit
12. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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

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

15. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified in the Inspection and Maintenance (I & M) plan submitted to the District. [District Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

16. 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 no later than 14 days after the change for approval. 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 Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

17. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrated compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, 4701 and 4702, 6.3.2] Federally Enforceable Through Title V Permit

18. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. [In-stack O2 monitors may be allowed if approved by the APCO.] Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

19. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

20. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

21. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2520, 9.4.2 and NSR] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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 Rules 4701 and 4702] Federally Enforceable Through Title V Permit

23. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

24. 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

25. 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

26. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

27. 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

28. 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

29. 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

30. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

31. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-79-9 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
1,000 BHP WAUKESHA MODEL L7042 RICH BURN NATURAL GAS FIRED I.C. ENGINE, WITH TURBOCHARGER AND CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-57 UNX# 18017)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
4. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.59 lb/hr, 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction), SOx (as SO2): 0.34 lb/hr, PM10: 0.24 lb/hr, CO: 8.82 lb/hr and 541 ppmv @ 15% O2, or VOC: 250 ppmv @ 15% O2. [District Rules 2201, 4201, 4701 and 4702; Kern County Rule 407] Federally Enforceable Through Title V Permit
5. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit
6. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201; Kern County Rule 404] Federally Enforceable Through Title V Permit
7. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit
8. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
11. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, VOC, and CO. This mean shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. [District Rules 2520, 9.4.2 & 4702, 6.3.3] Federally Enforceable Through Title V Permit
12. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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

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

15. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified in the Inspection and Maintenance (I & M) plan submitted to the District. [District Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

16. 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 no later than 14 days after the change for approval. 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 Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

17. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrated compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, 4701 and 4702, 6.3.2] Federally Enforceable Through Title V Permit

18. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. [In-stack O2 monitors may be allowed if approved by the APCO.] Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

19. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

20. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

21. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2520, 9.4.2 and NSR] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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 Rules 4701 and 4702] Federally Enforceable Through Title V Permit

23. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

24. 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

25. 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

26. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

27. 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

28. 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

29. 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

30. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

31. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-80-6 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
1,000 BHP WAUKESHA MODEL L7042GL LEAN BURN NATURAL GAS FIRED I.C. ENGINE, WITH PRE-STRATIFIED COMBUSTION SYSTEM, POWERING A GAS COMPRESSOR (K-59 UNX# 53881)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. Particulate matter emissions at the point of discharge shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
5. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.8 gr/hp-hr, 3.97 lb/hr and 148 ppmv @ 15% O2 (equivalent to 90% NOx reduction); SOx (as SO2): 0.01 lb/hr; PM10: 0.09 lb/hr; CO: 9.92 lb/hr and 608 ppmv @ 15% O2; or VOC: 7.00 lb/hr and 750 ppmv @ 15% O2. [District NSR Rule and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
6. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
7. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
8. If the IC engine is fired on PUC-regulated natural gas, the permittee shall maintain on file, copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. Source testing to measure the NOx, CO, and VOC emissions from this unit shall be conducted not less than once every 12 months. If compliance with the emission limits is demonstrated on two (2) consecutive annual source tests, the testing frequency may be reduced to not less than once every 24 months. If the unit fails to demonstrate compliance with the applicable emission limits, the testing frequency shall return to not less than once every 12 months. [District NSR Rule and District Rule 4702, 6.3.2] Federally Enforceable Through Title V Permit
12. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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

14. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100; CO (ppmv) - EPA Method 10 or ARB Method 100; stack gas oxygen - EPA Method 3 or 3A or ARB Method 100; and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081 and 4702, 6.4] Federally Enforceable Through Title V Permit

15. 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. The percent reduction of NOx emissions shall also be reported. [District Rule 4702, 6.3.3] Federally Enforceable Through Title V Permit

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

17. 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, 5.6.8 and 6.5] Federally Enforceable Through Title V Permit

18. 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, 5.6.8 and 6.5.8] Federally Enforceable Through Title V Permit

19. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

20. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4702, 5.6.1 and 5.6.3] Federally Enforceable Through Title V Permit

21. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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

23. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4701, 6.2.1] Federally Enforceable Through Title V Permit

24. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

25. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702, 6.2.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-81-6 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
1,000 BHP WAUKESHA MODEL L7042GL LEAN BURN NATURAL GAS FIRED I.C. ENGINE, WITH PRE-STRATIFIED COMBUSTION SYSTEM, POWERING A GAS COMPRESSOR (K-60)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
4. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.8 gr/hp-hr, 3.97 lb/hr and 148 ppmv @ 15% O2 (equivalent to 90% NOx reduction), SOx (as SO2): 0.01 lbm/hr, PM10: 0.09 lbm/hr, CO: 9.92 lbm/hr and 608 ppmv @ 15% O2, or VOC: 7.00 lb/hr and 750 ppmv @ 15% O2. [District Rules 2201, 4201, 4701 and 4702; Kern County Rule 407] Federally Enforceable Through Title V Permit
5. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit
6. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201; Kern County Rule 404] Federally Enforceable Through Title V Permit
7. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit
8. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
11. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, VOC, and CO. This mean shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. [District Rules 2520, 9.4.2 & 4702, 6.3.3] Federally Enforceable Through Title V Permit
12. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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

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

15. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified in the Inspection and Maintenance (I & M) plan submitted to the District. [District Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

16. 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 no later than 14 days after the change for approval. 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 Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

17. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrated compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, 4701 and 4702] Federally Enforceable Through Title V Permit

18. Permittee shall monitor the nitrogen oxides (NOx) concentration in the engine exhaust with a facility conducted noncertified self test at least on a monthly basis. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

19. The permittee shall monitor and record the stack concentration of CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

20. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

21. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

22. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2520, 9.4.2 and NSR] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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 Rules 4701 and 4702] Federally Enforceable Through Title V Permit

24. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

25. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

26. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-82-10 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
1,500 BHP WAUKESHA MODEL L7042 LEAN BURN NATURAL GAS FIRED I.C. ENGINE, WITH PRE-STRATIFIED COMBUSTION SYSTEM, POWERING A GAS COMPRESSOR (K-70 UNX# 54508)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
4. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.8 gr/hp-hr, 5.95 lb/hr and 148 ppmv @ 15% O2 (equivalent to 90% NOx reduction), SOx (as SO2): 0.02 lb/hr, PM10: 0.05 lb/hr, CO: 8.00 lb/hr and 327 ppmv @ 15% O2, or VOC: 6.00 lb/hr and 429 ppmv @ 15% O2. [District Rules 2201, 4201, 4701 and 4702; Kern County Rule 407] Federally Enforceable Through Title V Permit
5. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit
6. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201; Kern County Rule 404] Federally Enforceable Through Title V Permit
7. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit
8. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
11. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, VOC, and CO. This mean shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. [District Rules 2520, 9.4.2 & 4702, 6.3.3] Federally Enforceable Through Title V Permit
12. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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

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

15. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified in the Inspection and Maintenance (I & M) plan submitted to the District. [District Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

16. 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 no later than 14 days after the change for approval. 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 Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

17. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrated compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, 4701 and 4702] Federally Enforceable Through Title V Permit

18. Permittee shall monitor the nitrogen oxides (NOx) concentration in the engine exhaust with a facility conducted noncertified self test at least on a monthly basis. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

19. The permittee shall monitor and record the stack concentration of CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

20. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

21. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

22. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2520, 9.4.2 and NSR] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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 Rules 4701 and 4702] Federally Enforceable Through Title V Permit

24. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

25. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

26. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-83-9 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
1,500 BHP WAUKESHA MODEL L7042 LEAN BURN NATURAL GAS FIRED I.C. ENGINE, WITH PRE-STRATIFIED COMBUSTION SYSTEM, POWERING A GAS COMPRESSOR (K-71 UNX# 54497)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
4. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 1.8 gr/hp-hr, 5.95 lb/hr and 148 ppmv @ 15% O2 (equivalent to 90% NOx reduction), SOx (as SO2): 0.02 lb/hr, PM10: 0.05 lb/hr, CO: 8.00 lb/hr and 327 ppmv @ 15% O2, or VOC: 6.00 lb/hr and 429 ppmv @ 15% O2. [District Rules 2201, 4201, 4701 and 4702; Kern County Rule 407] Federally Enforceable Through Title V Permit
5. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit
6. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201; Kern County Rule 404] Federally Enforceable Through Title V Permit
7. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [Kern County Rule 407] Federally Enforceable Through Title V Permit
8. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
11. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, VOC, and CO. This mean shall be multiplied by the appropriate factor to determine compliance with the hourly emission limits. [District Rules 2520, 9.4.2 & 4702, 6.3.3] Federally Enforceable Through Title V Permit
12. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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

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

15. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified in the Inspection and Maintenance (I & M) plan submitted to the District. [District Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

16. 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 no later than 14 days after the change for approval. 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 Rules 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

17. NOx, CO, and VOC emissions shall be measured (source tested) not less than every 12 months. If compliance with the emission limits is demonstrated for 2 consecutive years, testing frequency may be reduced to every 24 months. If the unit fails to demonstrated compliance with the emission limits, the testing frequency shall return to not less than every 12 months. NOx percent reduction compliance shall be demonstrated every 24 months. [District Rules 2201, 2520 9.4.2, 4701 and 4702] Federally Enforceable Through Title V Permit

18. Permittee shall monitor the nitrogen oxides (NOx) concentration in the engine exhaust with a facility conducted noncertified self test at least on a monthly basis. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

19. The permittee shall monitor and record the stack concentration of CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

20. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

21. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

22. The facility conducted noncertified self test shall be performed for NOx according to ARB Method 100 (or EPA Method 7E). [District Rules 2520, 9.4.2 and NSR] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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 Rules 4701 and 4702] Federally Enforceable Through Title V Permit

24. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

25. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

26. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-84-6 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
490 BHP CATERPILLAR MODEL G398 RICH BURN NATURAL GAS FIRED I.C. ENGINE, WITH CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-67 UNX# 54302)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. Particulate matter emissions at the point of discharge shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
5. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction); SOx (as SO2): 0.6 lb/day; PM10: 10.5 lb/day; CO: 11.6 g/hp-hr and 1,592 ppmv @ 15% O2; or VOC: 58 ppmv @ 15% O2. [District NSR Rule and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
6. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
7. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
8. If the IC engine is fired on PUC-regulated natural gas, the permittee shall maintain on file, copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. Source testing to measure the NOx, CO, and VOC emissions from this unit shall be conducted not less than once every 12 months. If compliance with the emission limits is demonstrated on two (2) consecutive annual source tests, the testing frequency may be reduced to not less than once every 24 months. If the unit fails to demonstrate compliance with the applicable emission limits, the testing frequency shall return to not less than once every 12 months. [District NSR Rule and District Rule 4702, 6.3.2] Federally Enforceable Through Title V Permit
12. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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

14. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100; CO (ppmv) - EPA Method 10 or ARB Method 100; stack gas oxygen - EPA Method 3 or 3A or ARB Method 100; and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081 and 4702, 6.4] Federally Enforceable Through Title V Permit

15. 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

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

17. 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, 5.6.8 and 6.5]

18. 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, 5.6.8 and 6.5.8]

19. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

20. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

21. 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 4701, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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
23. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit
24. 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
25. 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
26. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit
27. 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
28. 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
29. 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
30. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
31. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702, 6.2.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-85-6 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
490 BHP CATERPILLAR MODEL G398 RICH BURN NATURAL GAS FIRED I.C. ENGINE, WITH CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-66 UNX# 54299)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. Particulate matter emissions at the point of discharge shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
5. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction); SOx (as SO2): 0.6 lb/day; PM10: 10.5 lb/day; CO: 11.6 g/hp-hr and 1,592 ppmv @ 15% O2; or VOC: 58 ppmv @ 15% O2. [District NSR Rule and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
6. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
7. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
8. If the IC engine is fired on PUC-regulated natural gas, the permittee shall maintain on file, copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. Source testing to measure the NOx, CO, and VOC emissions from this unit shall be conducted not less than once every 12 months. If compliance with the emission limits is demonstrated on two (2) consecutive annual source tests, the testing frequency may be reduced to not less than once every 24 months. If the unit fails to demonstrate compliance with the applicable emission limits, the testing frequency shall return to not less than once every 12 months. [District NSR Rule and District Rule 4702, 6.3.2] Federally Enforceable Through Title V Permit
12. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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

14. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100; CO (ppmv) - EPA Method 10 or ARB Method 100; stack gas oxygen - EPA Method 3 or 3A or ARB Method 100; and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081 and 4702, 6.4] Federally Enforceable Through Title V Permit

15. 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

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

17. 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, 5.6.8 and 6.5] Federally Enforceable Through Title V Permit

18. 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, 5.6.8 and 6.5.8] Federally Enforceable Through Title V Permit

19. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

20. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

21. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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

23. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

24. 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

25. 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

26. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

27. 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

28. 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

29. 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

30. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

31. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702, 6.2.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-86-6 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
490 BHP CATERPILLAR MODEL G398 RICH BURN NATURAL GAS FIRED I.C. ENGINE, WITH CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-69 UNX# 54318)

PERMIT UNIT REQUIREMENTS

1. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District Rule 1070] Federally Enforceable Through Title V Permit
3. Particulate matter emissions at the point of discharge shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
5. Emissions rates shall not exceed any of the following limits: NOx (as NO2): 0.72 gr/hp-hr and 59 ppmv @ 15% O2 (equivalent to 96% NOx reduction); SOx (as SO2): 0.6 lb/day; PM10: 10.5 lb/day; CO: 11.6 g/hp-hr and 1,592 ppmv @ 15% O2; or VOC: 58 ppmv @ 15% O2. [District NSR Rule and District Rule 4702, 5.1] Federally Enforceable Through Title V Permit
6. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
7. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
8. If the IC engine is fired on PUC-regulated natural gas, the permittee shall maintain on file, copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. Source testing to measure the NOx, CO, and VOC emissions from this unit shall be conducted not less than once every 12 months. If compliance with the emission limits is demonstrated on two (2) consecutive annual source tests, the testing frequency may be reduced to not less than once every 24 months. If the unit fails to demonstrate compliance with the applicable emission limits, the testing frequency shall return to not less than once every 12 months. [District NSR Rule and District Rule 4702, 6.3.2] Federally Enforceable Through Title V Permit
12. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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

14. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100; CO (ppmv) - EPA Method 10 or ARB Method 100; stack gas oxygen - EPA Method 3 or 3A or ARB Method 100; and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081 and 4702, 6.4] Federally Enforceable Through Title V Permit

15. 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

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

17. 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, 5.6.8 and 6.5] Federally Enforceable Through Title V Permit

18. 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, 5.6.8 and 6.5.8] Federally Enforceable Through Title V Permit

19. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

20. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

21. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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

23. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit

24. 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

25. 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

26. The operator shall submit a Title V minor modification application to incorporate the O2 sensor output voltage range established for this engine within twelve months from the date in which the renewed Title V permit is issued. [District Rule 2520, 9.3.2 and 40 CFR 64] Federally Enforceable Through Title V Permit

27. 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

28. 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

29. 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

30. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

31. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702, 6.2.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-87-5 **EXPIRATION DATE:** 10/31/2009

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

EQUIPMENT DESCRIPTION:
88 BHP WAUKESHA NATURAL GAS-FIRED STANDBY IC ENGINE (UNX #15556)

PERMIT UNIT REQUIREMENTS

1. Permittee shall bring this engine into compliance with the requirements of District Rule 4702, Internal Combustion Engines - Phase 2, in accordance with the approved emission control plan that was submitted to the District. [District Rule 4702, 6.1 and 7.6] Federally Enforceable Through Title V Permit
2. Approved locations for this equipment: any site within facility S-2234. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The operator shall notify the District in writing at least two weeks prior to starting operations at a new location. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
5. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
6. Unit shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
7. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
8. If the engine is not fired on PUC-regulated natural gas, then the sulfur content (as hydrogen sulfide) of the natural gas being fired in the IC engine shall be calculated using a continuous monitor averaged over a daily basis in accordance with SCAQMD Rule 431.1 Attachment A (as amended June 12, 1998). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. If the engine is not fired on PUC-regulated natural gas, the sulfur content (as hydrogen sulfide) of each fuel source shall be tested. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 and Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
11. The engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 200 hours per year. [District NSR Rule and District Rule 4701, 3.22 and 4.2.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. The permittee shall maintain records of hours of emergency and non-emergency operation. Records shall include the date, the number of hours of operation, the purpose of the operation (e.g., load testing, weekly testing, rolling blackout, general area power outage, etc.), the type, quantity and sulfur content of fuel used, and records of operational characteristics monitoring. [District Rules 1070 and 4701, 6.2.2] Federally Enforceable Through Title V Permit

13. The operator of an internal combustion (IC) engine shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4701, 6.2.3] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-97-2 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
1,250 HP GENERAL ELECTRIC ELECTRICALLY DRIVEN NATURAL GAS COMPRESSOR (K-81) AUTHORIZED TO OPERATE WITHIN THE GAS PLANT STATIONARY SOURCE

PERMIT UNIT REQUIREMENTS

1. If compressor is operated in VOC service or wet gas service at a natural gas processing plant as defined in 40 CFR 60.631, then 40 CFR Part 60 Subpart KKK requirements shall be fully satisfied including, but not limited to, section 60.632 performance standards, 60.635 recordkeeping requirements, section 60.636 reporting requirements and Subpart A section 60.7 notification and recordkeeping. [District Rule 4001] Federally Enforceable Through Title V Permit
2. This compressor is permitted to operate at various unspecified locations within the Elk Hills Gas Plant Stationary Source. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The operator shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
4. 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
5. Maximum VOC fugitive emissions shall not exceed 1.9 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
6. The operator shall maintain with the permit accurate fugitive component counts and resulting emissions calculated using API Publication 4322 Table E-3 and U.S. EPA publication 450/3-83-007, Table 4-1. [District NSR Rule] Federally Enforceable Through Title V Permit
7. VOC content of gas processed shall not exceed 28% by weight. Permittee shall maintain a written record of VOC content (sampled not less than annually) and shall make such records available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
8. The operator shall maintain a log noting compressor location, date the compressor was relocated, whether the location is at the gas plant and whether the compressor is located upstream of the gas plant (in wet gas service). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-98-3 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
2,250 HP GENERAL ELECTRIC ELECTRICALLY DRIVEN NATURAL GAS COMPRESSOR (K-82) AUTHORIZED TO OPERATE WITHIN THE GAS PLANT STATIONARY SOURCE

PERMIT UNIT REQUIREMENTS

1. If compressor is operated in VOC service or wet gas service and is located within the boundaries of the plant site at a natural gas processing plant as defined in 40 CFR 60.631, then 40 CFR Part 60 Subpart KKK requirements shall be fully satisfied including, but not limited to, section 60.632 performance standards, 60.635 recordkeeping requirements, section 60.636 reporting requirements and Subpart A section 60.7 notification and recordkeeping. [District Rule 4001] Federally Enforceable Through Title V Permit
2. This compressor is permitted to operate at various unspecified locations within the Elk Hills Gas Plant Stationary Source. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The operator shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
4. 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
5. A leak free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit shall be reported as a deviation. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Fugitive VOC emissions rate shall be, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components from this tank. [District Rule 2201] Federally Enforceable Through Title V Permit
7. VOC fugitive emissions from the components in gas, light liquid, and light crude oil service shall not exceed 0.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Permittee shall maintain accurate records of fugitive emissions and such records shall be made readily available for District inspection upon request for a period of five years. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain a log noting compressor location, date the compressor was relocated, whether the location is at the gas plant and whether the compressor is located upstream of the gas plant (in wet gas service). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-99-3 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
2,250 HP GENERAL ELECTRIC ELECTRICALLY DRIVEN NATURAL GAS COMPRESSOR (K-83) AUTHORIZED TO OPERATE WITHIN THE GAS PLANT STATIONARY SOURCE

PERMIT UNIT REQUIREMENTS

1. If compressor is operated in VOC service or wet gas service and is located within the boundaries of the plant site at a natural gas processing plant as defined in 40 CFR 60.631, then 40 CFR Part 60 Subpart KKK requirements shall be fully satisfied including, but not limited to, section 60.632 performance standards, 60.635 recordkeeping requirements, section 60.636 reporting requirements and Subpart A section 60.7 notification and recordkeeping. [District Rule 4001] Federally Enforceable Through Title V Permit
2. This compressor is permitted to operate at various unspecified locations within the Elk Hills Gas Plant Stationary Source. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The operator shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
4. 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
5. A leak free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit shall be reported as a deviation. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Fugitive VOC emissions rate shall be, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components from this tank. [District Rule 2201] Federally Enforceable Through Title V Permit
7. VOC fugitive emissions from the components in gas, light liquid, and light crude oil service shall not exceed 0.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Permittee shall maintain accurate records of fugitive emissions and such records shall be made readily available for District inspection upon request for a period of five years. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain a log noting compressor location, date the compressor was relocated, whether the location is at the gas plant and whether the compressor is located upstream of the gas plant (in wet gas service). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-100-2 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
300 BHP SIEMENS ELECTRICALLY DRIVEN NATURAL GAS COMPRESSOR (K-84) AUTHORIZED TO OPERATE WITHIN THE GAS PLANT STATIONARY SOURCE S-2234

PERMIT UNIT REQUIREMENTS

1. If compressor is operated in VOC service or wet gas service at a natural gas processing plant as defined in 40 CFR 60.631, then 40 CFR Part 60 Subpart KKK requirements shall be fully satisfied including, but not limited to, section 60.632 performance standards, 60.635 recordkeeping requirements, section 60.636 reporting requirements and Subpart A section 60.7 notification and recordkeeping. [District Rule 4001] Federally Enforceable Through Title V Permit
2. This compressor is permitted to operate at various unspecified locations within the Elk Hills Gas Plant Stationary Source. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The operator shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
4. 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
5. Maximum VOC fugitive emissions shall not exceed 1.0 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
6. The operator shall maintain with the permit accurate fugitive component counts and resulting emissions calculated using API Publication 4322 Table E-3 and U.S. EPA publication 450/3-83-007, Table 4-1. [District NSR Rule] Federally Enforceable Through Title V Permit
7. VOC content of gas processed shall not exceed 28% by weight. Permittee shall maintain a written record of VOC content (sampled not less than annually) and shall make such records available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
8. The operator shall maintain a log noting compressor location, date the compressor was relocated, whether the location is at the gas plant and whether the compressor is located upstream of the gas plant (in wet gas service). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-101-2 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
300 BHP SIEMENS ELECTRICALLY DRIVEN NATURAL GAS COMPRESSOR (K-85) AUTHORIZED TO OPERATE WITHIN THE GAS PLANT STATIONARY SOURCE S-2234

PERMIT UNIT REQUIREMENTS

1. If compressor is operated in VOC service or wet gas service at a natural gas processing plant as defined in 40 CFR 60.631, then 40 CFR Part 60 Subpart KKK requirements shall be fully satisfied including, but not limited to, section 60.632 performance standards, 60.635 recordkeeping requirements, section 60.636 reporting requirements and Subpart A section 60.7 notification and recordkeeping. [District Rule 4001] Federally Enforceable Through Title V Permit
2. This compressor is permitted to operate at various unspecified locations within the Elk Hills Gas Plant Stationary Source. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The operator shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
4. 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
5. Maximum VOC fugitive emissions shall not exceed 1.0 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
6. The operator shall maintain with the permit accurate fugitive component counts and resulting emissions calculated using API Publication 4322 Table E-3 and U.S. EPA publication 450/3-83-007, Table 4-1. [District NSR Rule] Federally Enforceable Through Title V Permit
7. VOC content of gas processed shall not exceed 28% by weight. Permittee shall maintain a written record of VOC content (sampled not less than annually) and shall make such records available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
8. The operator shall maintain a log noting compressor location, date the compressor was relocated, whether the location is at the gas plant and whether the compressor is located upstream of the gas plant (in wet gas service). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-104-2 **EXPIRATION DATE:** 10/31/2009

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

EQUIPMENT DESCRIPTION:
1445 HP CATERPILLAR MODEL 3512 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING A 1000KW ELECTRIC GENERATOR

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
2. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. Compliance with this requirement is assured by only using diesel fuel with sulfur content not exceeding 0.05% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
3. The diesel engine shall be operated with an initial injection timing setting of 16 degrees BTDC (Before Top Dead Center) or less. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Engine shall be equipped with a turbocharger. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Engine shall be equipped with an aftercooler or intercooler. [District NSR Rule] 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 NSR Rule] Federally Enforceable Through Title V Permit
7. The engine shall not have a rain cap, that impedes vertical exhaust flow, installed on the exhaust pipe. [District Rule 4102]
8. This engine shall be operated using only CARB certified diesel fuel. [District Rule 2520, 9.3.2 and 17 CCR 93115] Federally Enforceable Through Title V Permit
9. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District NSR Rule, District Rule 4702, 5.7.4 and 17 CCR 93115] Federally Enforceable Through Title V Permit
10. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702, 5.7.2] Federally Enforceable Through Title V Permit
11. Emissions shall not exceed any of the following at full rated load: NOx, 9.39 g/bhp-hr; CO, 0.93 g/bhp-hr; VOC, 0.28 g/bhp-hr; PM10, 0.142 g/bhp-hr; or SOx, 0.082 g/bhp-hr. [District NSR Rule] Federally Enforceable Through Title V Permit
12. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District NSR Rule, District Rule 4702, 4.2.1 and 17 CCR 93115] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702, 5.7.3] Federally Enforceable Through Title V Permit

14. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.), and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702, 6.2.3 and 17 CCR 93115] Federally Enforceable Through Title V Permit

15. The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [District Rule 2520, 9.4.2 and 17 CCR 93115] Federally Enforceable Through Title V Permit

16. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702, 6.2.3 and 17 CCR 93115] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-107-4 **EXPIRATION DATE:** 10/31/2009

SECTION: NW36 **TOWNSHIP:** 30S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
2,250 BHP ELECTRICALLY DRIVEN NATURAL GAS COMPRESSOR (K-89), INCLUDING 2 SKID MOUNTED GAS/LIQUID SEPARATORS, 1 OFF SKID GAS COOLER AND FACILITY INLET GAS/LIQUID SEPARATOR

PERMIT UNIT REQUIREMENTS

1. If compressor is operated in VOC service or wet gas service and is located within the boundaries of the plant site at a natural gas processing plant as defined in 40 CFR 60.631, then 40 CFR Part 60 Subpart KKK requirements shall be fully satisfied including, but not limited to, section 60.632 performance standards, 60.635 recordkeeping requirements, section 60.636 reporting requirements and Subpart A section 60.7 notification and recordkeeping. [District Rule 4001] Federally Enforceable Through Title V Permit
2. This compressor is permitted to operate at various unspecified locations within the Elk Hills Gas Plant Stationary Source. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The operator shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
4. 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
5. A leak free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit shall be reported as a deviation. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Fugitive VOC emissions rate shall be, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components from this tank. [District Rule 2201] Federally Enforceable Through Title V Permit
7. VOC fugitive emissions from the components in gas, light liquid, and light crude oil service shall not exceed 0.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Permittee shall maintain accurate records of fugitive emissions and such records shall be made readily available for District inspection upon request for a period of five years. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain a log noting compressor location, date the compressor was relocated, whether the location is at the gas plant and whether the compressor is located upstream of the gas plant (in wet gas service). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-108-4 **EXPIRATION DATE:** 10/31/2009

SECTION: NW36 **TOWNSHIP:** 30S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
2,250 BHP ELECTRICALLY DRIVEN NATURAL GAS COMPRESSOR (K-90), INCLUDING 2 SKID MOUNTED GAS/LIQUID SEPARATORS AND 1 OFF SKID GAS COOLER

PERMIT UNIT REQUIREMENTS

1. If compressor is operated in VOC service or wet gas service and is located within the boundaries of the plant site at a natural gas processing plant as defined in 40 CFR 60.631, then 40 CFR Part 60 Subpart KKK requirements shall be fully satisfied including, but not limited to, section 60.632 performance standards, 60.635 recordkeeping requirements, section 60.636 reporting requirements and Subpart A section 60.7 notification and recordkeeping. [District Rule 4001] Federally Enforceable Through Title V Permit
2. This compressor is permitted to operate at various unspecified locations within the Elk Hills Gas Plant Stationary Source. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The operator shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
4. 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
5. A leak free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit shall be reported as a deviation. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Fugitive VOC emissions rate shall be, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components from this tank. [District Rule 2201] Federally Enforceable Through Title V Permit
7. VOC fugitive emissions from the components in gas, light liquid, and light crude oil service shall not exceed 0.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Permittee shall maintain accurate records of fugitive emissions and such records shall be made readily available for District inspection upon request for a period of five years. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain a log noting compressor location, date the compressor was relocated, whether the location is at the gas plant and whether the compressor is located upstream of the gas plant (in wet gas service). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-109-4 **EXPIRATION DATE:** 10/31/2009

SECTION: NW36 **TOWNSHIP:** 30S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
2,250 BHP ELECTRICALLY DRIVEN NATURAL GAS COMPRESSOR (K-91), INCLUDING 2 SKID MOUNTED GAS/LIQUID SEPARATORS AND 1 OFF SKID GAS COOLER

PERMIT UNIT REQUIREMENTS

1. If compressor is operated in VOC service or wet gas service and is located within the boundaries of the plant site at a natural gas processing plant as defined in 40 CFR 60.631, then 40 CFR Part 60 Subpart KKK requirements shall be fully satisfied including, but not limited to, section 60.632 performance standards, 60.635 recordkeeping requirements, section 60.636 reporting requirements and Subpart A section 60.7 notification and recordkeeping. [District Rule 4001] Federally Enforceable Through Title V Permit
2. This compressor is permitted to operate at various unspecified locations within the Elk Hills Gas Plant Stationary Source. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The operator shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
4. 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
5. A leak free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit shall be reported as a deviation. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Fugitive VOC emissions rate shall be, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components from this tank. [District Rule 2201] Federally Enforceable Through Title V Permit
7. VOC fugitive emissions from the components in gas, light liquid, and light crude oil service shall not exceed 0.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Permittee shall maintain accurate records of fugitive emissions and such records shall be made readily available for District inspection upon request for a period of five years. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain a log noting compressor location, date the compressor was relocated, whether the location is at the gas plant and whether the compressor is located upstream of the gas plant (in wet gas service). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-110-4 **EXPIRATION DATE:** 10/31/2009

SECTION: NW36 **TOWNSHIP:** 30S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
2,250 BHP ELECTRICALLY DRIVEN NATURAL GAS COMPRESSOR (K-92), INCLUDING 2 SKID MOUNTED GAS/LIQUID SEPARATORS AND 1 OFF SKID GAS COOLER

PERMIT UNIT REQUIREMENTS

1. If compressor is operated in VOC service or wet gas service and is located within the boundaries of the plant site at a natural gas processing plant as defined in 40 CFR 60.631, then 40 CFR Part 60 Subpart KKK requirements shall be fully satisfied including, but not limited to, section 60.632 performance standards, 60.635 recordkeeping requirements, section 60.636 reporting requirements and Subpart A section 60.7 notification and recordkeeping. [District Rule 4001] Federally Enforceable Through Title V Permit
2. This compressor is permitted to operate at various unspecified locations within the Elk Hills Gas Plant Stationary Source. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The operator shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
4. 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
5. A leak free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit shall be reported as a deviation. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Fugitive VOC emissions rate shall be, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components from this tank. [District Rule 2201] Federally Enforceable Through Title V Permit
7. VOC fugitive emissions from the components in gas, light liquid, and light crude oil service shall not exceed 0.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Permittee shall maintain accurate records of fugitive emissions and such records shall be made readily available for District inspection upon request for a period of five years. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain a log noting compressor location, date the compressor was relocated, whether the location is at the gas plant and whether the compressor is located upstream of the gas plant (in wet gas service). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-111-4 **EXPIRATION DATE:** 10/31/2009

SECTION: NW36 **TOWNSHIP:** 30S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
2,250 BHP ELECTRICALLY DRIVEN NATURAL GAS COMPRESSOR (K-93), INCLUDING 2 SKID MOUNTED GAS/LIQUID SEPARATORS AND 1 OFF SKID GAS COOLER

PERMIT UNIT REQUIREMENTS

1. If compressor is operated in VOC service or wet gas service and is located within the boundaries of the plant site at a natural gas processing plant as defined in 40 CFR 60.631, then 40 CFR Part 60 Subpart KKK requirements shall be fully satisfied including, but not limited to, section 60.632 performance standards, 60.635 recordkeeping requirements, section 60.636 reporting requirements and Subpart A section 60.7 notification and recordkeeping. [District Rule 4001] Federally Enforceable Through Title V Permit
2. This compressor is permitted to operate at various unspecified locations within the Elk Hills Gas Plant Stationary Source. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The operator shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
4. 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
5. A leak free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit shall be reported as a deviation. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Fugitive VOC emissions rate shall be, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components from this tank. [District Rule 2201] Federally Enforceable Through Title V Permit
7. VOC fugitive emissions from the components in gas, light liquid, and light crude oil service shall not exceed 0.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Permittee shall maintain accurate records of fugitive emissions and such records shall be made readily available for District inspection upon request for a period of five years. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain a log noting compressor location, date the compressor was relocated, whether the location is at the gas plant and whether the compressor is located upstream of the gas plant (in wet gas service). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-112-4 **EXPIRATION DATE:** 10/31/2009

SECTION: NW36 **TOWNSHIP:** 30S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
2,250 BHP ELECTRICALLY DRIVEN NATURAL GAS COMPRESSOR (K-94), INCLUDING 2 SKID MOUNTED GAS/LIQUID SEPARATORS AND 1 OFF SKID GAS COOLER

PERMIT UNIT REQUIREMENTS

1. If compressor is operated in VOC service or wet gas service and is located within the boundaries of the plant site at a natural gas processing plant as defined in 40 CFR 60.631, then 40 CFR Part 60 Subpart KKK requirements shall be fully satisfied including, but not limited to, section 60.632 performance standards, 60.635 recordkeeping requirements, section 60.636 reporting requirements and Subpart A section 60.7 notification and recordkeeping. [District Rule 4001] Federally Enforceable Through Title V Permit
2. This compressor is permitted to operate at various unspecified locations within the Elk Hills Gas Plant Stationary Source. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The operator shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
4. 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
5. A leak free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit shall be reported as a deviation. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Fugitive VOC emissions rate shall be, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components from this tank. [District Rule 2201] Federally Enforceable Through Title V Permit
7. VOC fugitive emissions from the components in gas, light liquid, and light crude oil service shall not exceed 0.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Permittee shall maintain accurate records of fugitive emissions and such records shall be made readily available for District inspection upon request for a period of five years. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain a log noting compressor location, date the compressor was relocated, whether the location is at the gas plant and whether the compressor is located upstream of the gas plant (in wet gas service). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-114-1 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
90,000 GALLON NATURAL GASOLINE AND BUTANE STORAGE TANK #UNX 12954

PERMIT UNIT REQUIREMENTS

1. The storage tank shall not vent directly to the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
2. This tank shall be capable of maintaining working pressures sufficient to prevent organic liquid loss of VOC loss to the atmosphere. [District Rule 4623, 3.24 and 4.1.1] Federally Enforceable Through Title V Permit
3. There shall be no leaks in excess of 10,000 ppmv when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Any tank gauging or sampling device shall be equipped with a gas-tight (as defined in District Rule 4623) cover which shall be closed at all times except during gauging or sampling. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. All piping, valves and fittings shall be constructed and maintained in a gas-tight (as defined in District Rule 4623) condition. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. 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
7. A facility operator, upon detection of a leaking component greater than 7,500 ppm when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. Leaks less than 10,000 ppmv from components which have been tagged by the facility operator for repair within 56 hours or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. Fugitive VOC emissions rate, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c , Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components shall not exceed 0.2 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection; 3) Date and emission level of recheck after leak is repaired. [District NSR Rule] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-115-1 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
90,000 GALLON NATURAL GASOLINE AND BUTANE STORAGE TANK #UNX 12955

PERMIT UNIT REQUIREMENTS

1. The storage tank shall not vent directly to the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
2. This tank shall be capable of maintaining working pressures sufficient to prevent organic liquid loss of VOC loss to the atmosphere. [District Rule 4623, 3.24 and 4.1.1] Federally Enforceable Through Title V Permit
3. There shall be no leaks in excess of 10,000 ppmv when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Any tank gauging or sampling device shall be equipped with a gas-tight (as defined in Rule 4623) cover which shall be closed at all times except during gauging or sampling. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. All piping, valves and fittings shall be constructed and maintained in a gas-tight (as defined in 4623) condition. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. 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
7. A facility operator, upon detection of a leaking component greater than 7,500 ppm when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. Leaks less than 10,000 ppmv from components which have been tagged by the facility operator for repair within 56 hours or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. Fugitive VOC emissions rate, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c , Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components shall not exceed 0.2 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection; 3) Date and emission level of recheck after leak is repaired. [District NSR Rule] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-116-1 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
90,000 GALLON NATURAL GASOLINE AND BUTANE STORAGE TANK #UNX 12956

PERMIT UNIT REQUIREMENTS

1. The tank shall not vent directly to the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
2. This tank shall be capable of maintaining working pressures sufficient to prevent organic liquid loss of VOC loss to the atmosphere. [District Rule 4623, 3.24 and 4.1.1] Federally Enforceable Through Title V Permit
3. There shall be no leaks in excess of 10,000 ppmv when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Any tank gauging or sampling device shall be equipped with a gas-tight (as defined in District Rule 4623) cover which shall be closed at all times except during gauging or sampling. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. All piping, valves and fittings shall be constructed and maintained in a gas-tight (as defined in District Rule 4623) condition. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. 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
7. A facility operator, upon detection of a leaking component greater than 7,500 ppm when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. Leaks less than 10,000 ppmv from components which have been tagged by the facility operator for repair within 56 hours or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. Fugitive VOC emissions rate, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c , Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components shall not exceed 0.2 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection; 3) Date and emission level of recheck after leak is repaired. [District NSR Rule] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-117-1 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
90,000 GALLON NATURAL GASOLINE AND BUTANE STORAGE TANK #UNX 12966

PERMIT UNIT REQUIREMENTS

1. The tank shall not vent directly to the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
2. This tank shall be capable of maintaining working pressures sufficient to prevent organic liquid loss of VOC loss to the atmosphere. [District Rule 4623, 3.24 and 4.1.1] Federally Enforceable Through Title V Permit
3. There shall be no leaks in excess of 10,000 ppmv when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Any tank gauging or sampling device shall be equipped with a gas-tight (as defined in DIstrict Rule 4623) cover which shall be closed at all times except during gauging or sampling. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. All piping, valves and fittings shall be constructed and maintained in a gas-tight (as defined in District Rule 4623) condition. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. 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
7. A facility operator, upon detection of a leaking component greater than 7,500 ppm when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. Leaks less than 10,000 ppmv from components which have been tagged by the facility operator for repair within 56 hours or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. Fugitive VOC emissions rate, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c , Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components shall not exceed 0.2 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection; 3) Date and emission level of recheck after leak is repaired. [District NSR Rule] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-118-1 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
96,604 GALLON NATURAL GASOLINE AND BUTANE STORAGE TANK

PERMIT UNIT REQUIREMENTS

1. The tank shall not vent directly to the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
2. This tank shall be capable of maintaining working pressures sufficient to prevent organic liquid loss of VOC loss to the atmosphere. [District Rule 4623, 3.24 and 4.1.1] Federally Enforceable Through Title V Permit
3. There shall be no leaks in excess of 10,000 ppmv when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Any tank gauging or sampling device shall be equipped with a gas-tight (as defined in District Rule 4623) cover which shall be closed at all times except during gauging or sampling. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. All piping, valves and fittings shall be constructed and maintained in a gas-tight (as defined in District Rule 4623) condition. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. 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
7. A facility operator, upon detection of a leaking component greater than 7,500 ppm when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. Leaks less than 10,000 ppmv from components which have been tagged by the facility operator for repair within 56 hours or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. Fugitive VOC emissions rate, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c , Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components shall not exceed 0.2 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection; 3) Date and emission level of recheck after leak is repaired. [District NSR Rule] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-119-1 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
96,604 GALLON NATURAL GASOLINE AND BUTANE STORAGE BULLET TANK

PERMIT UNIT REQUIREMENTS

1. The tank shall not vent directly to the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
2. This tank shall be capable of maintaining working pressures sufficient to prevent organic liquid loss of VOC loss to the atmosphere. [District Rule 4623, 3.24 and 4.1.1] Federally Enforceable Through Title V Permit
3. There shall be no leaks in excess of 10,000 ppmv when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Any tank gauging or sampling device shall be equipped with a gas-tight (as defined in Rule 4623) cover which shall be closed at all times except during gauging or sampling. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. All piping, valves and fittings shall be constructed and maintained in a gas-tight (as defined in 4623) condition. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. 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
7. A facility operator, upon detection of a leaking component greater than 7,500 ppm when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. Leaks less than 10,000 ppmv from components which have been tagged by the facility operator for repair within 56 hours or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. Fugitive VOC emissions rate, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c , Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components shall not exceed 0.2 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection; 3) Date and emission level of recheck after leak is repaired. [District NSR Rule] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-120-1 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
90,000 GALLON NATURAL GASOLINE AND BUTANE STORAGE TANK #UNX 12950

PERMIT UNIT REQUIREMENTS

1. This tank shall be capable of maintaining working pressures sufficient to prevent organic liquid loss of VOC loss to the atmosphere. [District Rule 4623, 3.24 and 4.1.1] Federally Enforceable Through Title V Permit
2. There shall be no leaks in excess of 10,000 ppmv when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Any tank gauging or sampling device shall be equipped with a gas-tight (as defined in District Rule 4623) cover which shall be closed at all times except during gauging or sampling. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
4. All piping, valves and fittings shall be constructed and maintained in a gas-tight (as defined in District Rule 4623) condition. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. 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
6. A facility operator, upon detection of a leaking component greater than 7,500 ppm when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. Leaks less than 10,000 ppmv from components which have been tagged by the facility operator for repair within 56 hours or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. Fugitive VOC emissions rate, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c , Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components shall not exceed 0.2 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
10. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection; 3) Date and emission level of recheck after leak is repaired. [District NSR Rule] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-121-1 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
90,000 GALLON PRESSURIZED NATURAL GASOLINE AND BUTANE STORAGE TANK #UNX 12953

PERMIT UNIT REQUIREMENTS

1. This tank shall be capable of maintaining working pressures sufficient to prevent organic liquid loss of VOC loss to the atmosphere. [District Rule 4623, 3.24 and 4.1.1] Federally Enforceable Through Title V Permit
2. There shall be no leaks in excess of 10,000 ppmv when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Any tank gauging or sampling device shall be equipped with a gas-tight (as defined in District Rule 4623) cover which shall be closed at all times except during gauging or sampling. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
4. All piping, valves and fittings shall be constructed and maintained in a gas-tight (as defined in District Rule 4623) condition. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. 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
6. A facility operator, upon detection of a leaking component greater than 7,500 ppm when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. Leaks less than 10,000 ppmv from components which have been tagged by the facility operator for repair within 56 hours or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. Fugitive VOC emissions rate, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c , Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components shall not exceed 0.2 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
10. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection; 3) Date and emission level of recheck after leak is repaired. [District NSR Rule] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-122-2 **EXPIRATION DATE:** 10/31/2009

SECTION: NW36 **TOWNSHIP:** 30S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
GLYCOL DEHYDRATION SKID MOUNTED UNIT WITH A GLYCOL CONTACTOR, SEPARATOR COALESCER, SEVERAL GLYCOL HEAT EXCHANGERS, REBOILER/REGENERATOR EQUIPPED WITH 1.5 MMBTU/HR BURNER, GLYCOL SURGE TANK, FLASH SEPARATOR, LEAN/RICH GLYCOL EXCHANGER, VARIOUS PUMPS AND FILTERS, WITH PROCESS VENT CONNECTED TO EXISTING VACUUM GAS GATHERING SYSTEM

PERMIT UNIT REQUIREMENTS

1. Glycol reboiler heater shall be fired on natural gas containing no more than 0.75 gr S/100 scf and no more than 5% by weight hydrocarbons heavier that butane. [District Rule 2020] Federally Enforceable Through Title V Permit
2. Only glycol shall be used as the dehydration medium. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Flash tank and dehydrator vent shall be vented to gas gathering system. [District Rules 2201 and 4408] Federally Enforceable Through Title V Permit
4. Condensate handling shall be conducted in closed systems resulting in fugitive component emissions only. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The glycol dehydration system shall not be operated unless all vapors are directed to the vapor recovery system, a fuel gas system or a sales gas system, or a system in which VOC emissions are combusted by a flare, incinerator, reboiler, or thermal oxidizer. [District Rule 4408, 5.1] Federally Enforceable Through Title V Permit
6. The condensed hydrocarbon liquid stream from the glycol dehydration vent shall be stored and handled in a manner that will not cause or allow evaporation of VOC to the atmosphere. [District Rule 4408, 5.2] Federally Enforceable Through Title V Permit
7. A leak is defined as the dripping at a rate of more than three (3) drops per minute of liquid containing VOCs or a reading as methane in excess of 10,000 ppm above background when measured in accordance with EPA Method 21. [District Rule 4408, 3.8.1] Federally Enforceable Through Title V Permit
8. All control systems shall be maintained in a leak-free condition as determined by EPA Method 21. [District Rule 4408, 5.3] Federally Enforceable Through Title V Permit
9. VOC control efficiency shall be no less than 95% by weight. [District Rule 4408, 5.1] Federally Enforceable Through Title V Permit
10. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.5 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
11. 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
12. The operator shall maintain monthly records of the amount of gas dehydrated (MMSCF). [District Rule 4408, 6.1.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. The operator of any glycol dehydration system shall maintain the following records: facility name and APCD permit number; description of any installed VOC control system; flow diagram of dehydrator and any VOC controls; and maintenance records of the VOC control system. [District Rule 4408, 6.1.2] Federally Enforceable Through Title V Permit

14. The records listed in Sections 6.1.1, 6.1.2, and 6.1.3 shall be retained on the premises for a period of not less than five years and made available to any District representative upon request. [District Rule 4408, 6.1] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-126-2 **EXPIRATION DATE:** 10/31/2009

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

EQUIPMENT DESCRIPTION:
1834 HP NATURAL GAS-FIRED WAUKESHA IC ENGINE MODEL #7042 DRIVING A GAS COMPRESSOR (R-21) EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION, AIR/FUEL RATIO CONTROLLER, POSITIVE CRANKCASE VENTILATION, AND OPERATES AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234

PERMIT UNIT REQUIREMENTS

1. When this unit is not operated, the fuel line shall be physically disconnected from this unit. [District Rule 4702] Federally Enforceable Through Title V Permit
2. A source test to demonstrate compliance with NOx, CO and VOC emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4702] Federally Enforceable Through Title V Permit
3. Permittee shall notify the District at least seven (7) calendar days prior to recommencing operation of this dormant emissions unit. [District Rule 4702] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. This unit shall not operate within 1,000 feet of a kindergarten through 12 grade school. [CH&SC 42301.6] Federally Enforceable Through Title V Permit
7. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
8. 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
9. 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
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) - 0.011 g/hp-hr. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
11. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The fuel consumption limit for this engine shall not exceed 241,600 scf/day. [District Rule 2201] Federally Enforceable Through Title V Permit
13. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

14. 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

15. If the engine is fired on non-PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D 1072, D 3031, D 4084, D 3246 or double GC. [District Rule 2201] Federally Enforceable Through Title V Permit

16. If the engine is fired on non-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

17. The permittee shall operate a nonresettable elapsed operating time meter. The elapsed operating time meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit

18. Source testing to measure the stack NOx, CO, and VOC emissions from this unit shall be conducted not less than once every twelve (12) months unless the unit is in dormant status. [District Rule 2201] 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: 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, VOC (ppmv) - EPA Method 25A or 25B or EPA Method 18 referenced as methane, ASTM D3246 or double GC for H2S and mercaptans, and EPA Method 21 for fugitive components. [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. 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

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 per the manufacturer's requirements as specified on the 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

27. Alternate monitoring shall not be required while unit is in dormant status, but shall resume upon recommencing operation of this unit. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

28. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

29. If the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted 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 immediately notify the District, 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 by this condition. [District Rule 4702, 5.6.1] 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 NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx 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 or gallons of liquid) 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, retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 2201 and 4702, 6.2.1 and 6.2.2] Federally Enforceable Through Title V Permit

36. Authority to Construct (ATC) S-2234-126-0 shall be implemented prior to the implementation of this ATC. [District Rule 2201]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-127-1 **EXPIRATION DATE:** 10/31/2009

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

EQUIPMENT DESCRIPTION:
1834 HP NATURAL GAS-FIRED WAUKESHA IC ENGINE MODEL #7042 DRIVING A GAS COMPRESSOR (R-25) EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION, AIR/FUEL RATIO CONTROLLER, POSITIVE CRANKCASE VENTILATION, AND OPERATES 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] Federally Enforceable Through Title V Permit
4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
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. 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) - 0.011 g/hp-hr. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
8. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The fuel consumption limit for this engine shall not exceed 241,600 scf/day. [District Rule 2201] Federally Enforceable Through Title V Permit
10. 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
11. 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
12. If the engine is fired on non-PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D 1072, D 3031, D 4084, D 3246 or double GC. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. If the engine is fired on non-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

14. The permittee shall install and operate a nonresettable elapsed operating time meter. The elapsed operating time meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit

15. Source testing to measure the stack NOx, CO, and VOC emissions from this unit shall be conducted not less than once every twelve (12) months. [District Rule 2201] Federally Enforceable Through Title V Permit

16. 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

17. 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

18. 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, VOC (ppmv) - EPA Method 25A or 25B or EPA Method 18 referenced as methane, ASTM D3246 or double GC for H2S and mercaptans, and EPA Method 21 for fugitive components. [District Rule 4702, 6.4] Federally Enforceable Through Title V Permit

19. 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

20. 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

21. 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

22. 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, 6.5] Federally Enforceable Through Title V Permit

23. 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

24. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

25. If the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted 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 immediately notify the District, 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 by this condition. [District Rule 4702, 5.6.1] Federally Enforceable Through Title V Permit

26. 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

27. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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

28. 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

29. 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

30. 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 or gallons of liquid) 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

31. All records shall be maintained, retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 2201 and 4702, 6.2.1 and 6.2.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-129-2 **EXPIRATION DATE:** 10/31/2009

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

EQUIPMENT DESCRIPTION:
1834 HP NATURAL GAS-FIRED WAUKESHA IC ENGINE MODEL #7042 DRIVING A GAS COMPRESSOR (R-27) EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION, AIR/FUEL RATIO CONTROLLER, POSITIVE CRANKCASE VENTILATION, AND OPERATES 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] Federally Enforceable Through Title V Permit
4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
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. 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) - 0.011 g/hp-hr. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
8. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The fuel consumption limit for this engine shall not exceed 241,600 scf/day. [District Rule 2201] Federally Enforceable Through Title V Permit
10. 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
11. 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
12. If the engine is fired on non-PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D 1072, D 3031, D 4084, D 3246 or double GC. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. If the engine is fired on non-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

14. The permittee shall install and operate a nonresettable elapsed operating time meter. The elapsed operating time meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit

15. Source testing to measure the stack NOx, CO, and VOC emissions from this unit shall be conducted not less than once every twelve (12) months. [District Rule 2201] Federally Enforceable Through Title V Permit

16. 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

17. 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

18. 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, VOC (ppmv) - EPA Method 25A or 25B or EPA Method 18 referenced as methane, ASTM D3246 or double GC for H2S and mercaptans, and EPA Method 21 for fugitive components. [District Rule 4702, 6.4] Federally Enforceable Through Title V Permit

19. 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

20. 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

21. 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

22. 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, 6.5] Federally Enforceable Through Title V Permit

23. 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

24. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

25. If the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted 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 immediately notify the District, 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 by this condition. [District Rule 4702, 5.6.1] Federally Enforceable Through Title V Permit

26. 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

27. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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

28. 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

29. 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

30. 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 or gallons of liquid) 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

31. All records shall be maintained, retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 2201 and 4702, 6.2.1 and 6.2.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-130-1 **EXPIRATION DATE:** 10/31/2009

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

EQUIPMENT DESCRIPTION:
1834 HP NATURAL GAS-FIRED WAUKESHA IC ENGINE MODEL #7042 DRIVING A GAS COMPRESSOR (R-28) EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION, AIR/FUEL RATIO CONTROLLER, POSITIVE CRANKCASE VENTILATION, AND OPERATES 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] Federally Enforceable Through Title V Permit
4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
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. 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) - 0.011 g/hp-hr. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
8. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The fuel consumption limit for this engine shall not exceed 241,600 scf/day. [District Rule 2201] Federally Enforceable Through Title V Permit
10. 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
11. 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
12. If the engine is fired on non-PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D 1072, D 3031, D 4084, D 3246 or double GC. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. If the engine is fired on non-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

14. The permittee shall install and operate a nonresettable elapsed operating time meter. The elapsed operating time meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit

15. Source testing to measure the stack NOx, CO, and VOC emissions from this unit shall be conducted not less than once every twelve (12) months. [District Rule 2201] Federally Enforceable Through Title V Permit

16. 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

17. 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

18. 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, VOC (ppmv) - EPA Method 25A or 25B or EPA Method 18 referenced as methane, ASTM D3246 or double GC for H2S and mercaptans, and EPA Method 21 for fugitive components. [District Rule 4702, 6.4] Federally Enforceable Through Title V Permit

19. 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

20. 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

21. 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

22. 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, 6.5] Federally Enforceable Through Title V Permit

23. 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

24. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

25. If the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted 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 immediately notify the District, 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 by this condition. [District Rule 4702, 5.6.1] Federally Enforceable Through Title V Permit

26. 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

27. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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

28. 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

29. 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

30. 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 or gallons of liquid) 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

31. All records shall be maintained, retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 2201 and 4702, 6.2.1 and 6.2.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-131-1 **EXPIRATION DATE:** 10/31/2009

SECTION: 33 **TOWNSHIP:** 30S **RANGE:** 24E

EQUIPMENT DESCRIPTION:
1834 HP NATURAL GAS-FIRED WAUKESHA IC ENGINE MODEL #7042 DRIVING A GAS COMPRESSOR (R-29) EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION, AIR/FUEL RATIO CONTROLLER, POSITIVE CRANKCASE VENTILATION, AND OPERATES 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] Federally Enforceable Through Title V Permit
4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
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. 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) - 0.011 g/hp-hr. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
8. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The fuel consumption limit for this engine shall not exceed 241,600 scf/day. [District Rule 2201] Federally Enforceable Through Title V Permit
10. 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
11. 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
12. If the engine is fired on non-PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D 1072, D 3031, D 4084, D 3246 or double GC. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. If the engine is fired on non-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

14. The permittee shall install and operate a nonresettable elapsed operating time meter. The elapsed operating time meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit

15. Source testing to measure the stack NOx, CO, and VOC emissions from this unit shall be conducted not less than once every twelve (12) months. [District Rule 2201] Federally Enforceable Through Title V Permit

16. 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

17. 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

18. 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, VOC (ppmv) - EPA Method 25A or 25B or EPA Method 18 referenced as methane, ASTM D3246 or double GC for H2S and mercaptans, and EPA Method 21 for fugitive components. [District Rule 4702, 6.4] Federally Enforceable Through Title V Permit

19. 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

20. 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

21. 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

22. 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, 6.5] Federally Enforceable Through Title V Permit

23. 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

24. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

25. If the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted 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 immediately notify the District, 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 by this condition. [District Rule 4702, 5.6.1] Federally Enforceable Through Title V Permit

26. 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

27. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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

28. 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

29. 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

30. 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 or gallons of liquid) 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

31. All records shall be maintained, retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 2201 and 4702, 6.2.1 and 6.2.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-132-1 **EXPIRATION DATE:** 10/31/2009

SECTION: 33 **TOWNSHIP:** 30S **RANGE:** 24E

EQUIPMENT DESCRIPTION:
1834 HP NATURAL GAS-FIRED WAUKESHA IC ENGINE MODEL #7042 DRIVING A GAS COMPRESSOR (R-30) EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION, AIR/FUEL RATIO CONTROLLER, POSITIVE CRANKCASE VENTILATION, AND OPERATES 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] Federally Enforceable Through Title V Permit
4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
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. 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) - 0.011 g/hp-hr. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
8. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The fuel consumption limit for this engine shall not exceed 241,600 scf/day. [District Rule 2201] Federally Enforceable Through Title V Permit
10. 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
11. 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
12. If the engine is fired on non-PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D 1072, D 3031, D 4084, D 3246 or double GC. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. If the engine is fired on non-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

14. The permittee shall install and operate a nonresettable elapsed operating time meter. The elapsed operating time meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit

15. Source testing to measure the stack NOx, CO, and VOC emissions from this unit shall be conducted not less than once every twelve (12) months. [District Rule 2201] Federally Enforceable Through Title V Permit

16. 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

17. 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

18. 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, VOC (ppmv) - EPA Method 25A or 25B or EPA Method 18 referenced as methane, ASTM D3246 or double GC for H2S and mercaptans, and EPA Method 21 for fugitive components. [District Rule 4702, 6.4] Federally Enforceable Through Title V Permit

19. 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

20. 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

21. 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

22. 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, 6.5] Federally Enforceable Through Title V Permit

23. 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

24. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

25. If the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted 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 immediately notify the District, 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 by this condition. [District Rule 4702, 5.6.1] Federally Enforceable Through Title V Permit

26. 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

27. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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

28. 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

29. 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

30. 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 or gallons of liquid) 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

31. All records shall be maintained, retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 2201 and 4702, 6.2.1 and 6.2.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-133-1 **EXPIRATION DATE:** 10/31/2009

SECTION: 31 **TOWNSHIP:** 30S **RANGE:** 24E

EQUIPMENT DESCRIPTION:
1834 HP NATURAL GAS-FIRED WAUKESHA IC ENGINE MODEL #7042 DRIVING A GAS COMPRESSOR (R-31) EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION, AIR/FUEL RATIO CONTROLLER, POSITIVE CRANKCASE VENTILATION, AND OPERATES 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] Federally Enforceable Through Title V Permit
4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
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. 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) - 0.011 g/hp-hr. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
8. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The fuel consumption limit for this engine shall not exceed 241,600 scf/day. [District Rule 2201] Federally Enforceable Through Title V Permit
10. 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
11. 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
12. If the engine is fired on non-PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D 1072, D 3031, D 4084, D 3246 or double GC. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. If the engine is fired on non-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
14. The permittee shall install and operate a nonresettable elapsed operating time meter. The elapsed operating time meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
15. Source testing to measure the stack NOx, CO, and VOC emissions from this unit shall be conducted not less than once every twelve (12) months. [District Rule 2201] Federally Enforceable Through Title V Permit
16. 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
17. 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
18. 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, VOC (ppmv) - EPA Method 25A or 25B or EPA Method 18 referenced as methane, ASTM D3246 or double GC for H2S and mercaptans, and EPA Method 21 for fugitive components. [District Rule 4702, 6.4] Federally Enforceable Through Title V Permit
19. 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
20. 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
21. 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
22. 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, 6.5] Federally Enforceable Through Title V Permit
23. 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
24. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

25. If the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted 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 immediately notify the District, 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 by this condition. [District Rule 4702, 5.6.1] Federally Enforceable Through Title V Permit

26. 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

27. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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

28. 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

29. 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

30. 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 or gallons of liquid) 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

31. All records shall be maintained, retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 2201 and 4702, 6.2.1 and 6.2.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-134-1 **EXPIRATION DATE:** 10/31/2009

SECTION: 31 **TOWNSHIP:** 30S **RANGE:** 24E

EQUIPMENT DESCRIPTION:
1834 HP NATURAL GAS-FIRED WAUKESHA IC ENGINE MODEL #7042 DRIVING A GAS COMPRESSOR (R-32) EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION, AIR/FUEL RATIO CONTROLLER, POSITIVE CRANKCASE VENTILATION, AND OPERATES 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] Federally Enforceable Through Title V Permit
4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
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. 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) - 0.011 g/hp-hr. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
8. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The fuel consumption limit for this engine shall not exceed 241,600 scf/day. [District Rule 2201] Federally Enforceable Through Title V Permit
10. 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
11. 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
12. If the engine is fired on non-PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D 1072, D 3031, D 4084, D 3246 or double GC. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. If the engine is fired on non-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

14. The permittee shall install and operate a nonresettable elapsed operating time meter. The elapsed operating time meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit

15. Source testing to measure the stack NOx, CO, and VOC emissions from this unit shall be conducted not less than once every twelve (12) months. [District Rule 2201] Federally Enforceable Through Title V Permit

16. 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

17. 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

18. 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, VOC (ppmv) - EPA Method 25A or 25B or EPA Method 18 referenced as methane, ASTM D3246 or double GC for H2S and mercaptans, and EPA Method 21 for fugitive components. [District Rule 4702, 6.4] Federally Enforceable Through Title V Permit

19. 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

20. 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

21. 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

22. 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, 6.5] Federally Enforceable Through Title V Permit

23. 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

24. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

25. If the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted 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 immediately notify the District, 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 by this condition. [District Rule 4702, 5.6.1] Federally Enforceable Through Title V Permit

26. 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

27. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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

28. 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

29. 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

30. 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 or gallons of liquid) 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

31. All records shall be maintained, retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 2201 and 4702, 6.2.1 and 6.2.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-135-1 **EXPIRATION DATE:** 10/31/2009

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

EQUIPMENT DESCRIPTION:
1834 HP NATURAL GAS-FIRED WAUKESHA IC ENGINE MODEL #7042 DRIVING A GAS COMPRESSOR (R-33) EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION, AIR/FUEL RATIO CONTROLLER, POSITIVE CRANKCASE VENTILATION, AND OPERATES 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] Federally Enforceable Through Title V Permit
4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
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. 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) - 0.011 g/hp-hr. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
8. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The fuel consumption limit for this engine shall not exceed 241,600 scf/day. [District Rule 2201] Federally Enforceable Through Title V Permit
10. 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
11. 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
12. If the engine is fired on non-PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D 1072, D 3031, D 4084, D 3246 or double GC. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. If the engine is fired on non-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

14. The permittee shall install and operate a nonresettable elapsed operating time meter. The elapsed operating time meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit

15. Source testing to measure the stack NOx, CO, and VOC emissions from this unit shall be conducted not less than once every twelve (12) months. [District Rule 2201] Federally Enforceable Through Title V Permit

16. 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

17. 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

18. 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, VOC (ppmv) - EPA Method 25A or 25B or EPA Method 18 referenced as methane, ASTM D3246 or double GC for H2S and mercaptans, and EPA Method 21 for fugitive components. [District Rule 4702, 6.4] Federally Enforceable Through Title V Permit

19. 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

20. 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

21. 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

22. 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, 6.5] Federally Enforceable Through Title V Permit

23. 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

24. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

25. If the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted 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 immediately notify the District, 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 by this condition. [District Rule 4702, 5.6.1] Federally Enforceable Through Title V Permit

26. 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

27. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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

28. 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

29. 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

30. 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 or gallons of liquid) 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

31. All records shall be maintained, retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 2201 and 4702, 6.2.1 and 6.2.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-136-1 **EXPIRATION DATE:** 10/31/2009

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

EQUIPMENT DESCRIPTION:
1834 HP NATURAL GAS-FIRED WAUKESHA IC ENGINE MODEL #7042 DRIVING A GAS COMPRESSOR (R-34) EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION, AIR/FUEL RATIO CONTROLLER, POSITIVE CRANKCASE VENTILATION, AND OPERATES 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] Federally Enforceable Through Title V Permit
4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
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. 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) - 0.011 g/hp-hr. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
8. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The fuel consumption limit for this engine shall not exceed 241,600 scf/day. [District Rule 2201] Federally Enforceable Through Title V Permit
10. 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
11. 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
12. If the engine is fired on non-PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D 1072, D 3031, D 4084, D 3246 or double GC. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. If the engine is fired on non-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

14. The permittee shall install and operate a nonresettable elapsed operating time meter. The elapsed operating time meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit

15. Source testing to measure the stack NOx, CO, and VOC emissions from this unit shall be conducted not less than once every twelve (12) months. [District Rule 2201] Federally Enforceable Through Title V Permit

16. 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

17. 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

18. 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, VOC (ppmv) - EPA Method 25A or 25B or EPA Method 18 referenced as methane, ASTM D3246 or double GC for H2S and mercaptans, and EPA Method 21 for fugitive components. [District Rule 4702, 6.4] Federally Enforceable Through Title V Permit

19. 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

20. 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

21. 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

22. 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, 6.5] Federally Enforceable Through Title V Permit

23. 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

24. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

25. If the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted 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 immediately notify the District, 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 by this condition. [District Rule 4702, 5.6.1] Federally Enforceable Through Title V Permit

26. 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

27. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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

28. 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

29. 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

30. 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 or gallons of liquid) 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

31. All records shall be maintained, retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 2201 and 4702, 6.2.1 and 6.2.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-137-2 **EXPIRATION DATE:** 10/31/2009

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

EQUIPMENT DESCRIPTION:
1834 HP NATURAL GAS-FIRED WAUKESHA IC ENGINE MODEL #7042 DRIVING A GAS COMPRESSOR (R-35) EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION, AIR/FUEL RATIO CONTROLLER, POSITIVE CRANKCASE VENTILATION, AND OPERATES AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234

PERMIT UNIT REQUIREMENTS

1. When this unit is not operated, the fuel line shall be physically disconnected from this unit. [District Rule 4702] Federally Enforceable Through Title V Permit
2. A source test to demonstrate compliance with NOx, CO and VOC emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4702] Federally Enforceable Through Title V Permit
3. Permittee shall notify the District at least seven (7) calendar days prior to recommencing operation of this dormant emissions unit. [District Rule 4702] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. This unit shall not operate within 1,000 feet of a kindergarten through 12 grade school. [CH&SC 42301.6] Federally Enforceable Through Title V Permit
7. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
8. 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
9. 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
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) - 0.011 g/hp-hr. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
11. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The fuel consumption limit for this engine shall not exceed 241,600 scf/day. [District Rule 2201] Federally Enforceable Through Title V Permit
13. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

14. 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

15. If the engine is fired on non-PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D 1072, D 3031, D 4084, D 3246 or double GC. [District Rule 2201] Federally Enforceable Through Title V Permit

16. If the engine is fired on non-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

17. The permittee shall operate a nonresettable elapsed operating time meter. The elapsed operating time meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit

18. Source testing to measure the stack NOx, CO, and VOC emissions from this unit shall be conducted not less than once every twelve (12) months unless the unit is in dormant status. [District Rule 2201] 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: 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, VOC (ppmv) - EPA Method 25A or 25B or EPA Method 18 referenced as methane, ASTM D3246 or double GC for H2S and mercaptans, and EPA Method 21 for fugitive components. [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. 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

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 per the manufacturer's requirements as specified on the 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

27. Alternate monitoring shall not be required while unit is in dormant status, but shall resume upon recommencing operation of this unit. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

28. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

29. If the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted 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 immediately notify the District, 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 by this condition. [District Rule 4702, 5.6.1] 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 NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx 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 or gallons of liquid) 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, retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 2201 and 4702, 6.2.1 and 6.2.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-139-2 **EXPIRATION DATE:** 10/31/2009

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

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (R-23) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit
7. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-140-2 **EXPIRATION DATE:** 10/31/2009

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

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (R-24) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit
7. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-141-2 **EXPIRATION DATE:** 10/31/2009

SECTION: 03 **TOWNSHIP:** 31S **RANGE:** 24E

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-95) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit
7. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-142-2 **EXPIRATION DATE:** 10/31/2009

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

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-103) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit
7. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-143-2 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-104) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit
7. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 1070 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-144-2 **EXPIRATION DATE:** 10/31/2009

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

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-105) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit
7. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-145-2 **EXPIRATION DATE:** 10/31/2009

SECTION: 25 **TOWNSHIP:** 30S **RANGE:** 24E

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-106) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit
7. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-147-2 **EXPIRATION DATE:** 10/31/2009

SECTION: 17 **TOWNSHIP:** 30S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-108] AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit
7. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-150-2 **EXPIRATION DATE:** 10/31/2009

SECTION: 03 **TOWNSHIP:** 31S **RANGE:** 24E

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-109) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit
7. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-151-2 **EXPIRATION DATE:** 10/31/2009

SECTION: 03 **TOWNSHIP:** 31S **RANGE:** 24E

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-110) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit
7. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-152-2 **EXPIRATION DATE:** 10/31/2009

SECTION: 03 **TOWNSHIP:** 31S **RANGE:** 24E

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-111) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit
7. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-153-2 **EXPIRATION DATE:** 10/31/2009

SECTION: 03 **TOWNSHIP:** 31S **RANGE:** 24E

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-112) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit
7. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-154-2 **EXPIRATION DATE:** 10/31/2009

SECTION: 03 **TOWNSHIP:** 31S **RANGE:** 24E

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-113) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit
7. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-157-1 **EXPIRATION DATE:** 10/31/2009

SECTION: 06 **TOWNSHIP:** 31S **RANGE:** 24E

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-114) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit
7. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-158-1 **EXPIRATION DATE:** 10/31/2009

SECTION: 29 **TOWNSHIP:** 30S **RANGE:** 24E

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-115) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit
7. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-159-1 **EXPIRATION DATE:** 10/31/2009

SECTION: 04 **TOWNSHIP:** 31S **RANGE:** 24E

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-116) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit
7. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-160-1 **EXPIRATION DATE:** 10/31/2009

SECTION: 09 **TOWNSHIP:** 31S **RANGE:** 24E

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-117) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit
7. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-161-1 **EXPIRATION DATE:** 10/31/2009

SECTION: 10 **TOWNSHIP:** 31S **RANGE:** 24E

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-118) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit
7. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-162-1 **EXPIRATION DATE:** 10/31/2009

SECTION: 34 **TOWNSHIP:** 30S **RANGE:** 24E

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-119) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit
7. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-163-1 **EXPIRATION DATE:** 10/31/2009

SECTION: 35 **TOWNSHIP:** 30S **RANGE:** 24E

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-120) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit
7. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-164-1 **EXPIRATION DATE:** 10/31/2009

SECTION: 36 **TOWNSHIP:** 30S **RANGE:** 24E

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-121) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit
7. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-165-1 **EXPIRATION DATE:** 10/31/2009

SECTION: 12 **TOWNSHIP:** 31S **RANGE:** 24E

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-122) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit
7. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-166-1 **EXPIRATION DATE:** 10/31/2009

SECTION: 31 **TOWNSHIP:** 30S **RANGE:** 24E

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-123) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit
7. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-167-1 **EXPIRATION DATE:** 10/31/2009

SECTION: 31 **TOWNSHIP:** 30S **RANGE:** 24E

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-124) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit
7. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-170-1 **EXPIRATION DATE:** 10/31/2009

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

EQUIPMENT DESCRIPTION:
99 BHP CUMMINS MODEL 4BTA 3.9-G5 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING POTABLE WATER PUMPS

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
2. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (except for a flapper type rain cap), roof overhang, or any other obstruction. [District Rule 4102]
3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.7.4 and 17 CCR 93115] Federally Enforceable Through Title V Permit
4. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702, 5.7.2] Federally Enforceable Through Title V Permit
5. This engine shall be operated using only CARB certified diesel fuel. [District NSR Rule and 17 CCR 93115] Federally Enforceable Through Title V Permit
6. Emissions from this IC engine shall not exceed any of the following limits: 4.71 g-NOx/bhp-hr, 0.37 g-CO/bhp-hr, or 0.36 g-VOC/bhp-hr. [District NSR Rule and 17 CCR 93115] Federally Enforceable Through Title V Permit
7. The PM10 emissions rate shall not exceed 0.15 g/hp-hr based on US EPA certification using ISO 8178 test procedure. [District NSR Rule, District Rule 4102, and 17 CCR 93115] Federally Enforceable Through Title V Permit
8. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District NSR Rule, District Rule 4702, 4.2.1 and 17 CCR 93115] Federally Enforceable Through Title V Permit
9. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702, 5.7.3] Federally Enforceable Through Title V Permit
10. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.), and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702, 6.2.3 and 17 CCR 93115] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [District Rule 2520, 9.4.2 and 17 CCR 93115] Federally Enforceable Through Title V Permit

12. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702, 6.2.3 and 17 CCR 93115] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-172-1 **EXPIRATION DATE:** 10/31/2009

SECTION: 3 **TOWNSHIP:** 31S **RANGE:** 24E

EQUIPMENT DESCRIPTION:
GLYCOL DEHYDRATION OPERATION INCLUDING 1.5 MMBTU/HR BURNER, A GLYCOL SURGE TANK, FLASH VESSEL AND GLYCOL REBOILER VENT, A LEAN/RICH GLYCOL EXCHANGER, AND VARIOUS PUMPS AND FILTERS WITH PROCESS VENT CONNECTED TO VACUUM GAS GATHERING SYSTEM

PERMIT UNIT REQUIREMENTS

1. Glycol reboiler heater shall be fired on natural gas containing no more than 0.75 gr S/100 scf and no more than 5% by weight hydrocarbons heavier that butane. [District Rule 2020] Federally Enforceable Through Title V Permit
2. Only glycol shall be used as the dehydration medium. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Flash tank and dehydrator vent shall be vented to gas gathering system. [District Rules 2201 and 4408] Federally Enforceable Through Title V Permit
4. Condensate handling shall be conducted in closed systems resulting in fugitive component emissions only. [District Rule] Federally Enforceable Through Title V Permit
5. The glycol dehydration system shall not be operated unless all vapors are directed to the vapor recovery system, a fuel gas system or a sales gas system, or a system in which VOC emissions are combusted by a flare, incinerator, reboiler, or thermal oxidizer. [District Rule 4408, 5.1] Federally Enforceable Through Title V Permit
6. The condensed hydrocarbon liquid stream from the glycol dehydration vent shall be stored and handled in a manner that will not cause or allow evaporation of VOC to the atmosphere. [District Rule 4408, 5.2] Federally Enforceable Through Title V Permit
7. A leak is defined as the dripping at a rate of more than three (3) drops per minute of liquid containing VOCs or a reading as methane in excess of 10,000 ppm above background when measured in accordance with EPA Method 21. [District Rule 4408, 3.8.1] Federally Enforceable Through Title V Permit
8. All control systems shall be maintained in a leak-free condition as determined by EPA Method 21. [District Rule 4408, 5.3] Federally Enforceable Through Title V Permit
9. VOC control efficiency shall be no less than 95% by weight. [District Rule 4408, 5.1] Federally Enforceable Through Title V Permit
10. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.6 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
11. 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
12. The operator shall maintain monthly records of the amount of gas dehydrated (MMSCF). [District Rule 4408, 6.1.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. The operator of any glycol dehydration system shall maintain the following records: facility name and APCD permit number; description of any installed VOC control system; flow diagram of dehydrator and any VOC controls; and maintenance records of the VOC control system. [District Rule 4408, 6.1.2] Federally Enforceable Through Title V Permit

14. The records listed in Sections 6.1.1, 6.1.2, and 6.1.3 shall be retained on the premises for a period of not less than five years and made available to any District representative upon request. [District Rule 4408, 6.1] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-175-1 **EXPIRATION DATE:** 10/31/2009

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

EQUIPMENT DESCRIPTION:
GAS DEHYDRATION SYSTEM INCLUDING; INLET GAS COALESCERS, MOLECULAR SIEVE DRYER BEDS, REGENERATION AND DRY GAS COOLERS, AND ELECTRIC MOTOR REGENERATION GAS COMPRESSOR (35R GAS PLANT)

PERMIT UNIT REQUIREMENTS

1. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 1.9 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. There shall be no leaks exceeding 10,000 ppmv VOCs. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4309] Federally Enforceable Through Title V Permit
4. Equipment that is in vacuum service is exempt from the control and monitoring requirements and work practice standards of District Rule 4409 and applicable NSPS requirements, provided the equipment is identified as such in the Operator Management Plan. [District Rule District Rule 4409, 4.2.8 and 40 CFR 60.482-1(d)] Federally Enforceable Through Title V Permit
5. For determining compliance with applicable NSPS requirements, the test methods and procedures at 40 CFR 60.485 shall be used. Alternative test methods may be used subject to approval pursuant to 40 CFR 60.8. [40 CFR 60.8, 40 CFR 60.485] Federally Enforceable Through Title V Permit
6. For all components that are subject to applicable NSPS requirements and are included in the permit unit addendum to the operator management plan and that comply with the applicable NSPS inspection, maintenance and repair requirements as specified by the terms and condition of this permit, a Title-V permit shield is granted for applicable requirements at 40 CFR 60, Subpart KKK. [District Rule 40 CFR 60, Subpart KKK] Federally Enforceable Through Title V Permit
7. If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements as specified in this permit unit. [District Rule 4409, 4.2.8 and 40 CFR 60.482-10(i)] Federally Enforceable Through Title V Permit
8. For open ended lines and open ended valves, subject to applicable NSPS, each open-ended valve or line shall be sealed with two (2) valves, a blind flange, a cap, or a plug at all times, except during operations requiring process fluid flow through the valve or line. Open ended lines and valves designed to open automatically in the event of an emergency are exempt from this requirement [40 CFR 60.482-6(a) and 40 CFR 60.482-6(d)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. For valves subject to applicable new source performance standards (NSPS), any valve in gas/vapor service or light liquid service that is designated in the Operator Management Plan as an unsafe-to-monitor valve is exempt from the monthly NSPS leak inspection requirements, provided: 1) the owner/operator demonstrates the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence, and 2) a written plan is adhered to that requires monitoring of the valve as frequently as practicable during safe-to-monitor times and at least annually and during shutdown. [40 CFR 60.482-7(g)] Federally Enforceable Through Title V Permit

10. For valves subject to applicable NSPS, any valve in gas/vapor service or light liquid service that is designated in the Operator Management Plan as a difficult-to-monitor (inaccessible) valve is exempt from the monthly NSPS leak inspection requirements, provided: 1) the owner/operator demonstrates the valve cannot be monitored without elevating the monitoring personnel more than 15 feet above a support surface, or that it is over 6 feet away from a platform , 2) the process unit within which the valve is located either becomes an affected facility through 40 CFR 60.14 or 60.15 or if the owner/operator designates less than 3.0% of the total number of valves as difficult-to-monitor, and 3) a written plan is adhered to that, requires monitoring of the valve at least annually and during shutdown. [40 CFR 60.482-7(h)] Federally Enforceable Through Title V Permit

11. Any components of the closed vent system that are designated as unsafe to inspect are exempt from the inspection requirements specified in this permit unit if the owner or operator complies with the following: 1) the owner or operator determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with the inspection requirements; 2) the owner or operator identifies the components in the Operator Management Plan; 3) the owner or operator has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times; and 4) inspection and required repair of the components is performed at least annually and during shutdown. [District Rule 4409, 5.3.7.5 and 40 CFR 60.482-10(j)] Federally Enforceable Through Title V Permit

12. For components subject to applicable NSPS, when a leak is detected, a weatherproof and readily visible tag shall be attached, bearing the equipment identification number and date which the leak is detected. The tag on a valve shall remain in place until after it has been monitored for 2 successive months and no leak has been detected. The tag on all other equipment may be removed after repair and re-inspection document compliance with the applicable NSPS. [40 CFR 60.486(b) and 60.635(b)(1)] Federally Enforceable Through Title V Permit

13. Any leaking component and any leak shall be repaired to a leak-free condition and reinspected within 15 calendar days. [40 CFR 60.482-7] Federally Enforceable Through Title V Permit

14. For components subject to applicable NSPS standards, except as otherwise provided by 40 CFR 60.482-9, any component leak shall be repaired to a leak-free condition, or vented to a flare satisfying the requirements of 40 CFR 60.18, or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 or EPA Method 18 within fifteen (15) calendar days of detection. A first attempt at repair shall be made no later than 5 calendar days after leak detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates necessary and sufficient actions are being taken to correct the leak within this time period. [40 CFR 60.482-2(c)(1) and (c)(2), 60.482-3(g), 60.482-7(d), 60.482-8(c), and 60.633(b)(3)] Federally Enforceable Through Title V Permit

15. For components subject to applicable NSPS, if the leaking component is an essential part of a critical process identified in the operator management plan and which cannot be immediately shut down for repairs, the operator shall minimize the leak within 15 calendar days. If the leak which has been minimized still exceeds the applicable NSPS standard, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than six months from the date of the original leak detection for pumps and one year from the date of the original leak detection for other components. Delay of repair is allowed for equipment which is isolated from the process and which does not remain in VOC service and delay of repair is is allowed pursuant to 40 CFR 60.482-2(c)(1), 40 CFR 60.482-3(g)(1), 40 CFR 60.482-4(b)(1), 40 CFR 60.482-7(d)(1),40 CFR 60.482-8(c)(1) [40 CFR 60.482- 2(c)(1). [40 CFR 40 CFR 60.482-3(g)(1), 40 CFR 60.482-4(b)(1), 40 CFR 60.482-7(d)(1),40 CFR 60.482-8(c)(1), 60.482-9(a) and (b)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

16. Delay of repair of a closed vent system for which leaks have been detected is allowed if the closed vent system is an essential part of a critical process identified in the operator management plan which cannot be immediately shut down for repairs or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. However the operator shall minimize the leak within 15 calendar days. If the leak which has been minimized still exceeds the limit in this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. [40 CFR 60.482-9] Federally Enforceable Through Title V Permit

17. For the purpose of determining compliance with applicable NSPS, each operator shall maintain an inspection log for the components subject to NSPS inspection requirements that contains the following information: 1) instrument, operator, and equipment identification numbers; 2) date of leak detection; 3) dates and repair method of each attempt to repair the leak; 4) "above 10,000" if the maximum instrument reading after each repair attempt is equal to or greater than 10,000 ppm; 5) "repair delayed", reason for delay, signature of individual whose decision it was that repair could not be effected without a process shutdown, and expected date of successful repair if a leak is not repaired within 15 days of detection; 6) dates of process unit shutdown that occur while the equipment is unrepaired; 7) date of successful repair and emission level of recheck after leak is repaired. [District Rule 40 CFR 60.486(c) and 60.635(2)(i) through (ix)] Federally Enforceable Through Title V Permit

18. Each piece of equipment subject to requirements of this permit is presumed to be in VOC service or in wet gas service unless an owner or operator demonstrates that the piece of equipment is not in VOC service or in wet gas service. For a piece of equipment to be considered not in VOC service, it must be determined that the VOC content can be reasonably expected never to exceed 10.0 percent by weight. For a piece of equipment to be considered in wet gas service, it must be determined that it contains or contacts the field gas before the extraction step in the process. For purposes of determining the percent VOC content of the process fluid that is contained in or contacts a piece of equipment, procedures that conform to the methods described this permit shall be used. [40 CFR 60.485(d) and 60.632(f)] Federally Enforceable Through Title V Permit

19. Compliance the no detectable emission standards for this permit unit shall be determined as follows: 1) EPA Method 21 shall be followed, 2) Method 21 shall be used to determine the background level and all potential leak interfaces shall be traversed as close to the inter face as possible, and 3) the arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm to determine compliance. [40 CFR 60.485(c)] Federally Enforceable Through Title V Permit

20. For valves subject to applicable NSPS, if the operator elects to comply with the allowable percentage of leaking valves then for this permit unit, the operator shall notify the APCO 90 days before implementing these alternatives. [40 CFR 60.483-1(b)(1) and (d), 60. 483-2(a)(2), and 60.487(d)] Federally Enforceable Through Title V Permit

21. For valves subject to applicable NSPS, if the allowable percentage of leaking valves is selected, then a performance test shall be conducted initially upon designation for allowable percentage of leaking valves, annually, and at other times requested by the APCO. The performance test shall be conducted as follows: 1) all valves in gas/vapor and light liquid service shall be monitored within 1 week using EPA Method 21 and 2) the leak percentage shall be determined by dividing the number of leaking valves detected and valves for which repair has been delayed by the number of valves in gas/vapor and light liquid service in this permit unit, 3) a record must be kept of the percent of valves found leaking during each leak detection period. [40 CFR 60.483-1(b)(2) and (c) and 60. 483-2(b)(5) and (6)] Federally Enforceable Through Title V Permit

22. For compressors subject to applicable NSPS, each compressor shall meet the applicable control system requirements of 40 CFR 482-3(a) - (i), except as otherwise provided by 40 CFR 60.482-1(c) and 40 CFR 60.482-3(h) and (i). [40 CFR 60.482-3(a) through (j)], 40 CFR 60.482-1(c), 40 CFR 60.482-3(h) and (i), and 40 CFR 60.633] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. Compressors that are subject to applicable NSPS, are exempt from requirements of 40 CFR 60.482-3(a) and 40 CFR 60.482-3(b) if the compressor is equipped with a closed vent system to capture and transport leakage from the compressor drive shaft back to a process fuel gas system or a control device. Closed vent systems piping shall comply with applicable requirements at 40 CFR 60.482-10. Closed vent vapor recovery systems shall comply with design requirements at 40 CFR 60.482-10(b). Enclosed combustion devices used by closed vent system shall comply with design requirements at 40 CFR 60.482-10(c). Flares used by closed vent systems shall comply with requirements at 40 CFR 60.482-10(d). Closed vent system control devices shall comply with monitoring requirements at 40 CFR 60.482-10(e). [40 CFR 60 .482-3, 40 CFR 60.482-10] Federally Enforceable Through Title V Permit

24. Compressors that are subject to applicable NSPS and are designated in the Operator Management Plan for no detectable leak emission, as indicated by an instrument reading of less than 500 ppm above background, is are exempt from the requirements of 40 CFR 482-3(a)-(h), provided the compressor is tested for compliance with no detectable emissions initially upon designation, annually, and at other times requested by the APCO. [40 CFR 60.482-3(i)] Federally Enforceable Through Title V Permit

25. When determining compliance with applicable NSPS, if an instrument reading of 10,000 ppm or greater is measured, a leak is detected. [40 CFR 60.633(b)(2), 40482-7(a), (b), and (c] Federally Enforceable Through Title V Permit

26. For open ended lines or valves subject to applicable NSPS, each open-ended valve or line equipped with a second valve shall be operated so that the valve on the process fluid end is closed before the second valve is closed. [40 CFR 60.482-6(b)] Federally Enforceable Through Title V Permit

27. For equipment subject to applicable NSPS when a double block-and-bleed system is being used, the bleed valve or line may remain open only during operations that require venting the line between the block valves. [40 CFR 60.482-6(c)] Federally Enforceable Through Title V Permit

28. Except as provided by applicable NSPS, valves that are subject to NSPS that are in gas/vapor service or light liquid service shall be monitored monthly to detect leaks using EPA Method 21. Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter. If a leak is subsequently detected, monitoring shall revert to monthly. [40 CFR 60.482-7(a), (b), and (c)] Federally Enforceable Through Title V Permit

29. Any valve in gas/vapor service or light liquid service that is designated in the equipment log list for no detectable leak emission, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the monitoring requirements of 40 CFR 60.482-7(a), provided the valve: 1) has no external actuating mechanism in contact with the process fluid and 2) is tested for and meets compliance with no detectable leak emission initially upon designation, annually and at other times requested by the APCO. [40 CFR 60.482-7(f)] Federally Enforceable Through Title V Permit

30. For valves subject to applicable NSPS requirements, for a valve in gas/vapor service or light or heavy liquid service, first attempts at repair shall include the following where practicable: 1) tightening of bonnet bolts, 2) replacement of bonnet bolts, 3) tightening of packing gland nuts, and 4) injection of lubricant into lubricant packing. [40 CFR 60.482-7(e) and 60.482-8(d)] Federally Enforceable Through Title V Permit

31. For pumps and valves in heavy liquid service, pressure relief devices in light or heavy liquid service, and flanges and other connectors, that are subject to applicable NSPS requirements, if evidence of a potential leak is found by sight, sound, smell, or any other detection method then the device shall be monitored within 5 days for leak detection in accordance with EPA Method 21. A leak is detected if an instrument reading of 10,000 ppm or greater is measured. [40 CFR 60.482-8(a) and (b)] Federally Enforceable Through Title V Permit

32. In addition to the information required by Rule 4409, the operator management plan shall include an addendum for this permit unit containing the following applicable NSPS information: 1) list of identification numbers for equipment subject to the applicable NSPS requirements, 2) list of identification numbers for equipment which is designated for no detectable emissions and which is signed by the owner/operator, 3) list of equipment identification numbers for pressure relief devices which must be operated with no detectable emissions, 4) dates of each compliance test for emissions below 500 ppm, for all equipment subject to this no detectable emission limit and the background level measured and the maximum instrument reading measured at the equipment, during each test, and 5) list of identification numbers for equipment in vacuum service. [40 CFR 60.486(e) and 60.635(b)(2)(x)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

33. In addition to the information required by Rule 4409, the operator management plan shall include an addendum for this permit unit containing the following applicable NSPS information: for valves in gas/vapor service and light liquid service: 1) a list of identification numbers for valves designated "unsafe-to-monitor" and for valves designated "difficult-to monitor", 2) an explanation for each valve stating why it is so designated, and 3) the schedule for monitoring each such valve. [40 CFR 60.486(f)] Federally Enforceable Through Title V Permit

34. For valves subject to NSPS annual leak detection alternative requirements, the NSPS inspection log shall include the following information: 1) a schedule of monitoring and 2) the percent of valves found leaking during each monitoring period. [CFR 60.486(g)] Federally Enforceable Through Title V Permit

35. A log containing the following information for pumps and compressors equipped a barrier fluid seal system which includes a seal failure sensor, for which a system failure criteria is required to be established, pursuant to the requirements for this permit unit, shall be maintained and kept in a readily accessible location: 1) the design criterion required by this permit and an explanation and 2) any changes to this criterion and reasons for the changes. [40 CFR 60.486(h)] Federally Enforceable Through Title V Permit

36. For equipment (compressors and components) subject to applicable NSPS, the operator shall maintain information and data used to demonstrate that a piece of equipment is not in VOC service and information and data used to demonstrate that a reciprocating compressor is in wet gas service. The information shall be included in the NSPS inspection log for the permit unit and shall be kept in a readily accessible location. [40 CFR 60.486(j) and 60.635(c)] Federally Enforceable Through Title V Permit

37. Vapor recovery systems (for example, condensers and absorbers) shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, whichever is less stringent. [40 CFR 60.482-10(b)] Federally Enforceable Through Title V Permit

38. Enclosed combustion devices shall be designed and operated to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816 øC. [40 CFR 60.482-10(c)] Federally Enforceable Through Title V Permit

39. If the vapor collection system or closed vent system is constructed of hard-piping, the owner or operator shall conduct an initial inspection according to the procedures specified in EPA Method 21 using the calibration gases as specified in the requirements for this permit unit. The owner or operator shall also conduct annual visual inspections for visible, audible, or olfactory indications of leaks. [40 CFR 60.482-10(f)(1) and 40 CFR 60.485(b)] Federally Enforceable Through Title V Permit

40. If the vapor collection system or closed vent system is constructed of ductwork, the owner or operator shall conduct an initial inspection and annual inspections according to the procedures specified in EPA Method 21 using the calibration gases as specified in the requirements for this permit unit. The owner or operator shall also conduct annual visual inspections for visible, audible, or olfactory indications of leaks. [40 CFR 60.482-10(f)(2) and 40 CFR 60.485(b)] Federally Enforceable Through Title V Permit

41. Any parts of the closed vent system that are designated as difficult to inspect are exempt from the inspection requirements of 40 CFR 60.482-10(f)(1) and (f)(2) if the owner or operator complies with the following: 1) the owner or operator determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and 2) the process unit within which the closed vent system is located becomes an affected facility through modification or reconstruction, as defined in 40 CFR 60.14 and 60.15, or the owner or operator designates less than 3.0 percent of the total number of closed vent system equipment as difficult to inspect; and 3) the owner or operator has a written plan that requires inspection of the equipment at least every 5 years. A closed vent system is exempt from inspection if it is operated under a vacuum. [40 CFR 60.482-10(k)] Federally Enforceable Through Title V Permit

42. Closed vent systems and control devices shall be operated at all times when emissions may be vented to them. [40 CFR 60.482-10(m)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

43. A log shall be maintained containing the following information: 1) identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment; 2) identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment; 3) for each inspection conducted in accordance with EPA Method 21 during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected; and 4) for each visual inspection conducted for visible, audible, or olfactory indications of leaks during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected. [40 CFR 60.482-10(l) and 40 CFR 60.485(b)] Federally Enforceable Through Title V Permit

44. For components subject to applicable NSPS requirements, semiannual reports shall be submitted to the APCO containing the following information: 1) process unit identification, 2) for each month during the reporting period, number of valves, pumps, compressors, and pressure relief devices for which leaks were detected; number of valves, pumps, compressors, and pressure relief devices for which leaks were not repaired within 15 days and a first attempt not made within 5 days of leak detection; the facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible 3) dates of process unit shutdowns which occurred within the reporting period, and 4) revisions to items reported in the initial or subsequent semiannual reports. [40 CFR 60.487(a) and (c) and 60.636(c)] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-176-1 **EXPIRATION DATE:** 10/31/2009

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

EQUIPMENT DESCRIPTION:
NATURAL GAS CO2 REMOVAL SYSTEM INCLUDING; MOLECULAR SIEVE CO2 REMOVAL BEDS, FIN-FAN GAS COOLERS, NITROGEN DRYING BEDS, LIQUID KNOCKOUT VESSELS AND ELECTRIC MOTOR CO2 REMOVAL COMPRESSORS (35R GAS PLANT)

PERMIT UNIT REQUIREMENTS

1. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.5 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. There shall be no leaks exceeding 10,000 ppmv VOCs. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit
4. Equipment that is in vacuum service is exempt from the control and monitoring requirements and work practice standards of District Rule 4409 and applicable NSPS requirements, provided the equipment is identified as such in the Operator Management Plan. [District Rule District Rule 4409, 4.2.8 and 40 CFR 60.482-1(d)] Federally Enforceable Through Title V Permit
5. For determining compliance with applicable NSPS requirements, the test methods and procedures at 40 CFR 60.485 shall be used. Alternative test methods may be used subject to approval pursuant to 40 CFR 60.8. [40 CFR 60.8, 40 CFR 60.485] Federally Enforceable Through Title V Permit
6. For all components that are subject to applicable requirements of District Rule 4409 and are included in the operator management plan and that comply with the inspection, maintenance and repair requirements as specified by Rule 4409, a Title-V permit shield for applicable Rule 4409 requirements is granted. [District Rule 4409] Federally Enforceable Through Title V Permit
7. For all components that are subject to applicable NSPS requirements and are included in the permit unit addendum to the operator management plan and that comply with the applicable NSPS inspection, maintenance and repair requirements as specified by the terms and condition of this permit, a Title-V permit shield is granted for applicable requirements at 40 CFR 60, Subpart KKK. [District Rule 40 CFR 60, Subpart KKK] Federally Enforceable Through Title V Permit
8. If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements as specified in this permit unit. [District Rule 4409, 4.2.8 and 40 CFR 60.482-10(i)] Federally Enforceable Through Title V Permit
9. For open ended lines and open ended valves, subject to applicable NSPS, each open-ended valve or line shall be sealed with two (2) valves, a blind flange, a cap, or a plug at all times, except during operations requiring process fluid flow through the valve or line. Open ended lines and valves designed to open automatically in the event of an emergency are exempt from this requirement [40 CFR 60.482-6(a) and 40 CFR 60.482-6(d)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. For valves subject to applicable new source performance standards (NSPS), any valve in gas/vapor service or light liquid service that is designated in the Operator Management Plan as an unsafe-to-monitor valve is exempt from the monthly NSPS leak inspection requirements, provided: 1) the owner/operator demonstrates the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence, and 2) a written plan is adhered to that requires monitoring of the valve as frequently as practicable during safe-to-monitor times and at least annually and during shutdown. [40 CFR 60.482-7(g)] Federally Enforceable Through Title V Permit

11. For valves subject to applicable NSPS, any valve in gas/vapor service or light liquid service that is designated in the Operator Management Plan as a difficult-to-monitor (inaccessible) valve is exempt from the monthly NSPS leak inspection requirements, provided: 1) the owner/operator demonstrates the valve cannot be monitored without elevating the monitoring personnel more than 15 feet above a support surface, or that it is over 6 feet away from a platform , 2) the process unit within which the valve is located either becomes an affected facility through 40 CFR 60.14 or 60.15 or if the owner/operator designates less than 3.0% of the total number of valves as difficult-to-monitor, and 3) a written plan is adhered to that, requires monitoring of the valve at least annually and during shutdown. [40 CFR 60.482-7(h)] Federally Enforceable Through Title V Permit

12. Any components of the closed vent system that are designated as unsafe to inspect are exempt from the inspection requirements specified in this permit unit if the owner or operator complies with the following: 1) the owner or operator determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with the inspection requirements; 2) the owner or operator identifies the components in the Operator Management Plan; 3) the owner or operator has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times; and 4) inspection and required repair of the components is performed at least annually and during shutdown. [District Rule 4409, 5.3.7.5 and 40 CFR 60.482-10(j)] Federally Enforceable Through Title V Permit

13. For components subject to applicable NSPS, when a leak is detected, a weatherproof and readily visible tag shall be attached, bearing the equipment identification number and date which the leak is detected. The tag on a valve shall remain in place until after it has been monitored for 2 successive months and no leak has been detected. The tag on all other equipment may be removed after repair and re-inspection document compliance with the applicable NSPS. [40 CFR 60.486(b) and 60.635(b)(1)] Federally Enforceable Through Title V Permit

14. Any leak detected on the basis of sight, smell, or sound shall be identified by the operator affixing a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until repair and reinspection document compliance, whether or not operator inspection is otherwise required by this permit. [District Rule 4409, 5.3.3 and5.3.3] Federally Enforceable Through Title V Permit

15. Any leaking component and any leak shall be repaired to a leak-free condition and reinspected within 15 calendar days. [40 CFR 60.482-7] Federally Enforceable Through Title V Permit

16. For components subject to applicable NSPS standards, except as otherwise provided by 40 CFR 60.482-9, any component leak shall be repaired to a leak-free condition, or vented to a flare satisfying the requirements of 40 CFR 60.18, or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 or EPA Method 18 within fifteen (15) calendar days of detection. A first attempt at repair shall be made no later than 5 calendar days after leak detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates necessary and sufficient actions are being taken to correct the leak within this time period. [40 CFR 60.482-2(c)(1) and (c)(2), 60.482-3(g), 60.482-7(d), 60.482-8(c), and 60.633(b)(3)] Federally Enforceable Through Title V Permit

17. For components subject to applicable NSPS, if the leaking component is an essential part of a critical process identified in the operator management plan and which cannot be immediately shut down for repairs, the operator shall minimize the leak within 15 calendar days. If the leak which has been minimized still exceeds the applicable NSPS standard, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than six months from the date of the original leak detection for pumps and one year from the date of the original leak detection for other components. Delay of repair is allowed for equipment which is isolated from the process and which does not remain in VOC service and delay of repair is is allowed pursuant to 40 CFR 60.482-2(c)(1), 40 CFR 60.482-3(g)(1), 40 CFR 60.482-4(b)(1), 40 CFR 60.482-7(d)(1),40 CFR 60.482-8(c)(1) [40 CFR 60.482- 2(c)(1). [40 CFR 40 CFR 60.482-3(g)(1), 40 CFR 60.482-4(b)(1), 40 CFR 60.482-7(d)(1),40 CFR 60.482-8(c)(1), 60.482-9(a) and (b)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

18. Delay of repair of a closed vent system for which leaks have been detected is allowed if the closed vent system is an essential part of a critical process identified in the operator management plan which cannot be immediately shut down for repairs or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. However the operator shall minimize the leak within 15 calendar days. If the leak which has been minimized still exceeds the limit in this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. [40 CFR 60.482-9] Federally Enforceable Through Title V Permit

19. For the purpose of determining compliance with District Rule 4409, the operator shall maintain an inspection log that has been signed and dated by the facility operator responsible for the inspection, certifying the accuracy of the information recorded in the log. The inspection log shall contain all of the following information: 1) The total number of components inspected, and the total number and percentage of leaking components found by component types; 2) The location, type, name or description of each leaking component and the description of any unit where the leaking component is found; 3) Date of the leak detection and method of the leak detection; 4) For gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak; 5) The date of repair, replacement, or removal from operation of the leaking component(s); 6) The identification and location of essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes first; 7) The method(s) used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier; 8) The date of re-inspection and the leak concentration in ppmv after the component is repaired or is replaced; 9) The inspector's name, business mailing address, and business telephone number. [District Rule 4409, 6.2.1] Federally Enforceable Through Title V Permit

20. For the purpose of determining compliance with applicable NSPS, each operator shall maintain an inspection log for the components subject to NSPS inspection requirements that contains the following information: 1) instrument, operator, and equipment identification numbers; 2) date of leak detection; 3) dates and repair method of each attempt to repair the leak; 4) "above 10,000" if the maximum instrument reading after each repair attempt is equal to or greater than 10,000 ppm; 5) "repair delayed", reason for delay, signature of individual whose decision it was that repair could not be effected without a process shutdown, and expected date of successful repair if a leak is not repaired within 15 days of detection; 6) dates of process unit shutdown that occur while the equipment is unrepaired; 7) date of successful repair and emission level of recheck after leak is repaired. [District Rule 40 CFR 60.486(c) and 60.635(2)(i) through (ix)] Federally Enforceable Through Title V Permit

21. Each piece of equipment subject to requirements of this permit is presumed to be in VOC service or in wet gas service unless an owner or operator demonstrates that the piece of equipment is not in VOC service or in wet gas service. For a piece of equipment to be considered not in VOC service, it must be determined that the VOC content can be reasonably expected never to exceed 10.0 percent by weight. For a piece of equipment to be considered in wet gas service, it must be determined that it contains or contacts the field gas before the extraction step in the process. For purposes of determining the percent VOC content of the process fluid that is contained in or contacts a piece of equipment, procedures that conform to the methods described this permit shall be used. [40 CFR 60.485(d) and 60.632(f)] Federally Enforceable Through Title V Permit

22. Compliance the no detectable emission standards for this permit unit shall be determined as follows: 1) EPA Method 21 shall be followed, 2) Method 21 shall be used to determine the background level and all potential leak interfaces shall be traversed as close to the inter face as possible, and 3) the arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm to determine compliance. [40 CFR 60.485(c)] Federally Enforceable Through Title V Permit

23. For valves subject to applicable NSPS, if the operator elects to comply with the allowable percentage of leaking valves then for this permit unit, the operator shall notify the APCO 90 days before implementing these alternatives. [40 CFR 60.483-1(b)(1) and (d), 60. 483-2(a)(2), and 60.487(d)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

24. For valves subject to applicable NSPS, if the allowable percentage of leaking valves is selected, then a performance test shall be conducted initially upon designation for allowable percentage of leaking valves, annually, and at other times requested by the APCO. The performance test shall be conducted as follows: 1) all valves in gas/vapor and light liquid service shall be monitored within 1 week using EPA Method 21 and 2) the leak percentage shall be determined by dividing the number of leaking valves detected and valves for which repair has been delayed by the number of valves in gas/vapor and light liquid service in this permit unit, 3) a record must be kept of the percent of valves found leaking during each leak detection period. [40 CFR 60.483-1(b)(2) and (c) and 60. 483-2(b)(5) and (6)] Federally Enforceable Through Title V Permit

25. For compressors subject to applicable NSPS, each compressor shall meet the applicable control system requirements of 40 CFR 482-3(a) - (i), except as otherwise provided by 40 CFR 60.482-1(c) and 40 CFR 60.482-3(h) and (i). [40 CFR 60.482-3(a) through (j)], 40 CFR 60.482-1(c), 40 CFR 60.482-3(h) and (i), and 40 CFR 60.633] Federally Enforceable Through Title V Permit

26. Compressors that are subject to applicable NSPS, are exempt from requirements of 40 CFR 60.482-3(a) and 40 CFR 60.482-3(b) if the compressor is equipped with a closed vent system to capture and transport leakage from the compressor drive shaft back to a process fuel gas system or a control device. Closed vent systems piping shall comply with applicable requirements at 40 CFR 60.482-10. Closed vent vapor recovery systems shall comply with design requirements at 40 CFR 60.482-10(b). Enclosed combustion devices used by closed vent system shall comply with design requirements at 40 CFR 60.482-10(c). Flares used by closed vent systems shall comply with requirements at 40 CFR 60.482-10(d). Closed vent system control devices shall comply with monitoring requirements at 40 CFR 60.482-10(e). [40 CFR 60 .482-3, 40 CFR 60.482-10] Federally Enforceable Through Title V Permit

27. Compressors that are subject to applicable NSPS and are designated in the Operator Management Plan for no detectable leak emission, as indicated by an instrument reading of less than 500 ppm above background, is are exempt from the requirements of 40 CFR 482-3(a)-(h), provided the compressor is tested for compliance with no detectable emissions initially upon designation, annually, and at other times requested by the APCO. [40 CFR 60.482-3(i)] Federally Enforceable Through Title V Permit

28. When determining compliance with applicable NSPS, if an instrument reading of 10,000 ppm or greater is measured, a leak is detected. [40 CFR 60.633(b)(2), 40482-7(a), (b), and (c] Federally Enforceable Through Title V Permit

29. For open ended lines or valves subject to applicable NSPS, each open-ended valve or line equipped with a second valve shall be operated so that the valve on the process fluid end is closed before the second valve is closed. [40 CFR 60.482-6(b)] Federally Enforceable Through Title V Permit

30. For equipment subject to applicable NSPS when a double block-and-bleed system is being used, the bleed valve or line may remain open only during operations that require venting the line between the block valves. [40 CFR 60.482-6(c)] Federally Enforceable Through Title V Permit

31. Except as provided by applicable NSPS, valves that are subject to NSPS that are in gas/vapor service or light liquid service shall be monitored monthly to detect leaks using EPA Method 21. Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter. If a leak is subsequently detected, monitoring shall revert to monthly. [40 CFR 60.482-7(a), (b), and (c)] Federally Enforceable Through Title V Permit

32. Any valve in gas/vapor service or light liquid service that is designated in the equipment log list for no detectable leak emission, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the monitoring requirements of 40 CFR 60.482-7(a), provided the valve: 1) has no external actuating mechanism in contact with the process fluid and 2) is tested for and meets compliance with no detectable leak emission initially upon designation, annually and at other times requested by the APCO. [40 CFR 60.482-7(f)] Federally Enforceable Through Title V Permit

33. For valves subject to applicable NSPS requirements, for a valve in gas/vapor service or light or heavy liquid service, first attempts at repair shall include the following where practicable: 1) tightening of bonnet bolts, 2) replacement of bonnet bolts, 3) tightening of packing gland nuts, and 4) injection of lubricant into lubricant packing. [40 CFR 60.482-7(e) and 60.482-8(d)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

34. For pumps and valves in heavy liquid service, pressure relief devices in light or heavy liquid service, and flanges and other connectors, that are subject to applicable NSPS requirements, if evidence of a potential leak is found by sight, sound, smell, or any other detection method then the device shall be monitored within 5 days for leak detection in accordance with EPA Method 21. A leak is detected if an instrument reading of 10,000 ppm or greater is measured. [40 CFR 60.482-8(a) and (b)] Federally Enforceable Through Title V Permit

35. In addition to the information required by Rule 4409, the operator management plan shall include an addendum for this permit unit containing the following applicable NSPS information: 1) list of identification numbers for equipment subject to the applicable NSPS requirements, 2) list of identification numbers for equipment which is designated for no detectable emissions and which is signed by the owner/operator, 3) list of equipment identification numbers for pressure relief devices which must be operated with no detectable emissions, 4) dates of each compliance test for emissions below 500 ppm, for all equipment subject to this no detectable emission limit and the background level measured and the maximum instrument reading measured at the equipment, during each test, and 5) list of identification numbers for equipment in vacuum service. [40 CFR 60.486(e) and 60.635(b)(2)(x)] Federally Enforceable Through Title V Permit

36. In addition to the information required by Rule 4409, the operator management plan shall include an addendum for this permit unit containing the following applicable NSPS information: for valves in gas/vapor service and light liquid service: 1) a list of identification numbers for valves designated "unsafe-to-monitor" and for valves designated "difficult-to monitor", 2) an explanation for each valve stating why it is so designated, and 3) the schedule for monitoring each such valve. [40 CFR 60.486(f)] Federally Enforceable Through Title V Permit

37. For valves subject to NSPS annual leak detection alternative requirements, the NSPS inspection log shall include the following information: 1) a schedule of monitoring and 2) the percent of valves found leaking during each monitoring period. [CFR 60.486(g)] Federally Enforceable Through Title V Permit

38. A log containing the following information for pumps and compressors equipped a barrier fluid seal system which includes a seal failure sensor, for which a system failure criteria is required to be established, pursuant to the requirements for this permit unit, shall be maintained and kept in a readily accessible location: 1) the design criterion required by this permit and an explanation and 2) any changes to this criterion and reasons for the changes. [40 CFR 60.486(h)] Federally Enforceable Through Title V Permit

39. For equipment (compressors and components) subject to applicable NSPS, the operator shall maintain information and data used to demonstrate that a piece of equipment is not in VOC service and information and data used to demonstrate that a reciprocating compressor is in wet gas service. The information shall be included in the NSPS inspection log for the permit unit and shall be kept in a readily accessible location. [40 CFR 60.486(j) and 60.635(c)] Federally Enforceable Through Title V Permit

40. Vapor recovery systems (for example, condensers and absorbers) shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, whichever is less stringent. [40 CFR 60.482-10(b)] Federally Enforceable Through Title V Permit

41. Enclosed combustion devices shall be designed and operated to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816 øC. [40 CFR 60.482-10(c)] Federally Enforceable Through Title V Permit

42. If the vapor collection system or closed vent system is constructed of hard-piping, the owner or operator shall conduct an initial inspection according to the procedures specified in EPA Method 21 using the calibration gases as specified in the requirements for this permit unit. The owner or operator shall also conduct annual visual inspections for visible, audible, or olfactory indications of leaks. [40 CFR 60.482-10(f)(1) and 40 CFR 60.485(b)] Federally Enforceable Through Title V Permit

43. If the vapor collection system or closed vent system is constructed of ductwork, the owner or operator shall conduct an initial inspection and annual inspections according to the procedures specified in EPA Method 21 using the calibration gases as specified in the requirements for this permit unit. The owner or operator shall also conduct annual visual inspections for visible, audible, or olfactory indications of leaks. [40 CFR 60.482-10(f)(2) and 40 CFR 60.485(b)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

44. Any parts of the closed vent system that are designated as difficult to inspect are exempt from the inspection requirements of 40 CFR 60.482-10(f)(1) and (f)(2) if the owner or operator complies with the following: 1) the owner or operator determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and 2) the process unit within which the closed vent system is located becomes an affected facility through modification or reconstruction, as defined in 40 CFR 60.14 and 60.15, or the owner or operator designates less than 3.0 percent of the total number of closed vent system equipment as difficult to inspect; and 3) the owner or operator has a written plan that requires inspection of the equipment at least every 5 years. A closed vent system is exempt from inspection if it is operated under a vacuum. [40 CFR 60.482-10(k)] Federally Enforceable Through Title V Permit

45. Closed vent systems and control devices shall be operated at all times when emissions may be vented to them. [40 CFR 60.482-10(m)] Federally Enforceable Through Title V Permit

46. A log shall be maintained containing the following information: 1) identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment; 2) identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment; 3) for each inspection conducted in accordance with EPA Method 21 during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected; and 4) for each visual inspection conducted for visible, audible, or olfactory indications of leaks during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected. [40 CFR 60.482-10(l) and 40 CFR 60.485(b)] Federally Enforceable Through Title V Permit

47. For components subject to applicable NSPS requirements, semiannual reports shall be submitted to the APCO containing the following information: 1) process unit identification, 2) for each month during the reporting period, number of valves, pumps, compressors, and pressure relief devices for which leaks were detected; number of valves, pumps, compressors, and pressure relief devices for which leaks were not repaired within 15 days and a first attempt not made within 5 days of leak detection; the facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible 3) dates of process unit shutdowns which occurred within the reporting period, and 4) revisions to items reported in the initial or subsequent semiannual reports. [40 CFR 60.487(a) and (c) and 60.636(c)] Federally Enforceable Through Title V Permit

48. All logs required for this permit unit and all records of required monitoring data and support information shall be retained by the operator for a minimum of five years after the date of an entry, kept in a readily accessible location, and made available upon request to District personnel. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-180-1 **EXPIRATION DATE:** 10/31/2009

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

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-19) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit
7. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-181-1 **EXPIRATION DATE:** 10/31/2009

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

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-20) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit
7. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-182-0 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
1,680 BHP WAUKESHA MODEL 7044 GSI NATURAL GAS-FIRED IC ENGINE WITH NSCR AND PCV POWERING A COMPRESSOR (R-36)

PERMIT UNIT REQUIREMENTS

1. 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
2. Annual fuel consumption for this natural gas-fired engine shall not exceed 104.6 MMScf per year. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Permittee shall maintain annual records of fuel consumption, in MMScf, to show compliance with the annual fuel consumption limit of 104.6 MMScf. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102]
5. The permittee shall install and operate a nonresettable elapsed operating time meter. [District Rule 4702] Federally Enforceable Through Title V Permit
6. The permittee shall install and operate a nonresettable fuel flow meter to determine annual fuel usage. [District Rule 2201] Federally Enforceable Through Title V Permit
7. 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
8. Emissions from this IC engine shall not exceed any of the following limits: 0.07 g-NOx/hp-hr, 0.0094 g-SOx/hp-hr, 0.02 g-PM10/hp-hr, 0.475 g-CO/hp-hr, or 0.121 g-VOC/hp-hr. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
9. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last calendar quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit

11. 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

12. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

13. Source testing to measure gas combustion NOx, CO, and VOC emissions from this unit shall be measured not less than once every 24 months. [District Rule 4702] Federally Enforceable Through Title V Permit

14. 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] Federally Enforceable Through Title V Permit

15. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. PM10 emission rate shall be reported in grams/bhp-hr. [District Rule 4702] Federally Enforceable Through Title V Permit

16. 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, PM10 - EPA Method 19, and VOC (ppmv) - EPA Method 25A or 25B, or ARB Method 100. [District Rules 1081 and 4702] Federally Enforceable Through Title V Permit

17. 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

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

19. 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 and quantity (cubic feet of gas or gallons of liquid) 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

20. 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

21. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made readily available for District inspection upon request. [District Rules 1081 and 4702] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-183-0 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
1,680 BHP WAUKESHA MODEL 7044 GSI NATURAL GAS-FIRED IC ENGINE WITH NSCR AND PCV POWERING A COMPRESSOR (R-37)

PERMIT UNIT REQUIREMENTS

1. 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
2. Annual fuel consumption for this natural gas-fired engine shall not exceed 104.6 MMScf per year. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Permittee shall maintain annual records of fuel consumption, in MMScf, to show compliance with the annual fuel consumption limit of 104.6 MMScf. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102]
5. The permittee shall install and operate a nonresettable elapsed operating time meter. [District Rule 4702] Federally Enforceable Through Title V Permit
6. The permittee shall install and operate a nonresettable fuel flow meter to determine annual fuel usage. [District Rule 2201] Federally Enforceable Through Title V Permit
7. 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
8. Emissions from this IC engine shall not exceed any of the following limits: 0.07 g-NOx/hp-hr, 0.0094 g-SOx/hp-hr, 0.02 g-PM10/hp-hr, 0.475 g-CO/hp-hr, or 0.121 g-VOC/hp-hr. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
9. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last calendar quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit
11. 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
12. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit
13. Source testing to measure gas combustion NOx, CO, and VOC emissions from this unit shall be measured not less than once every 24 months. [District Rule 4702] Federally Enforceable Through Title V Permit
14. 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] Federally Enforceable Through Title V Permit
15. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. PM10 emission rate shall be reported in grams/bhp-hr. [District Rule 4702] Federally Enforceable Through Title V Permit
16. 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, PM10 - EPA Method 19, and VOC (ppmv) - EPA Method 25A or 25B, or ARB Method 100. [District Rules 1081 and 4702] Federally Enforceable Through Title V Permit
17. 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
18. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
19. 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 and quantity (cubic feet of gas or gallons of liquid) 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

20. 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

21. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made readily available for District inspection upon request. [District Rules 1081 and 4702] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-184-0 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
1,680 BHP WAUKESHA MODEL 7044 GSI NATURAL GAS-FIRED IC ENGINE WITH NSCR AND PCV POWERING A COMPRESSOR (R-38)

PERMIT UNIT REQUIREMENTS

1. 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
2. Annual fuel consumption for this natural gas-fired engine shall not exceed 104.6 MMScf per year. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Permittee shall maintain annual records of fuel consumption, in MMScf, to show compliance with the annual fuel consumption limit of 104.6 MMScf. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102]
5. The permittee shall install and operate a nonresettable elapsed operating time meter. [District Rule 4702] Federally Enforceable Through Title V Permit
6. The permittee shall install and operate a nonresettable fuel flow meter to determine annual fuel usage. [District Rule 2201] Federally Enforceable Through Title V Permit
7. 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
8. Emissions from this IC engine shall not exceed any of the following limits: 0.07 g-NOx/hp-hr, 0.0094 g-SOx/hp-hr, 0.02 g-PM10/hp-hr, 0.475 g-CO/hp-hr, or 0.121 g-VOC/hp-hr. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
9. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last calendar quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit
11. 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
12. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit
13. Source testing to measure gas combustion NOx, CO, and VOC emissions from this unit shall be measured not less than once every 24 months. [District Rule 4702] Federally Enforceable Through Title V Permit
14. 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] Federally Enforceable Through Title V Permit
15. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. PM10 emission rate shall be reported in grams/bhp-hr. [District Rule 4702] Federally Enforceable Through Title V Permit
16. 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, PM10 - EPA Method 19, and VOC (ppmv) - EPA Method 25A or 25B, or ARB Method 100. [District Rules 1081 and 4702] Federally Enforceable Through Title V Permit
17. 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
18. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
19. 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 and quantity (cubic feet of gas or gallons of liquid) 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

20. 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

21. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made readily available for District inspection upon request. [District Rules 1081 and 4702] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-185-0 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
1,680 BHP WAUKESHA MODEL 7044 GSI NATURAL GAS-FIRED IC ENGINE WITH NSCR AND PCV POWERING A COMPRESSOR (R-39)

PERMIT UNIT REQUIREMENTS

1. 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
2. Annual fuel consumption for this natural gas-fired engine shall not exceed 104.6 MMScf per year. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Permittee shall maintain annual records of fuel consumption, in MMScf, to show compliance with the annual fuel consumption limit of 104.6 MMScf. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102]
5. The permittee shall install and operate a nonresettable elapsed operating time meter. [District Rule 4702] Federally Enforceable Through Title V Permit
6. The permittee shall install and operate a nonresettable fuel flow meter to determine annual fuel usage. [District Rule 2201] Federally Enforceable Through Title V Permit
7. 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
8. Emissions from this IC engine shall not exceed any of the following limits: 0.07 g-NOx/hp-hr, 0.0094 g-SOx/hp-hr, 0.02 g-PM10/hp-hr, 0.475 g-CO/hp-hr, or 0.121 g-VOC/hp-hr. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
9. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last calendar quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit
11. 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
12. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit
13. Source testing to measure gas combustion NOx, CO, and VOC emissions from this unit shall be measured not less than once every 24 months. [District Rule 4702] Federally Enforceable Through Title V Permit
14. 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] Federally Enforceable Through Title V Permit
15. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. PM10 emission rate shall be reported in grams/bhp-hr. [District Rule 4702] Federally Enforceable Through Title V Permit
16. 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, PM10 - EPA Method 19, and VOC (ppmv) - EPA Method 25A or 25B, or ARB Method 100. [District Rules 1081 and 4702] Federally Enforceable Through Title V Permit
17. 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
18. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
19. 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 and quantity (cubic feet of gas or gallons of liquid) 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

20. 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

21. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made readily available for District inspection upon request. [District Rules 1081 and 4702] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-186-0 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
1,680 BHP WAUKESHA MODEL 7044 GSI NATURAL GAS-FIRED IC ENGINE WITH NSCR AND PCV POWERING A COMPRESSOR (R-40)

PERMIT UNIT REQUIREMENTS

1. 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
2. Annual fuel consumption for this natural gas-fired engine shall not exceed 104.6 MMScf per year. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Permittee shall maintain annual records of fuel consumption, in MMScf, to show compliance with the annual fuel consumption limit of 104.6 MMScf. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102]
5. The permittee shall install and operate a nonresettable elapsed operating time meter. [District Rule 4702] Federally Enforceable Through Title V Permit
6. The permittee shall install and operate a nonresettable fuel flow meter to determine annual fuel usage. [District Rule 2201] Federally Enforceable Through Title V Permit
7. 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
8. Emissions from this IC engine shall not exceed any of the following limits: 0.07 g-NOx/hp-hr, 0.0094 g-SOx/hp-hr, 0.02 g-PM10/hp-hr, 0.475 g-CO/hp-hr, or 0.121 g-VOC/hp-hr. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
9. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last calendar quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit
11. 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
12. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit
13. Source testing to measure gas combustion NOx, CO, and VOC emissions from this unit shall be measured not less than once every 24 months. [District Rule 4702] Federally Enforceable Through Title V Permit
14. 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] Federally Enforceable Through Title V Permit
15. 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. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. PM10 emission rate shall be reported in grams/bhp-hr. [District Rule 4702] Federally Enforceable Through Title V Permit
16. 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, PM10 - EPA Method 19, and VOC (ppmv) - EPA Method 25A or 25B, or ARB Method 100. [District Rules 1081 and 4702] Federally Enforceable Through Title V Permit
17. 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
18. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
19. 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 and quantity (cubic feet of gas or gallons of liquid) 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

20. 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

21. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made readily available for District inspection upon request. [District Rules 1081 and 4702] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-194-2 **EXPIRATION DATE:** 10/31/2009

SECTION: SE14 **TOWNSHIP:** 30S **RANGE:** 22E

EQUIPMENT DESCRIPTION:
GLYCOL DEHYDRATION SKID MOUNTED UNIT WITH A GLYCOL CONTACTOR, A SEPARATOR COALESCER, SEVERAL GLYCOL HEAT EXCHANGERS, A REBOILER/REGENERATOR EQUIPPED WITH 4.7 MMBTU/HR BURNER, A GLYCOL SURGE TANK, A FLASH SEPARATOR, A LEAN/RICH GLYCOL EXCHANGER, AND VARIOUS PUMPS AND FILTERS, WITH PROCESS VENT CONNECTED TO EXISTING VACUUM GAS GATHERING SYSTEM:

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102] Federally Enforceable Through Title V Permit
2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
3. Only glycol shall be used as the dehydration medium. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Condensate handling shall be conducted in closed systems resulting in fugitive component emissions only. [District Rule 2201] Federally Enforceable Through Title V Permit
5. VOC control efficiency shall be no less than 95% by weight. [District Rule 4408] Federally Enforceable Through Title V Permit
6. Permittee shall maintain with the permit accurate fugitive component counts and resulting emissions calculated using (ALR) equations for a 2,000 ppmv leak threshold included in EPA, "Protocol for Estimating Leak Emissions" (EPA - 453/R-95-017, November 1995). [District Rule 2201] Federally Enforceable Through Title V Permit
7. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 2,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated to methane in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as the dripping of organic liquid at a rate more than 3 drops per minute. A gas or liquid leak is a violation of this permit and shall be reported as a deviation. [District Rule 2201] Federally Enforceable Through Title V Permit
8. VOC fugitive emissions shall not exceed 0.56 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. VOC content of gas processed shall not exceed 100% by weight. Permittee shall maintain a written record of VOC content (sampled not less than annually) and shall make such records available for District inspection upon request for a period of two years. [District Rules 2201 and 1070] Federally Enforceable Through Title V Permit
10. VOC content of gas shall be measured using EPA Methods 25, 25a, or 25b referenced as methane. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Permittee shall comply in full with all applicable Rule 4409 requirements as shown on the facility wide permit. [District Rule 4409] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Permittee shall maintain daily and monthly records of gas dehydrated and records including those listed in Rule 4408 Section 6.1.2. The permittee shall make such records readily available for District inspection upon request and shall be retained on the premises for a period of not less than five years. [District Rules 2201 and 4408] Federally Enforceable Through Title V Permit

13. Permittee shall maintain records of component leak inspections and repairs in accordance with Rule 4409. [District Rule 4409] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-200-1 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (R-22) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit
7. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 1070 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-201-1 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-107) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit
7. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 1070 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-202-1 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-55) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit
7. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 1070 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-203-1 **EXPIRATION DATE:** 10/31/2009

EQUIPMENT DESCRIPTION:
ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-56) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

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] Federally Enforceable Through Title V Permit
4. Compressor skid shall only be used in conjunction with gas processing operations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive emissions, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c (Feb 1999), with no leaks greater than or equal to 10,000 ppm, shall not exceed 0.7 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall comply with all of the requirements of District Rule 4409, as specified on facility wide permit S-2234-0. [District Rule 4409] Federally Enforceable Through Title V Permit
7. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 1070 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-204-1 **EXPIRATION DATE:** 10/31/2009

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

EQUIPMENT DESCRIPTION:
7,300 MMBTU/HR HIGH PRESSURE FLARE SERVING LTS #1 PLANT

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. The flare shall only be operated for maintenance, testing, and required regulatory purposes, and during emergency situations. [District Rules 2201 and 4311] Federally Enforceable Through Title V Permit
3. Operation of the flare for maintenance, testing, and required regulatory purposes shall not exceed 25 hours in any one calendar year. [District Rules 2201 and 4311] Federally Enforceable Through Title V Permit
4. For purposes of flare maintenance and testing, emission rates from this unit shall not exceed any of the following limits: 0.068 lb-NOx/MMBtu; 0.00285 lb-SOx/MMBtu; 0.008 lb-PM10/MMBtu; 0.37 lb-CO/MMBtu; or 0.063 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
5. A flame shall be present at all times in the flare whenever combustible gases are vented through the flare. [District Rule 4311] Federally Enforceable Through Title V Permit
6. Flare outlet shall be equipped with an automatic ignition system, or, shall operate with a pilot flame present at all times when combustible gases are vented through the flare, except during purge periods for automatic-ignition equipped flares. [District Rule 4311] Federally Enforceable Through Title V Permit
7. Except for flares equipped with a flow-sensing ignition system, a heat sensing device such as a thermocouple, ultraviolet beam sensor, infrared sensor, or an equivalent device, capable of continuously detecting the presence of at least one pilot flame or the flare flame, shall be installed and operated. [District Rule 4311] Federally Enforceable Through Title V Permit
8. If the flare uses a flow-sensing automatic ignition system and does not use a continuous flame pilot, the flare shall use purge gas for purging. [District Rule 4311] Federally Enforceable Through Title V Permit
9. The permittee shall maintain all records of emergency and non-emergency operations. Records shall include the date and number of hours of each operation, the amount of gas burned, the type of the operation (e.g., weekly testing, rolling blackout, general area power outage, etc.), and records of operational characteristics monitoring (e.g. maintenance schedule as recommended by the manufacturer). [District Rules 2201 and 4311] Federally Enforceable Through Title V Permit
10. All records required by this permit shall be retained on-site for a minimum of five years and shall be made available to the APCO, ARB, and EPA upon request. [District Rules 2201 and 4311] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-205-1 **EXPIRATION DATE:** 10/31/2009

SECTION: 34 **TOWNSHIP:** 30S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
7,300 MMBTU/HR HIGH PRESSURE FLARE SERVING LTS #2 PLANT

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. The flare shall only be operated for maintenance, testing, and required regulatory purposes, and during emergency situations. [District Rules 2201 and 4311] Federally Enforceable Through Title V Permit
3. Operation of the flare for maintenance, testing, and required regulatory purposes shall not exceed 25 hours in any one calendar year. [District Rules 2201 and 4311] Federally Enforceable Through Title V Permit
4. For purposes of flare maintenance and testing, emission rates from this unit shall not exceed any of the following limits: 0.068 lb-NOx/MMBtu; 0.00285 lb-SOx/MMBtu; 0.008 lb-PM10/MMBtu; 0.37 lb-CO/MMBtu; or 0.063 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
5. A flame shall be present at all times in the flare whenever combustible gases are vented through the flare. [District Rule 4311] Federally Enforceable Through Title V Permit
6. Flare outlet shall be equipped with an automatic ignition system, or, shall operate with a pilot flame present at all times when combustible gases are vented through the flare, except during purge periods for automatic-ignition equipped flares. [District Rule 4311] Federally Enforceable Through Title V Permit
7. Except for flares equipped with a flow-sensing ignition system, a heat sensing device such as a thermocouple, ultraviolet beam sensor, infrared sensor, or an equivalent device, capable of continuously detecting the presence of at least one pilot flame or the flare flame, shall be installed and operated. [District Rule 4311] Federally Enforceable Through Title V Permit
8. If the flare uses a flow-sensing automatic ignition system and does not use a continuous flame pilot, the flare shall use purge gas for purging. [District Rule 4311] Federally Enforceable Through Title V Permit
9. The permittee shall maintain all records of emergency and non-emergency operations. Records shall include the date and number of hours of each operation, the amount of gas burned, the type of the operation (e.g., weekly testing, rolling blackout, general area power outage, etc.), and records of operational characteristics monitoring (e.g. maintenance schedule as recommended by the manufacturer). [District Rules 2201 and 4311] Federally Enforceable Through Title V Permit
10. All records required by this permit shall be retained on-site for a minimum of five years and shall be made available to the APCO, ARB, and EPA upon request. [District Rules 2201 and 4311] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-206-1 **EXPIRATION DATE:** 10/31/2009

SECTION: 2 **TOWNSHIP:** 31S **RANGE:** 23E

EQUIPMENT DESCRIPTION:
762 BHP CATERPILLAR MODEL C15 TIER 2 CERTIFIED DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 17 CCR 93115, and 40 CFR 60 Subpart IIII] Federally Enforceable Through Title V Permit
4. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801, 17 CCR 93115, 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
5. Emissions from this IC engine shall not exceed any of the following limits: 4.5 g-NOx/bhp-hr, 2.6 g-CO/bhp-hr, or 0.3 g-VOC/bhp-hr. [District Rule 2201, 17 CCR 93115, and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
6. Emissions from this IC engine shall not exceed 0.15 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102, 17 CCR 93115, and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
7. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702 and 40 CFR 60 Subpart IIII] Federally Enforceable Through Title V Permit
8. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
9. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit
10. This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702] Federally Enforceable Through Title V Permit

12. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rule 4702, 17 CCR 93115 and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit

13. The permittee shall maintain monthly records of the type of fuel purchased. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit

14. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-207-1 **EXPIRATION DATE:** 10/31/2009

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

EQUIPMENT DESCRIPTION:
1,680 BHP NATURAL GAS-FIRED WAUKESHA MODEL L7044GSI 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. 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. The permittee shall install and operate a nonresettable elapsed operating time meter. The time meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 4702, 5.6.6] 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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

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 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

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: NOX (ppmv) - EPA Method 7E or ARB Method 100; CO (ppmv) - EPA Method 10 or ARB Method 100; VOC - EPA Method 25A or 25B, or ARB Method 100; stack gas oxygen - EPA Method 3 or 3A or ARB Method 100. 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. 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

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

27. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

28. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4702, 5.6.1] 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, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

30. The permittee shall maintain records of: (1) the date and time of NOx CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOX and CO concentrations corrected to 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] Federally Enforceable Through Title V Permit

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

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-208-1 **EXPIRATION DATE:** 10/31/2009

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

EQUIPMENT DESCRIPTION:
1,680 BHP NATURAL GAS-FIRED WAUKESHA MODEL L7044GSI 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. 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] Federally Enforceable Through Title V Permit
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. The permittee shall install and operate a nonresettable elapsed operating time meter. The time meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 4702, 5.6.6] 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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
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 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
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: NOX (ppmv) - EPA Method 7E or ARB Method 100; CO (ppmv) - EPA Method 10 or ARB Method 100; VOC - EPA Method 25A or 25B, or ARB Method 100; stack gas oxygen - EPA Method 3 or 3A or ARB Method 100. 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. 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
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

27. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

28. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4702, 5.6.1] 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, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

30. The permittee shall maintain records of: (1) the date and time of NOx CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOX and CO concentrations corrected to 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

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-209-1 **EXPIRATION DATE:** 10/31/2009

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

EQUIPMENT DESCRIPTION:
1,680 BHP NATURAL GAS-FIRED WAUKESHA MODEL L7044GSI 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. 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. The permittee shall install and operate a nonresettable elapsed operating time meter. The time meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 4702, 5.6.6] 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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

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 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

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: NOX (ppmv) - EPA Method 7E or ARB Method 100; CO (ppmv) - EPA Method 10 or ARB Method 100; VOC - EPA Method 25A or 25B, or ARB Method 100; stack gas oxygen - EPA Method 3 or 3A or ARB Method 100. 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. 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

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

27. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

28. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4702, 5.6.1] 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, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

30. The permittee shall maintain records of: (1) the date and time of NOx CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOX and CO concentrations corrected to 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

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-210-1 **EXPIRATION DATE:** 10/31/2009

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

EQUIPMENT DESCRIPTION:
1,680 BHP NATURAL GAS-FIRED WAUKESHA MODEL L7044GSI 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. The permittee shall install and operate a nonresettable elapsed operating time meter. The time meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 4702, 5.6.6] 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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 annul fuel usage. [District Rule 2201] Federally Enforceable Through Title V Permit

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 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

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: NOX (ppmv) - EPA Method 7E or ARB Method 100; CO (ppmv) - EPA Method 10 or ARB Method 100; VOC - EPA Method 25A or 25B, or ARB Method 100; stack gas oxygen - EPA Method 3 or 3A or ARB Method 100. 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. 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

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

27. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

28. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4702, 5.6.1] 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, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

30. The permittee shall maintain records of: (1) the date and time of NOx CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOX and CO concentrations corrected to 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

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-211-1 **EXPIRATION DATE:** 10/31/2009

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

EQUIPMENT DESCRIPTION:
1,680 BHP NATURAL GAS-FIRED WAUKESHA MODEL L7044GSI 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. 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. The permittee shall install and operate a nonresettable elapsed operating time meter. The time meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 4702, 5.6.6] 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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

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 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

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: NOX (ppmv) - EPA Method 7E or ARB Method 100; CO (ppmv) - EPA Method 10 or ARB Method 100; VOC - EPA Method 25A or 25B, or ARB Method 100; stack gas oxygen - EPA Method 3 or 3A or ARB Method 100. 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. 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

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

27. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

28. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4702, 5.6.1] 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, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

30. The permittee shall maintain records of: (1) the date and time of NOx CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOX and CO concentrations corrected to 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

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-212-1 **EXPIRATION DATE:** 10/31/2009

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

EQUIPMENT DESCRIPTION:
1,680 BHP NATURAL GAS-FIRED WAUKESHA MODEL L7044GSI 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. The permittee shall install and operate a nonresettable elapsed operating time meter. The time meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 4702, 5.6.6] 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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 annul fuel usage. [District Rule 2201] Federally Enforceable Through Title V Permit

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 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

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: NOX (ppmv) - EPA Method 7E or ARB Method 100; CO (ppmv) - EPA Method 10 or ARB Method 100; VOC - EPA Method 25A or 25B, or ARB Method 100; stack gas oxygen - EPA Method 3 or 3A or ARB Method 100. 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. 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

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

27. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

28. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4702, 5.6.1] 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, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

30. The permittee shall maintain records of: (1) the date and time of NOx CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOX and CO concentrations corrected to 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

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-2234-214-1 **EXPIRATION DATE:** 10/31/2009

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

EQUIPMENT DESCRIPTION:
1,680 BHP NATURAL GAS-FIRED WAUKESHA MODEL L7044GSI 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. The permittee shall install and operate a nonresettable elapsed operating time meter. The time meter shall be properly maintained in accordance with the manufacturer's specifications. [District Rule 4702, 5.6.6] 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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 annul fuel usage. [District Rule 2201] Federally Enforceable Through Title V Permit

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 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

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

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21. 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; VOC - EPA Method 25A or 25B, or ARB Method 100; stack gas oxygen - EPA Method 3 or 3A or ARB Method 100. 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

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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

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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

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28. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4702, 5.6.1] 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, 5.6.1 and 5.6.9] Federally Enforceable Through Title V Permit

30. The permittee shall maintain records of: (1) the date and time of NOx CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOX and CO concentrations corrected to 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

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ATTACHMENT C

Detailed Facility List

Detailed Facility Report

For Facility=2234 and excluding Deleted Permits
Sorted by Facility Name and Permit Number

OCCIDENTAL OF ELK HILLS INC
GAS PLANT
SECTION SE-35, T-30S, R-23E
TUPMAN, CA

FAC # **S 2234**
STATUS: **A**
TELEPHONE:

TYPE: **TitleV**
TOXIC ID: **50177**

EXPIRE ON: **10/31/2009**
AREA: **81 /**
INSP. DATE: **11/11**

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-2234-1-17	55 MM BTU/HR	3020-02 H	1	1,030.00	1,030.00	A	LOW TEMPERATURE SEPARATION PLANT #2 INCLUDING PROCESS PUMPS, HEAT EXCHANGER(S)/COOLER(S), COOLING TOWER, FUEL GAS/LIQUID K.O. VESSEL(S) VENTED TO FLARE, AND DE-ETHANIZER, DE-BUTANIZER, DE-PROPANIZER COLUMNS VENTED TO FLARE, AND INLET HEAT EXCHANGER:
S-2234-3-18	55 MM BTU/HR	3020-02 H	1	1,030.00	1,030.00	A	LOW TEMPERATURE SEPARATION PLANT #1 INCLUDING FREE WATER KNOCKOUT(S), ACCUMULATOR(S), CHILLER(S), LOW TEMPERATURE SEPARATOR(S), DE-ETHANIZER & REBOILER, DE-BUTANIZER & REBOILER, DE-PROPANIZER & REBOILER, AND INLET HEAT EXCHANGER:
S-2234-4-5	30 hp loading rack	3020-01 B	1	117.00	117.00	A	NATURAL GASOLINE LOADOUT #2 INCLUDING A LOADING RACK WITH VAPOR RECOVERY SYSTEM
S-2234-8-2	104.6 MM BTU/HR	3020-02 H	1	1,030.00	1,030.00	A	104.6 MMBTU/HR LOW PRESSURE FLARE SERVING LTS #2 PLANT
S-2234-9-7	5,500 BHP IC ENGINE	3020-10 G	1	901.00	901.00	A	5,500 BHP INGERSOLL-RAND MODEL 616KVR LEAN BURN NATURAL GAS FIRED I.C. ENGINE, WITH PRE-COMBUSTION CHAMBER, POWERING A GAS COMPRESSOR (K-40 UNX #16652)
S-2234-10-7	5,500 BHP IC ENGINE	3020-10 G	1	901.00	901.00	A	5,500 BHP INGERSOLL-RAND MODEL 616KVR LEAN BURN NATURAL GAS FIRED I.C. ENGINE, WITH PRE-COMBUSTION CHAMBER, POWERING A GAS COMPRESSOR (K-41 UNX #16651)
S-2234-11-7	5,500 BHP IC ENGINE	3020-10 G	1	901.00	901.00	A	5,500 BHP INGERSOLL-RAND MODEL 616KVR LEAN BURN NATURAL GAS FIRED I.C. ENGINE, WITH PRE-COMBUSTION CHAMBER, POWERING A GAS COMPRESSOR (K-42 UNX #16650)
S-2234-12-7	2000 HP	3020-10 F	1	749.00	749.00	A	2,000 BHP INGERSOLL-RAND MODEL 412KVS LEAN BURN NATURAL GAS FIRED I.C. ENGINE, WITH PRE-COMBUSTION CHAMBER, POWERING A GAS COMPRESSOR (K-43 UNX #13694)
S-2234-14-2	105.6 MM BTU/HR	3020-02 H	1	1,030.00	1,030.00	A	105.6 MMBTU/HR LOW PRESSURE FLARE SERVING LTS #1
S-2234-15-7	5,500 BHP IC ENGINE	3020-10 G	1	901.00	901.00	A	5,500 BHP INGERSOLL-RAND MODEL 616KVR LEAN BURN NATURAL GAS FIRED I.C. ENGINE, WITH PRE-COMBUSTION CHAMBER, POWERING A GAS COMPRESSOR (K-36 UNX #13675)
S-2234-16-7	5,500 BHP IC ENGINE	3020-10 G	1	901.00	901.00	A	5,500 BHP INGERSOLL-RAND MODEL 616KVR LEAN BURN NATURAL GAS FIRED I.C. ENGINE, WITH PRE-COMBUSTION CHAMBER, POWERING A GAS COMPRESSOR (K-37 UNX #13674)
S-2234-17-7	5,500 BHP IC ENGINE	3020-10 G	1	901.00	901.00	A	5,500 BHP INGERSOLL-RAND MODEL 616KVR LEAN BURN NATURAL GAS FIRED I.C. ENGINE, WITH PRE-COMBUSTION CHAMBER, POWERING A GAS COMPRESSOR (K-38 UNX #13673)
S-2234-18-7	2000 HP	3020-10 F	1	749.00	749.00	A	2,000 BHP INGERSOLL-RAND MODEL 412KVS LEAN BURN NATURAL GAS FIRED I.C. ENGINE, WITH PRE-COMBUSTION CHAMBER, POWERING A GAS COMPRESSOR (K-39 UNX #13672)

Detailed Facility Report

For Facility=2234 and excluding Deleted Permits
Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-2234-19-12	63.1 MMBtu/hr	3020-02 H	1	1,030.00	1,030.00	A	35R GAS PLANT WITH LEAN OIL RECLAIMING STILL, FOUR AIR COMPRESSORS, ABSORBER, RICH OIL RECTIFIER, STRIPPER, DE-ETHANIZER AND DE-PROPANIZER
S-2234-27-6	4,000 BHP IC ENGINE	3020-10 F	1	749.00	749.00	A	4,000 BHP DELAVAL MODEL HVA12 LEAN BURN NATURAL GAS FIRED I.C. ENGINE, WITH PRE-COMBUSTION CHAMBER, POWERING A GAS COMPRESSOR (K-9 UNX #11726)
S-2234-28-7	4,000 BHP IC ENGINE	3020-10 F	1	749.00	749.00	A	4,000 BHP DELAVAL MODEL HVA12 LEAN BURN NATURAL GAS FIRED I.C. ENGINE, WITH PRE-COMBUSTION CHAMBER, POWERING A GAS COMPRESSOR (K-10 UNX #11718)
S-2234-29-10	1,000 BHP IC ENGINE	3020-10 F	1	749.00	749.00	A	1,000 BHP WAUKESHA MODEL L7042GSI RICH BURN NATURAL GAS FIRED I.C. ENGINE, WITH TURBOCHARGER, ENLARGED TURBOCHARGER NOZZLE RING, AND CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-11 UNX #13198)
S-2234-30-10	1,000 BHP IC ENGINE	3020-10 F	1	749.00	749.00	A	1,000 BHP WAUKESHA MODEL L7042GSIU RICH BURN NATURAL GAS FIRED I.C. ENGINE, WITH TURBOCHARGER, ENLARGED TURBOCHARGER NOZZLE RING, AND CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-12 UNX #12493)
S-2234-31-10	1,000 BHP IC ENGINE	3020-10 F	1	749.00	749.00	A	1,000 BHP WAUKESHA MODEL L7042GSI RICH BURN NATURAL GAS FIRED I.C. ENGINE, WITH TURBOCHARGER, ENLARGED TURBOCHARGER NOZZLE RING, AND CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-13 UNX #13409)
S-2234-38-3	310 HP	3020-10 C	1	240.00	240.00	A	310 BHP CUMMINS DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIREWATER PUMP (UNX #51392)
S-2234-39-3	310 HP	3020-10 C	1	240.00	240.00	A	310 BHP CUMMINS DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIREWATER PUMP (UNX #14535)
S-2234-43-3	227 HP	3020-10 C	1	240.00	240.00	A	227 BHP CATERPILLAR DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR (P4)
S-2234-44-4	773 HP	3020-10 D	1	479.00	479.00	A	773 BHP WAUKESHA NATURAL GAS-FIRED STANDBY IC ENGINE (UNX #14166)
S-2234-45-3	310 bhp engine	3020-10 C	1	240.00	240.00	A	310 HP CUMMINS DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIREWATER PUMP (UNX #12052)
S-2234-46-5	793 HP	3020-10 D	1	479.00	479.00	A	793 BHP WAUKESHA NATURAL GAS-FIRED STANDBY IC ENGINE (UNX #13397)
S-2234-47-5	793 HP	3020-10 D	1	479.00	479.00	A	793 BHP WAUKESHA NATURAL GAS-FIRED STANDBY IC ENGINE (UNX #14772)
S-2234-48-5	490 HP	3020-10 D	1	479.00	479.00	A	490 BHP CATERPILLAR MODEL G398 RICH BURN NATURAL GAS FIRED I.C. ENGINE, POWERING A GAS COMPRESSOR (K-68 UNX #54313)

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-2234-52-8	30.5 MW	3020-08A F	1	8,171.00	8,171.00	A	ONE 24.5 MW NATURAL GAS FIRED GAS TURBINE COGENERATION SYSTEM, INCLUDING 250 MMBTU/HR GENERAL ELECTRIC MODEL LM-2500 GAS TURBINE, 103 MMBTU/HR DUCT BURNER ASSEMBLY, 150,000 LB/HR HEAT RECOVERY STEAM GENERATOR, AND 6 MW STEAM TURBINE SERVING S-2234-52 AND S-2234-53
S-2234-53-6	24.5 MW	3020-08A F	1	8,171.00	8,171.00	A	ONE 24.5 MW NATURAL GAS FIRED GAS TURBINE COGENERATION SYSTEM, INCLUDING 250 MMBTU/HR GENERAL ELECTRIC MODEL LM-2500 GAS TURBINE, 103 MMBTU/HR DUCT BURNER ASSEMBLY, AND 150,000 LB/HR HEAT RECOVERY STEAM GENERATOR
S-2234-57-10	1,000 BRAKE HP	3020-10 F	1	749.00	749.00	A	1,000 BHP NATURAL GAS FIRED WAUKESHA MODEL L7042 RICH BURN I.C. ENGINE WITH TURBOCHARGER, ENLARGED NOZZLE RING, AIR/FUEL RATIO CONTROL UNIT, AND A NONSELECTIVE THREE WAY CATALYTIC REDUCTION (NSCR) SYSTEM (K-53 UNX #13444)
S-2234-58-12	1,000 BHP IC ENGINE	3020-10 F	1	749.00	749.00	A	1,000 BHP WAUKESHA MODEL L7042-GSIU RICH BURN NATURAL GAS FIRED I.C. ENGINE, WITH CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-49 UNX# 51286)
S-2234-59-11	1,000 BHP IC ENGINE	3020-10 F	1	749.00	749.00	A	1,000 BHP WAUKESHA MODEL L7042-GSI RICH BURN NATURAL GAS FIRED I.C. ENGINE, WITH CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-29 UNX# 13207)
S-2234-60-6	650 BRAKE HP	3020-10 D	1	479.00	479.00	A	650 BHP WAUKESHA MODEL L7042-GU RICH BURN NATURAL GAS FIRED I.C. ENGINE, WITH CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-54 UNX# 12877)
S-2234-61-10	1,000 BHP	3020-10 F	1	749.00	749.00	A	1,000 BHP WAUKESHA MODEL L7042GSI RICH BURN NATURAL GAS FIRED I.C. ENGINE, WITH TURBOCHARGER AND CATALYTIC CONVERTER. POWERING A GAS COMPRESSOR (K-52 UNX# 15676)
S-2234-62-7	2,000 HP	3020-10 F	1	749.00	749.00	A	2,000 BHP INGERSOLL-RAND MODEL 412KVS LEAN BURN NATURAL GAS FIRED I.C. ENGINE, WITH PRE-COMBUSTION CHAMBER, POWERING A GAS COMPRESSOR (K-44 UNX# 13701)
S-2234-63-10	1,000 BHP IC ENGINE	3020-10 F	1	749.00	749.00	A	1,000 BHP WAUKESHA MODEL L7042-GSIU RICH BURN NATURAL GAS FIRED I.C. ENGINE, WITH TURBOCHARGER AND CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-48 UNX# 13435)
S-2234-64-8	650 BRAKE HP	3020-10 D	1	479.00	479.00	A	650 BHP WAUKESHA MODEL L7042-GU RICH BURN NATURAL GAS FIRED I.C. ENGINE, WITH CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-26 UNX# 11554)
S-2234-65-8	650 BRAKE HP	3020-10 D	1	479.00	479.00	A	650 BHP WAUKESHA MODEL L7042-GU RICH BURN NATURAL GAS FIRED I.C. ENGINE, WITH CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-27 UNX #12705)
S-2234-66-8	650 BRAKE HP	3020-10 D	1	479.00	479.00	A	650 BHP WAUKESHA MODEL L7042-GU RICH BURN NATURAL GAS FIRED I.C. ENGINE, EQUIPPED WITH CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-28 UNX# 12850)
S-2234-67-10	1,000 BHP	3020-10 F	1	749.00	749.00	A	1,000 BHP WAUKESHA MODEL L7042-GSIU RICH BURN NATURAL GAS FIRED I.C. ENGINE, WITH TURBOCHARGER AND CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-30 UNX# 13426)

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PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-2234-68-10	1,000 BHP IC ENGINE	3020-10 F	1	749.00	749.00	A	1,000 BHP WAUKESHA MODEL L7042-GSIU RICH BURN NATURAL GAS FIRED I.C. ENGINE, WITH TURBOCHARGER AND CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-31 UNX# 11553)
S-2234-69-10	1,000 BHP IC ENGINE	3020-10 F	1	749.00	749.00	A	1,000 BHP WAUKESHA MODEL L7042-GSIU RICH BURN NATURAL GAS FIRED I.C. ENGINE, WITH TURBOCHARGER AND CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-32 UNX# 18028)
S-2234-70-11	1,000 BHP IC ENGINE	3020-10 F	1	749.00	749.00	A	1,000 BHP WAUKESHA MODEL L7042-GSIU RICH BURN NATURAL GAS FIRED I.C. ENGINE, WITH TURBOCHARGER AND CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-33 UNX# 16453)
S-2234-71-11	1,000 BHP IC ENGINE	3020-10 F	1	749.00	749.00	A	1,000 BHP WAUKESHA MODEL L7042-GSIU RICH BURN NATURAL GAS FIRED I.C. ENGINE, WITH TURBOCHARGER AND CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-34 UNX# 13417)
S-2234-72-10	1,000 BHP IC ENGINE	3020-10 F	1	749.00	749.00	A	1,000 BHP WAUKESHA MODEL L7042-GSIU RICH BURN NATURAL GAS FIRED I.C. ENGINE, WITH TURBOCHARGER AND CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-35 UNX# 54626)
S-2234-73-10	1,000 BHP IC ENGINE	3020-10 F	1	749.00	749.00	A	1,000 BHP WAUKESHA MODEL L7042-GSIU RICH BURN NATURAL GAS FIRED I.C. ENGINE, WITH TURBOCHARGER AND CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-51 UNX# 13793)
S-2234-74-10	1,000 BHP IC ENGINE	3020-10 F	1	749.00	749.00	A	1,000 BHP WAUKESHA MODEL L7042-GSIU RICH BURN NATURAL GAS FIRED I.C. ENGINE, WITH TURBOCHARGER AND CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-50 UNX# 13401)
S-2234-75-7	2,000 BHP	3020-10 F	1	749.00	749.00	A	2,000 BHP INGERSOLL-RAND MODEL 412KVS LEAN BURN NATURAL GAS FIRED I.C. ENGINE, WITH PRE-COMBUSTION CHAMBER, POWERING A GAS COMPRESSOR (K-45 UNX# 13706)
S-2234-76-7	2,000 BHP	3020-10 F	1	749.00	749.00	A	2,000 BHP INGERSOLL-RAND MODEL 412KVS LEAN BURN NATURAL GAS FIRED I.C. ENGINE, WITH PRE-COMBUSTION CHAMBER, POWERING A GAS COMPRESSOR (K-46 UNX# 13715)
S-2234-77-7	2,000 BHP	3020-10 F	1	749.00	749.00	A	2,000 BHP INGERSOLL-RAND MODEL 412KVS LEAN BURN NATURAL GAS FIRED I.C. ENGINE, WITH PRE-COMBUSTION CHAMBER, POWERING A GAS COMPRESSOR (K-47 UNX# 13716)
S-2234-78-9	1,000 BHP IC ENGINE	3020-10 F	1	749.00	749.00	A	1,000 BHP WAUKESHA MODEL L7042 RICH BURN NATURAL GAS FIRED I.C. ENGINE, WITH TURBOCHARGER AND CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-58 UNX# 18033)
S-2234-79-9	1,000 BHP IC ENGINE	3020-10 F	1	749.00	749.00	A	1,000 BHP WAUKESHA MODEL L7042 RICH BURN NATURAL GAS FIRED I.C. ENGINE, WITH TURBOCHARGER AND CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-57 UNX# 18017)
S-2234-80-6	1,000 BHP	3020-10 F	1	749.00	749.00	A	1,000 BHP WAUKESHA MODEL L7042GL LEAN BURN NATURAL GAS FIRED I.C. ENGINE, WITH PRE-STRATIFIED COMBUSTION SYSTEM, POWERING A GAS COMPRESSOR (K-59 UNX# 53881)
S-2234-81-6	1,000 BHP IC ENGINE	3020-10 F	1	749.00	749.00	A	1,000 BHP WAUKESHA MODEL L7042GL LEAN BURN NATURAL GAS FIRED I.C. ENGINE, WITH PRE-STRATIFIED COMBUSTION SYSTEM, POWERING A GAS COMPRESSOR (K-60)

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-2234-82-10	1,500 BHP IC ENGINE	3020-10 F	1	749.00	749.00	A	1,500 BHP WAUKESHA MODEL L7042 LEAN BURN NATURAL GAS FIRED I.C. ENGINE, WITH PRE-STRATIFIED COMBUSTION SYSTEM, POWERING A GAS COMPRESSOR (K-70 UNX# 54508)
S-2234-83-9	1,500 BHP IC ENGINE	3020-10 F	1	749.00	749.00	A	1,500 BHP WAUKESHA MODEL L7042 LEAN BURN NATURAL GAS FIRED I.C. ENGINE, WITH PRE-STRATIFIED COMBUSTION SYSTEM, POWERING A GAS COMPRESSOR (K-71 UNX# 54497)
S-2234-84-6	490 HP	3020-10 D	1	479.00	479.00	A	490 BHP CATERPILLAR MODEL G398 RICH BURN NATURAL GAS FIRED I.C. ENGINE, WITH CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-67 UNX# 54302)
S-2234-85-6	490 HP	3020-10 D	1	479.00	479.00	A	490 BHP CATERPILLAR MODEL G398 RICH BURN NATURAL GAS FIRED I.C. ENGINE, WITH CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-66 UNX# 54299)
S-2234-86-6	490 HP	3020-10 D	1	479.00	479.00	A	490 BHP CATERPILLAR MODEL G398 RICH BURN NATURAL GAS FIRED I.C. ENGINE, WITH CATALYTIC CONVERTER, POWERING A GAS COMPRESSOR (K-69 UNX# 54318)
S-2234-87-5	88 HP	3020-10 A	1	80.00	80.00	A	88 BHP WAUKESHA NATURAL GAS-FIRED STANDBY IC ENGINE (UNX #15556)
S-2234-97-2	1,250 hp electric compressor	3020-01 G	1	815.00	815.00	A	1,250 HP GENERAL ELECTRIC ELECTRICALLY DRIVEN NATURAL GAS COMPRESSOR (K-81) AUTHORIZED TO OPERATE WITHIN THE GAS PLANT STATIONARY SOURCE
S-2234-98-3	2,250 electric motor horsepower	3020-01 H	1	1,030.00	1,030.00	A	2,250 HP GENERAL ELECTRIC ELECTRICALLY DRIVEN NATURAL GAS COMPRESSOR (K-82) AUTHORIZED TO OPERATE WITHIN THE GAS PLANT STATIONARY SOURCE
S-2234-99-3	2,250 electric motor horsepower	3020-01 H	1	1,030.00	1,030.00	A	2,250 HP GENERAL ELECTRIC ELECTRICALLY DRIVEN NATURAL GAS COMPRESSOR (K-83) AUTHORIZED TO OPERATE WITHIN THE GAS PLANT STATIONARY SOURCE
S-2234-100-2	300 HP NATURAL GAS COMPRESSOR	3020-01 E	1	412.00	412.00	A	300 BHP SIEMENS ELECTRICALLY DRIVEN NATURAL GAS COMPRESSOR (K-84) AUTHORIZED TO OPERATE WITHIN THE GAS PLANT STATIONARY SOURCE S-2234
S-2234-101-2	300 HP NATURAL GAS COMPRESSOR	3020-01 E	1	412.00	412.00	A	300 BHP SIEMENS ELECTRICALLY DRIVEN NATURAL GAS COMPRESSOR (K-85) AUTHORIZED TO OPERATE WITHIN THE GAS PLANT STATIONARY SOURCE S-2234
S-2234-104-2	1445 HP DIESEL IC ENGINE	3020-10 F	1	749.00	749.00	A	1445 HP CATERPILLAR MODEL 3512 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING A 1000KW ELECTRIC GENERATOR
S-2234-107-4	2,250 electric motor horsepower	3020-01 H	1	1,030.00	1,030.00	A	2,250 BHP ELECTRICALLY DRIVEN NATURAL GAS COMPRESSOR (K-89), INCLUDING 2 SKID MOUNTED GAS/LIQUID SEPARATORS, 1 OFF SKID GAS COOLER AND FACILITY INLET GAS/LIQUID SEPARATOR
S-2234-108-4	2,250 electric motor horsepower	3020-01 H	1	1,030.00	1,030.00	A	2,250 BHP ELECTRICALLY DRIVEN NATURAL GAS COMPRESSOR (K-90), INCLUDING 2 SKID MOUNTED GAS/LIQUID SEPARATORS AND 1 OFF SKID GAS COOLER

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-2234-109-4	2,250 electric motor horsepower	3020-01 H	1	1,030.00	1,030.00	A	2,250 BHP ELECTRICALLY DRIVEN NATURAL GAS COMPRESSOR (K-91), INCLUDING 2 SKID MOUNTED GAS/LIQUID SEPARATORS AND 1 OFF SKID GAS COOLER
S-2234-110-4	2,250 electric motor horsepower	3020-01 H	1	1,030.00	1,030.00	A	2,250 BHP ELECTRICALLY DRIVEN NATURAL GAS COMPRESSOR (K-92), INCLUDING 2 SKID MOUNTED GAS/LIQUID SEPARATORS AND 1 OFF SKID GAS COOLER
S-2234-111-4	2,250 electric motor horsepower	3020-01 H	1	1,030.00	1,030.00	A	2,250 BHP ELECTRICALLY DRIVEN NATURAL GAS COMPRESSOR (K-93), INCLUDING 2 SKID MOUNTED GAS/LIQUID SEPARATORS AND 1 OFF SKID GAS COOLER
S-2234-112-4	2,250 electric motor horsepower	3020-01 H	1	1,030.00	1,030.00	A	2,250 BHP ELECTRICALLY DRIVEN NATURAL GAS COMPRESSOR (K-94), INCLUDING 2 SKID MOUNTED GAS/LIQUID SEPARATORS AND 1 OFF SKID GAS COOLER
S-2234-114-1	90,000 gallons	3020-05 D	1	185.00	185.00	A	90,000 GALLON NATURAL GASOLINE AND BUTANE STORAGE TANK #UNX 12954
S-2234-115-1	90,000 gallons	3020-05 D	1	185.00	185.00	A	90,000 GALLON NATURAL GASOLINE AND BUTANE STORAGE TANK #UNX 12955
S-2234-116-1	90,000 gallons	3020-05 D	1	185.00	185.00	A	90,000 GALLON NATURAL GASOLINE AND BUTANE STORAGE TANK #UNX 12956
S-2234-117-1	90,000 gallons	3020-05 D	1	185.00	185.00	A	90,000 GALLON NATURAL GASOLINE AND BUTANE STORAGE TANK #UNX 12966
S-2234-118-1	96,604 gallon storage tank	3020-05 D	1	185.00	185.00	A	96,604 GALLON NATURAL GASOLINE AND BUTANE STORAGE TANK
S-2234-119-1	96,604 gallon storage tank	3020-05 D	1	185.00	185.00	A	96,604 GALLON NATURAL GASOLINE AND BUTANE STORAGE BULLET TANK
S-2234-120-1	90,000 gallons	3020-05 D	1	185.00	185.00	A	90,000 GALLON NATURAL GASOLINE AND BUTANE STORAGE TANK #UNX 12950
S-2234-121-1	90,000 gallons	3020-05 D	1	185.00	185.00	A	90,000 GALLON PRESSURIZED NATURAL GASOLINE AND BUTANE STORAGE TANK #UNX 12953
S-2234-122-2	1.5 MMBtu/hr	3020-02 E	1	412.00	412.00	A	GLYCOL DEHYDRATION SKID MOUNTED UNIT WITH A GLYCOL CONTACTOR, SEPARATOR COALESCER, SEVERAL GLYCOL HEAT EXCHANGERS, REBOILER/REGENERATOR EQUIPPED WITH 1.5 MMBTU/HR BURNER, GLYCOL SURGE TANK, FLASH SEPARATOR, LEAN/RICH GLYCOL EXCHANGER, VARIOUS PUMPS AND FILTERS, WITH PROCESS VENT CONNECTED TO EXISTING VACUUM GAS GATHERING SYSTEM
S-2234-126-2	1,834 hp	3020-10 F	1	749.00	749.00	A	1834 HP NATURAL GAS-FIRED WAUKESHA IC ENGINE MODEL #7042 DRIVING A GAS COMPRESSOR (R-21) EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION, AIR/FUEL RATIO CONTROLLER, POSITIVE CRANKCASE VENTILATION, AND OPERATES AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234

Detailed Facility Report

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PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-2234-127-1	1,834 hp	3020-10 F	1	749.00	749.00	A	1834 HP NATURAL GAS-FIRED WAUKESHA IC ENGINE MODEL #7042 DRIVING A GAS COMPRESSOR (R-25) EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION, AIR/FUEL RATIO CONTROLLER, POSITIVE CRANKCASE VENTILATION, AND OPERATES AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234
S-2234-129-2	1,834 hp	3020-10 F	1	749.00	749.00	A	1834 HP NATURAL GAS-FIRED WAUKESHA IC ENGINE MODEL #7042 DRIVING A GAS COMPRESSOR (R-27) EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION, AIR/FUEL RATIO CONTROLLER, POSITIVE CRANKCASE VENTILATION, AND OPERATES AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234
S-2234-130-1	1,834 hp	3020-10 F	1	749.00	749.00	A	1834 HP NATURAL GAS-FIRED WAUKESHA IC ENGINE MODEL #7042 DRIVING A GAS COMPRESSOR (R-28) EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION, AIR/FUEL RATIO CONTROLLER, POSITIVE CRANKCASE VENTILATION, AND OPERATES AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234
S-2234-131-1	1,834 hp	3020-10 F	1	749.00	749.00	A	1834 HP NATURAL GAS-FIRED WAUKESHA IC ENGINE MODEL #7042 DRIVING A GAS COMPRESSOR (R-29) EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION, AIR/FUEL RATIO CONTROLLER, POSITIVE CRANKCASE VENTILATION, AND OPERATES AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234
S-2234-132-1	1,834 hp	3020-10 F	1	749.00	749.00	A	1834 HP NATURAL GAS-FIRED WAUKESHA IC ENGINE MODEL #7042 DRIVING A GAS COMPRESSOR (R-30) EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION, AIR/FUEL RATIO CONTROLLER, POSITIVE CRANKCASE VENTILATION, AND OPERATES AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234
S-2234-133-1	1,834 hp	3020-10 F	1	749.00	749.00	A	1834 HP NATURAL GAS-FIRED WAUKESHA IC ENGINE MODEL #7042 DRIVING A GAS COMPRESSOR (R-31) EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION, AIR/FUEL RATIO CONTROLLER, POSITIVE CRANKCASE VENTILATION, AND OPERATES AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234
S-2234-134-1	1,834 hp	3020-10 F	1	749.00	749.00	A	1834 HP NATURAL GAS-FIRED WAUKESHA IC ENGINE MODEL #7042 DRIVING A GAS COMPRESSOR (R-32) EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION, AIR/FUEL RATIO CONTROLLER, POSITIVE CRANKCASE VENTILATION, AND OPERATES AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234
S-2234-135-1	1,834 hp	3020-10 F	1	749.00	749.00	A	1834 HP NATURAL GAS-FIRED WAUKESHA IC ENGINE MODEL #7042 DRIVING A GAS COMPRESSOR (R-33) EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION, AIR/FUEL RATIO CONTROLLER, POSITIVE CRANKCASE VENTILATION, AND OPERATES AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234
S-2234-136-1	1,834 hp	3020-10 F	1	749.00	749.00	A	1834 HP NATURAL GAS-FIRED WAUKESHA IC ENGINE MODEL #7042 DRIVING A GAS COMPRESSOR (R-34) EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION, AIR/FUEL RATIO CONTROLLER, POSITIVE CRANKCASE VENTILATION, AND OPERATES AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234

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PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-2234-137-2	1,834 hp	3020-10 F	1	749.00	749.00	A	1834 HP NATURAL GAS-FIRED WAUKESHA IC ENGINE MODEL #7042 DRIVING A GAS COMPRESSOR (R-35) EQUIPPED WITH NON-SELECTIVE CATALYTIC REDUCTION, AIR/FUEL RATIO CONTROLLER, POSITIVE CRANKCASE VENTILATION, AND OPERATES AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234
S-2234-139-2	1,600+ hp	3020-01 H	1	1,030.00	1,030.00	A	ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (R-23) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE
S-2234-140-2	1,600+ hp	3020-01 H	1	1,030.00	1,030.00	A	ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (R-24) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE
S-2234-141-2	1,600+ hp	3020-01 H	1	1,030.00	1,030.00	A	ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-95) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE
S-2234-142-2	1,600+ hp	3020-01 H	1	1,030.00	1,030.00	A	ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-103) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE
S-2234-143-2	1,600+ hp	3020-01 H	1	1,030.00	1,030.00	A	ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-104) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE
S-2234-144-2	1,600+ hp	3020-01 H	1	1,030.00	1,030.00	A	ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-105) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE
S-2234-145-2	1,600+ hp	3020-01 H	1	1,030.00	1,030.00	A	ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-106) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE
S-2234-147-2	1,600+ hp	3020-01 H	1	1,030.00	1,030.00	A	ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-108] AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE
S-2234-150-2	1,600+ hp	3020-01 H	1	1,030.00	1,030.00	A	ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-109) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE
S-2234-151-2	1,600+ hp	3020-01 H	1	1,030.00	1,030.00	A	ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-110) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE
S-2234-152-2	1,600+ hp	3020-01 H	1	1,030.00	1,030.00	A	ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-111) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE
S-2234-153-2	1,600+ hp	3020-01 H	1	1,030.00	1,030.00	A	ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-112) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

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PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-2234-154-2	1,600+ hp	3020-01 H	1	1,030.00	1,030.00	A	ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-113) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE
S-2234-157-1	1,600+ hp	3020-01 H	1	1,030.00	1,030.00	A	ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-114) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE
S-2234-158-1	1,600+ hp	3020-01 H	1	1,030.00	1,030.00	A	ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-115) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE
S-2234-159-1	1,600+ hp	3020-01 H	1	1,030.00	1,030.00	A	ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-116) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE
S-2234-160-1	1,600+ hp	3020-01 H	1	1,030.00	1,030.00	A	ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-117) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE
S-2234-161-1	1,600+ hp	3020-01 H	1	1,030.00	1,030.00	A	ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-118) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE
S-2234-162-1	1,600+ hp	3020-01 H	1	1,030.00	1,030.00	A	ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-119) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE
S-2234-163-1	1,600+ hp	3020-01 H	1	1,030.00	1,030.00	A	ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-120) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE
S-2234-164-1	1,600+ hp	3020-01 H	1	1,030.00	1,030.00	A	ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-121) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE
S-2234-165-1	1,600+ hp	3020-01 H	1	1,030.00	1,030.00	A	ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-122) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE
S-2234-166-1	1,600+ hp	3020-01 H	1	1,030.00	1,030.00	A	ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-123) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE
S-2234-167-1	1,600+ hp	3020-01 H	1	1,030.00	1,030.00	A	ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-124) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE
S-2234-170-1	99 bhp IC engine	3020-01 C	1	197.00	197.00	A	99 BHP CUMMINS MODEL 4BTA 3.9-G5 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING POTABLE WATER PUMPS

Detailed Facility Report

For Facility=2234 and excluding Deleted Permits
Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-2234-172-1	1.5 MMBtu/hr	3020-02 E	1	412.00	412.00	A	GLYCOL DEHYDRATION OPERATION INCLUDING 1.5 MMBTU/HR BURNER, A GLYCOL SURGE TANK, FLASH VESSEL AND GLYCOL REBOILER VENT, A LEAN/RICH GLYCOL EXCHANGER, AND VARIOUS PUMPS AND FILTERS WITH PROCESS VENT CONNECTED TO VACUUM GAS GATHERING SYSTEM
S-2234-175-1	< 100 hp	3020-01 C	1	197.00	197.00	A	GAS DEHYDRATION SYSTEM INCLUDING; INLET GAS COALESCERS, MOLECULAR SIEVE DRYER BEDS, REGENERATION AND DRY GAS COOLERS, AND ELECTRIC MOTOR REGENERATION GAS COMPRESSOR (35R GAS PLANT)
S-2234-176-1	< 1,600 hp	3020-01 G	1	815.00	815.00	A	NATURAL GAS CO2 REMOVAL SYSTEM INCLUDING; MOLECULAR SIEVE CO2 REMOVAL BEDS, FIN-FAN GAS COOLERS, NITROGEN DRYING BEDS, LIQUID KNOCKOUT VESSELS AND ELECTRIC MOTOR CO2 REMOVAL COMPRESSORS (35R GAS PLANT)
S-2234-180-1	1,600+ hp	3020-01 H	1	1,030.00	1,030.00	A	ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-19) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE
S-2234-181-1	1,600+ hp	3020-01 H	1	1,030.00	1,030.00	A	ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-20) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE
S-2234-182-0	1,680 bHP	3020-10 F	1	749.00	749.00	A	1,680 BHP WAUKESHA MODEL 7044 GSI NATURAL GAS-FIRED IC ENGINE WITH NSCR AND PCV POWERING A COMPRESSOR (R-36)
S-2234-183-0	1,680 bHP	3020-10 F	1	749.00	749.00	A	1,680 BHP WAUKESHA MODEL 7044 GSI NATURAL GAS-FIRED IC ENGINE WITH NSCR AND PCV POWERING A COMPRESSOR (R-37)
S-2234-184-0	1,680 bHP	3020-10 F	1	749.00	749.00	A	1,680 BHP WAUKESHA MODEL 7044 GSI NATURAL GAS-FIRED IC ENGINE WITH NSCR AND PCV POWERING A COMPRESSOR (R-38)
S-2234-185-0	1,680 bHP	3020-10 F	1	749.00	749.00	A	1,680 BHP WAUKESHA MODEL 7044 GSI NATURAL GAS-FIRED IC ENGINE WITH NSCR AND PCV POWERING A COMPRESSOR (R-39)
S-2234-186-0	1,680 bHP	3020-10 F	1	749.00	749.00	A	1,680 BHP WAUKESHA MODEL 7044 GSI NATURAL GAS-FIRED IC ENGINE WITH NSCR AND PCV POWERING A COMPRESSOR (R-40)
S-2234-194-2	4.7 MMBtu/hr	3020-02 F	1	607.00	607.00	A	GLYCOL DEHYDRATION SKID MOUNTED UNIT WITH A GLYCOL CONTACTOR, A SEPARATOR COALESCER, SEVERAL GLYCOL HEAT EXCHANGERS, A REBOILER/REGENERATOR EQUIPPED WITH 4.7 MMBTU/HR BURNER, A GLYCOL SURGE TANK, A FLASH SEPARATOR, A LEAN/RICH GLYCOL EXCHANGER, AND VARIOUS PUMPS AND FILTERS, WITH PROCESS VENT CONNECTED TO EXISTING VACUUM GAS GATHERING SYSTEM:
S-2234-200-1	1,600+ hp	3020-01 H	1	1,030.00	1,030.00	A	ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (R-22) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE
S-2234-201-1	1,600+ hp	3020-01 H	1	1,030.00	1,030.00	A	ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-107) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE

Detailed Facility Report

For Facility=2234 and excluding Deleted Permits
Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-2234-202-1	1,600+ hp	3020-01 H	1	1,030.00	1,030.00	A	ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-55) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE
S-2234-203-1	1,600+ hp	3020-01 H	1	1,030.00	1,030.00	A	ELECTRIC MOTOR DRIVEN COMPRESSOR SKID (K-56) AUTHORIZED FOR OPERATION AT VARIOUS UNSPECIFIED LOCATIONS WITHIN THE GAS PROCESSING STATIONARY SOURCE
S-2234-204-1	7,300 MMBtu/hr	3020-02 H	1	1,030.00	1,030.00	A	7,300 MMBTU/HR HIGH PRESSURE FLARE SERVING LTS #1 PLANT
S-2234-205-1	7,300 MMBtu/hour	3020-02 H	1	1,030.00	1,030.00	A	7,300 MMBTU/HR HIGH PRESSURE FLARE SERVING LTS #2 PLANT
S-2234-206-1	762 hp ice	3020-10 D	1	479.00	479.00	A	762 BHP CATERPILLAR MODEL C15 TIER 2 CERTIFIED DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR
S-2234-207-1	1,680 BHP IC Engine	3020-10 F	1	749.00	749.00	A	1,680 BHP NATURAL GAS-FIRED WAUKESHA MODEL L7044GSI IC ENGINE WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A GAS COMPRESSOR (R-1) OPERATING AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234
S-2234-208-1	1,680 IC Engine	3020-10 F	1	749.00	749.00	A	1,680 BHP NATURAL GAS-FIRED WAUKESHA MODEL L7044GSI IC ENGINE WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A GAS COMPRESSOR (R-2) OPERATING AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234
S-2234-209-1	1,680 bhp	3020-10 F	1	749.00	749.00	A	1,680 BHP NATURAL GAS-FIRED WAUKESHA MODEL L7044GSI IC ENGINE WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A GAS COMPRESSOR (R-3) OPERATING AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234
S-2234-210-1	1,680 bhp	3020-10 F	1	749.00	749.00	A	1,680 BHP NATURAL GAS-FIRED WAUKESHA MODEL L7044GSI IC ENGINE WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A GAS COMPRESSOR (R-46) OPERATING AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234
S-2234-211-1	1,680 bhp	3020-10 F	1	749.00	749.00	A	1,680 BHP NATURAL GAS-FIRED WAUKESHA MODEL L7044GSI IC ENGINE WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A GAS COMPRESSOR (R-6) OPERATING AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234
S-2234-212-1	1,680 bhp	3020-10 F	1	749.00	749.00	A	1,680 BHP NATURAL GAS-FIRED WAUKESHA MODEL L7044GSI IC ENGINE WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A GAS COMPRESSOR (R-47) OPERATING AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234
S-2234-214-1	1,680 bhp	3020-10 F	1	749.00	749.00	A	1,680 BHP NATURAL GAS-FIRED WAUKESHA MODEL L7044GSI IC ENGINE WITH NON-SELECTIVE CATALYTIC REDUCTION POWERING A GAS COMPRESSOR (R-42) OPERATING AT VARIOUS UNSPECIFIED LOCATIONS WITHIN FACILITY S-2234

Number of Facilities Reported: 1

ATTACHMENT D

District Rule 4311 Stringency Analysis

Comparison of the latest amended version (amended June 18, 2009) of District Rule 4311 and the current SIP approved version, adopted June 20, 2002

District Rule 4311 Requirements	Adopted June 20, 2002	Amended June 18, 2009
APPLICABILITY		
This rule is applicable to operations involving the use of flares.	X	X
DEFINITIONS		
Air-Assisted Flare: a combustion device where forced air is injected to promote turbulence for mixing and to provide combustion air.	X	X
Air Pollution Control Officer (APCO): as defined in Rule 1020 (Definitions).		X
Air Resources Board (ARB): as defined in Rule 1020 (Definitions).		X
British Thermal Unit (Btu): the amount of heat required to raise the temperature of one pound of water from 59 ^{o}F to 60 ^{o}F at one atmosphere.		X
Calendar Day: any day starting at twelve o'clock AM and ending at 11:59 PM.		X
Coanda Effect Flare: A flare in which the high pressure flare gas flows along a curved surface nspiriting air into the gas to promote combustion.		X
Emergency: any situation or a condition arising from a sudden and reasonably unforeseeable event beyond the control of the operator. An emergency situation requires immediate corrective action to restore safe operation. A planned flaring event shall not be considered as an emergency.	X	
Emergency: any situation or a condition arising from a sudden and reasonably unforeseeable and unpreventable event beyond the control of the operator. Examples include, but are not limited to, not preventable equipment failure, natural disaster, act of war or terrorism, or external power curtailment, excluding a power curtailment due to an interruptible power service agreement from a utility. A flaring event due to improperly designed equipment, lack of preventative maintenance, careless or improper operation, operator error or willful misconduct does not quality as an emergency. An emergency situation requires immediate corrective action to restore safe operation. A planned flaring event shall not be considered as an emergency.		X
Enclosed Flare: a flare composed of multiple gas burners that are grouped in an enclosure, and are staged to operate at a	X	X

District Rule 4311 Requirements	Adopted June 20, 2002	Amended June 18, 2009
wide range of flow rates.		
EPA: United States Environmental Protection Agency.		X
Feasible: Capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.		X
Flare: a direct combustion device in which air and all combustible gases react at the burner with the objective of complete and instantaneous oxidation of the combustible gases. Flares are used either continuously or intermittently and are not equipped with devices for fuel-air mix control or for temperature control.	X	X
Flare Event: any intentional or unintentional combustion of vent gas in a flare. The flare event ends when the flow velocity drops below 0.12 feet per second or when the operator can demonstrate that no more vent gas was combusted based upon the monitoring records of the flare water seal level and/or other parameters as approved by the APCO in the Flare Monitoring and Recording Plan. For a flare event that continues for more than one calendar day, each calendar day or venting of gases shall constitute a separate flare event.		X
Flare Gas: gas burned in a flare.	X	X
Flare Minimization Plan (FMP): a document intended to meet the requirements of Section 6.5 of this Rule.		X
Flare Monitoring System: all flare monitoring and recording equipment used for the determination of flare operating parameters. Flare monitoring and recording equipment includes, but is not limited to, sample systems, transducers, transmitters, data acquisition equipment, data recording equipment, and video monitoring equipment and video recording equipment.		X
Flexigas: a low BTU fuel gas produced by gasifying coke produced in a fluid-bed Coker. Due to the air used in the gasifying process, Flexigas is approximately 50% nitrogen.		X
Gaseous Fuel: any gases used as combustion fuel which include, but are not limited to, any natural, process, synthetic, landfill, sewage digester, or waste gases. Gaseous fuels include produced gas, pilot gas and, when burned, purge gas.	X	X
Major Source: as defined in Rule 2201 (New and Modified Stationary Source Review Rule).	X	
MMBtu: million British thermal units.		X

District Rule 4311 Requirements	Adopted June 20, 2002	Amended June 18, 2009
Non-Assisted Flare: a combustion device without any auxiliary provision for enhancing the mixing of air into its flame. This definition does not include those flares, that by design, provide excess air at the flare tip.	X	X
Nox: any nitrogen oxide compounds	X	X
Open Flare: a vertically or horizontally oriented open pipe flare from which gases are released into the air before combustion is commenced.	X	X
Operator: includes, but not limited to, any person who owns, leases, supervises, or operates a facility.		X
Petroleum Refinery: a facility that processes petroleum, as defined in the Standard Industrial Classification Manual as Industry No. 2911, Petroleum Refining. For the purpose of this rule, all portions of the petroleum refining operation, including those at non-contiguous locations operating flares, shall be considered as one petroleum refinery.		X
Pilot: an auxiliary burner used to ignite the vent gas routed to a flare.		X
Pilot Gas: the gas used to maintain the presence of a flame for ignition of vent gases.		X
Planned Flaring: a flaring operation that constitutes a designed and planned process at a source, and which would have been reasonably foreseen ahead of its actual occurrence, or is scheduled to occur. The operation of a flare for the purpose of performing equipment maintenance provided it does not exceed 200 hours per calendar year, or during compliance source testing or visible emission inspections is not considered planned flaring. Planned flaring includes, but is not limited to, the following flaring activities: Oil or gas well tests, well related work, tests ordered by a regulatory agency. Equipment depressurization for maintenance purposes. Equipment start-up or shutdown. Flaring of gas at production sources where no gas handling, gas injection or gas transmission facilities exists. Flaring of off-specification gas (i.e. non PUC quality gas), unless the operator can demonstrate that the gas must be flared for engineering or safety reasons, e.g., under emergency.	X	
Planned Flaring: a flaring operation that constitutes a		X

District Rule 4311 Requirements	Adopted June 20, 2002	Amended June 18, 2009
designed and planned process at a source, and which would have been reasonably foreseen ahead of its actual occurrence, or is scheduled to occur. Planned flaring includes, but is not limited to, the following flaring activities: Oil or gas well tests, well related work, tests ordered by a regulatory agency. Equipment depressurization for maintenance purposes. Equipment start-up or shutdown. Flaring of gas at production sources where no gas handling, gas injection or gas transmission facilities exists. Flaring of off-specification gas (i.e. non-PUC quality gas), unless the operator can demonstrate that the gas must be flared for engineering or safety reasons, e.g., under emergency. The operation of a flare for the purpose of performing equipment maintenance.		
Prevention Measure: a component, system, procedure, or program that will minimize or eliminate flaring.		X
Public Utilities Commission (PUC) Quality Gas: any gaseous fuel, gas containing fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet and no more than five grains of total sulfur per one hundred (100) standard cubic feet. PUC quality gas shall also mean high methane (at least 80 % by volume) gas as specified in PUC's General Order 58-A.	X	X
Purge Gas: Nitrogen, carbon dioxide, liquefied petroleum gas, or natural gas, any of which can be used to maintain a non-explosive mixture of gases in the flare header or provide sufficient exit velocity to prevent any regressive flame travel back into the flare header.	X	X
Refinery Fuel Gas: a combustible gas, which is a by-product of the refinery process.		X
Reportable Flaring Event: any flaring where more than 500,000 standard cubic feet of vent gas is flared per calendar day, or where sulfur oxide emissions are greater than 500 pounds per calendar day. A reportable flaring event ends when it can be demonstrated by monitoring required in Section 6.8 that the integrity of the water seal has been maintained sufficiently to prevent vent gas to the flare tip. For flares without water seals or water seal monitors as required by Section 6.8, a reportable flaring event ends when the rate of flow of vent gas falls below 0.12 feet per second.		X

District Rule 4311 Requirements	Adopted June 20, 2002	Amended June 18, 2009
Representative Sample: a sample of vent gas collected from the location as approved for flare monitoring and analyzed utilizing test methods specified in Section 6.3.4.		X
Shutdown: the procedure by which the operation of a process unit or piece of equipment is stopped due to the end of a production run, or for the purpose of performing maintenance, repair and replacement of equipment. Stoppage caused by frequent breakdown due to poor maintenance or operator error shall not be deemed a shutdown.		X
Startup: the procedure by which a process unit or piece of equipment achieves normal operational status, as indicated by such parameters as temperature, pressure, feed rate and product quality.		X
Steam-Assisted Flare: a combustion device where steam is injected into the combustion zone to promote turbulence for the mixing of the combustion air before it is introduced to the flame.		X
Thermal oxidizer: an enclosed or partially enclosed combustion device, other than a flare, that is used to oxidize combustible gases.		X
Total Organic Gases (TOG): all hydrocarbon compounds containing hydrogen and carbon with or without other chemical elements.	X	X
Turnaround: a planned activity involving shutdown and startup of one or several process units for the purpose of performing periodic maintenance, repair, replacement of equipment or installation of new equipment.		X
Vent Gas: any gas directed into a flare, excluding assisting air or steam, flare pilot gas, and any continuous purge gases.		X
Volatile Organic Compound (VOC): as defined in Rule 1020 (Definitions).	X	X
Water Seal: a liquid barrier, or seal, to prevent the passage of gas. Water seals provide a positive means of flash-back prevention in addition to enabling the upstream flare system header to operate at a slight positive pressure at all times.		X
EXEMPTIONS		
Flares operated in municipal solid waste landfills subject to the requirements of Rule 4642 (Solid Waste Disposal Sites) are exempt from this rule. Flares that are subject to the requirements of 40 CFR 60 Subpart WWW (Standards of Performance for Municipal	X	X

District Rule 4311 Requirements	Adopted June 20, 2002	Amended June 18, 2009
Waste Landfills), or Subpart Cc (Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills) are exempt from this rule.		
Except for the recordkeeping requirements in Section 6.1.4 the requirements of this rule shall not apply to any stationary source that has the potential to emit, for all processes, less than ten (10.0) tons per year of VOC and less than ten (10.0) tons per year of Nox.		X
REQUIREMENTS		
The operator of any source subject to this rule shall comply with the following requirements: Flares that are permitted to operate only during an emergency are not subject to the requirements of Sections 5.6 and 5.7. The flame shall be present at all times when combustible gases are vented through the flare. The outlet shall be equipped with an automatic ignition system, or, shall operate with a pilot flame present at all times when combustible gases are vented through the flare, except during purge periods for automatic-ignition equipped flares.	X	X
Except for flares equipped with a flow-sensing ignition system, a heat sensing device such as a thermocouple, ultraviolet beam sensor, infrared sensor, or an equivalent device, capable of continuously detecting at least one pilot flame or the flare flame is present shall be installed and operated.	X	
Except for flares equipped with a flow-sensing ignition system, a heat sensing device such as a thermocouple, ultraviolet beam sensor, infrared sensor, or an alternative equivalent device, capable of continuously detecting at least one pilot flame or the flare flame is present shall be installed and operated.		X
Flares that use flow-sensing automatic ignition systems and which do not use a continuous flame pilot shall use purge gas for purging.	X	X
Open flares (air-assisted, steam-assisted, or non-assisted) in which the flare gas pressure is less than 5 psig shall be operated in such a manner that meets the provisions of 40 CFR 60.18.	X	
Open flares (air-assisted, steam-assisted, or non-assisted) in which the flare gas pressure is less than 5 psig shall be operated in such a manner that meets the		X

District Rule 4311 Requirements	Adopted June 20, 2002	Amended June 18, 2009
provisions of 40 CFR 60.18. The requirements of this section shall not apply to Coanda effect flares.		
Ground-level enclosed flares shall meet the following emission standards: Flares without Steam Assist Heat Release Rate: <10 MMBtu VOC limit = 0.0051 (lb/MMBtu) Nox limit = 0.0952 (lb/MMBtu) Heat Release Rate: 10-100 MMBtu VOC limit = 0.0027 (lb/MMBtu) Nox limit = 0.1330 (lb/MMBtu) Heat Release Rate: >100 MMBtu VOC limit = 0.0013 (lb/MMBtu) Nox limit = 0.5240 (lb/MMBtu) Flares with Steam Assist All Heat Release Rates VOC limit = 0.0014 (lb/MMBtu) as TOG Nox limit = 0.068 (lb/MMBtu)	X	X
Flare Minimization Plan Effective on and after July 1, 2011, flaring is prohibited unless it is consistent with an approved flare minimization plan (FMP), pursuant to Section 6.5, and all commitments listed in that plan have been met. This standard shall not apply if the APCO determines that the flaring is caused by an emergency as defined by Section 3.7 and is necessary to prevent an accident, hazard or release of vent gas directly to the atmosphere.		X
Petroleum Refinery SO_2 Performance Targets Effective on and after January 1, 2011, the operator of a petroleum refinery shall minimize sulfur dioxide flare emissions to less than 1.50 tons per million barrels of crude processing capacity, calculated as an average over one calendar year. Effective on and after January 1, 2017, the operator of a petroleum refinery shall minimize sulfur dioxide flare emissions to less than 0.50 tons per million barrels of crude processing capacity, calculated as an average over one calendar year.		X
Effective on and after July 1, 2011, the operator of a flare subject to flare minimization requirements pursuant to Section 5.8 shall monitor the vent gas flow to the flare with a flow measuring device or other parameters as specified in the Permit to Operate. The operator shall maintain records		X

District Rule 4311 Requirements	Adopted June 20, 2002	Amended June 18, 2009
pursuant to Section 6.1.7. Flares that the operator can verify, based on permit conditions, are not capable of producing reportable flare events pursuant to Section 6.2.2 shall not be required to monitor vent gas flow to the flare.		
Effective on and after July 1, 2011, the operator of a petroleum refinery or a flare with a flaring capacity equal to or greater than 50 MMBtu/hr shall monitor the flare pursuant to Sections 6.6, 6.7, 6.8, 6.9, and 6.10.		X
ADMINISTRATIVE REQUIREMENTS		
Compliance Determination Upon request the operator of flares that are subject to Section 5.6 shall make_available to the APCO the compliance determination records that demonstrate compliance with the provisions of 40 CFR 60.18, (c)(3) through (c)(5). The operator of ground-level enclosed flares shall conduct source testing at least once every 12 months to demonstrate compliance with Section 5.7. The operator shall submit a copy of the testing protocol to the APCO at least 30 days in advance of the scheduled testing. The operator shall submit the source test results not later than 45 days after completion of the source testing. For flares used during an emergency, record of the duration of flare operation, amount of gas burned, and the nature of the emergency situation.	X	X
Operators claiming an exemption pursuant to Section 4.3 shall record annual throughput, material usage, or other information necessary to demonstrate an exemption under that section. Effective on and after July 1, 2011, a copy of the approved flare minimization plan pursuant to Section 6.5. Effective on and after July 1, 2012, where applicable, a copy of annual reports submitted to the APCO pursuant to Section 6.2. Effective on and after July 1, 2011, where applicable, monitoring data collected pursuant to Sections 5.10, 6.6, 6.7, 6.8, 6.9, and 6.10.		X

District Rule 4311 Requirements	Adopted June 20, 2002	Amended June 18, 2009
Flare Reporting Unplanned Flaring Event Effective on and after July 1, 2011, the operator of a flare subject to flare minimization plans pursuant to Section 5.8 of this rule shall notify the APCO of an unplanned flaring event within 24 hours after the start of the next business day or within 24 hours of their discovery, which ever occurs first. The notification shall include the flare source identification, the start date and time, and the end date and time. Reportable Flaring Event Effective on and after July 1, 2012, and annually thereafter, the operator of a flare subject to flare minimization plans pursuant to Section 5.8 shall submit an annual report to the APCO that summarizes all Reportable Flaring Events as defined in Section 3.0 that occurred during the previous 12 month period. The report shall be submitted within 30 days following the end of the twelve month period of the previous year. The report shall include, but is not limited to all of the following: The results of an investigation to determine the primary cause and contributing factors of the flaring event; Any prevention measures considered or implemented to prevent recurrence together with a justification for rejecting any measures that were considered but not implemented; If appropriate, an explanation of why the flaring was an emergency and necessary to prevent accident, hazard or release of vent gas to the atmosphere, or where, due to a regulatory mandate to vent a flare, it cannot be recovered, treated and used as a fuel gas at the facility; and The date, time, and duration of the flaring event.		X
Annual Monitoring Report Effective on and after July 1, 2012, and annually thereafter, the operator of a flare subject to flare monitoring requirements pursuant to Sections 5.10, 6.6, 6.7, 6.8, 6.9, and 6.10, as appropriate, shall submit an annual report to the APCO within 30 days following the end of each 12 month period. The report shall include the following: The total volumetric flow of vent gas in standard cubic feet for each day. Hydrogen sulfide content, methane content, and hydrocarbon content of vent gas composition pursuant to		X

District Rule 4311 Requirements	Adopted June 20, 2002	Amended June 18, 2009
Section 6.6. If vent gas composition is monitored by a continuous analyzer or analyzers pursuant to Section 5.11, average total hydrocarbon content by volume, average methane content by volume, and depending upon the analytical method used pursuant to Section 6.3.4, total reduced sulfur content by volume or hydrogen sulfide content by volume of vent gas flared for each hour of the month. If the flow monitor used pursuant to Section 5.10 measures molecular weight, the average molecular weight for each hour of each month. For any pilot and purge gas used, the type of gas used, the volumetric flow for each day and for each month, and the means used to determine flow. Flare monitoring system downtime periods, including dates and times. For each day and for each month provide calculated sulfur dioxide emissions. A flow verification report for each flare subject to this rule. The flow verification report shall include flow verification testing pursuant to Section 6.3.5.		
Test Methods The test methods listed below shall be used to demonstrate compliance with this rule. Alternate equivalent test methods may be used provided the test methods have been approved by the APCO and EPA. VOC, measured and calculated as carbon, shall be determined by EPA Method 25, except when the outlet concentration must be below 50 ppm in order to meet the standard, in which case Method 25a may be used, and analysis of halogenated exempt compounds shall be analyzed by EPA Method 18 or ARB Method 422 "Determination of Volatile organic Compounds in Emission from Stationary Sources". The VOC concentration in ppmv shall be converted to pounds per million Btu (lb/MMBtu) by using the following equation: VOC in lb/MMBtu = $\frac{(ppmv\ dry)\ x\ (F, dscf\ /\ MMBtu)}{(1.135\ x\ 10^6)\ x\ (20.9 - \%O_2)}$ Where: F = As determined by EPA Method 19 NOx emissions in pounds per million BTU shall be determined by using EPA Method 19. NOx and O_2 concentrations shall be determined by using EPA Method 3A, EPA Method 7E, or ARB 100.	X	X

District Rule 4311 Requirements	Adopted June 20, 2002	Amended June 18, 2009
Testing and Sampling Methods for Flare Monitoring Effective on and after July 1, 2011 operators subject to vent gas composition monitoring requirements pursuant to Section 6.6 shall use the following test methods as appropriate, or by an alternative method approved by the APCO, ARB and EPA: Total hydrocarbon content and methane content of vent gas shall be determined using ASTM Method D 1945-96, ASTM Method UOP 539-97, EPA Method 18, or EPA Method 25A or 25B, Hydrogen sulfide content of vent gas shall be determined using ASTM Method D 1945-96, ASTM Method UOP 539-97, ASTM Method D 4084-94, or ASTM Method D 4810-88. If vent gas composition is monitored with a continuous analyzer employing gas chromatography the minimum sampling frequency shall be one sample every 30 minutes. If vent gas composition is monitored using continuous analyzers not employing gas chromatography, the total reduced sulfur content of vent gas shall be determined by using EPA Method D4468-85.		X
Flow Verification Test Methods For purposes of the flow verification report required by Section 6.2.3.8, vent gas flow shall be determined using one or more of the following methods, or by any alternative method approved by the APCO, ARB, and EPA: EPA Methods 1 and 2; A verification method recommended by the manufacturer of the flow monitoring equipment installed pursuant to Section 5.10. Tracer gas dilution or velocity. Other flow monitors or process monitors that can provide comparison data on a vent stream that is being directed past the ultrasonic flow meter.		X
<u>Flare Minimization Plan</u> By July 1, 2010, the operator of a petroleum refinery flare or any flare that has a flaring capacity of greater than or equal to 5.0 MMBtu per hour shall submit a flare minimization plan (FMP) to the APCO for approval. The FMP shall include, but not be limited to:		X

District Rule 4311 Requirements	Adopted June 20, 2002	Amended June 18, 2009
A description and technical specifications for each flare and associated knock-out pots, surge drums, water seals and flare gas recovery systems. Detailed process flow diagrams of all upstream equipment and process units venting to each flare, identifying the type and location of all control equipment. A description of equipment, processes, or procedures the operator plans to install or implement to eliminate or minimize flaring and planned date of installation or implementation. An evaluation of prevention measures to reduce flaring that has occurred or may be expected to occur during planned major maintenance activities, including startup and shutdown. An evaluation of preventative measures to reduce flaring that may be expected to occur due to issues of gas quantity and quality. The evaluation shall include an audit of the vent gas recovery capacity of each flare system, the storage capacity available for excess vent gases, and the scrubbing capacity available for vent gases including any limitations associated with scrubbing vent gases for use as a fuel; and shall determine the feasibility of reducing flaring though the recovery, treatment and use of the gas or other means. An evaluation of preventative measures to reduce flaring caused by the recurrent failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. The evaluation shall determine the adequacy of existing maintenance schedules and protocols for such equipment. For purposes of this section, a failure is recurrent if it occurs more than twice during any five year period as a result of the same cause as identified in accordance with Section 6.2.2. Any other information requested by the APCO as necessary for determination of compliance with applicable provisions of this rule. Every five years after the initial FMP submittal, the operator shall submit an updated FMP for each flare to the APCO for approval. The current FMP shall remain in effect until the updated FMP is approved by the APCO. If the operator fails to submit an updated FMP as required by this section, the existing FMP shall no longer be considered an approved plan. An updated FMP shall be submitted by the operator pursuant to Section 6.5 addressing new or modified equipment, prior to installing the equipment. Updated		

District Rule 4311 Requirements	Adopted June 20, 2002	Amended June 18, 2009
FMP submittals are only required if: The equipment change would require an authority to construct (ATC) and would impact the emissions from the flare, and The ATC is deemed complete after June 18, 2009, and The modification is not solely the removal or decommissioning of equipment that is listed in the FMP, and has no associated increase in flare emissions. When submitting the initial FMP, or updated FMP, the operator shall designate as confidential any information claimed to be exempt from public disclosure under the California Public Records Act, Government Code Section 6250 et seq. If a document is submitted that contains information designated confidential, the operator shall provide a justification for this designation and shall submit a separate copy of the document with the information designated confidential redacted.		
Vent Gas Composition Monitoring Effective on and after July 1, 2011, the operator of a petroleum refinery flare or any flare that has a flaring capacity equal to or greater than 50 MMBtu per hour shall monitor vent gas composition using one of the five methods pursuant to Section 6.6.1 through Section 6.6.5 as appropriate. Sampling that meets the following requirements: If the flow rate of vent gas flared in any consecutive 15-minute period continuously exceeds 330 standard cubic feet per minute (SCFM), a sample shall be taken within 15 minutes. The sampling frequency thereafter shall be one sample every three hours and shall continue until the flow rate of vent gas flared in any consecutive 15-minute period is continuously 330 SCFM or less. In no case shall a sample be required more frequently than once every 3 hours. Samples shall be analyzed pursuant to Section 6.3.4. Integrated sampling that meets the following requirements: If the flow rate of vent gas flared in any consecutive 15 minute period continuously exceeds 330 SCFM, integrated sampling shall begin within 15 minutes and shall continue until the flow rate of vent gas flared in any consecutive 15 minute period is continuously 330 SCFM or less. Integrated sampling shall consist of a minimum of one aliquot for each 15-minute period until the sample		X

District Rule 4311 Requirements	Adopted June 20, 2002	Amended June 18, 2009
container is full. If sampling is still required pursuant to Section 6.6.2.1, a new sample container shall be placed in service within one hour after the previous sample was filled. A sample container shall not be used for a sampling period that exceeds 24 hours. Samples shall be analyzed pursuant to Section 6.3.4. Continuous analyzers that meet the following requirements: The analyzers shall continuously monitor for total hydrocarbon methane, and depending upon the analytical method used pursuant to Section 6.3.4, hydrogen sulfide or total reduced sulfur. The hydrocarbon analyzer shall have a full-scale range of 100% total hydrocarbon. Each analyzer shall be maintained to be accurate to within 20% when compared to any field accuracy tests or to within 5% of full scale. Continuous analyzers employing gas chromatography that meet the following requirements: The gas chromatography system shall monitor for total hydrocarbon, methane, and hydrogen sulfide. The gas chromatography system shall be maintained to be accurate within 5% of full scale. Monitor sulfur content using a colorimetric tube system on a daily basis, and monitor vent gas hydrocarbon on a weekly basis by collecting samples and having them tested pursuant to a method in Section 6.3.4. If flares share a common header, a sample from the header will be deemed representative of vent gas composition for all flares served by the header. The operator shall provide the APCO with access to the monitoring system to collect vent gas samples to verify the analysis required by Section 5.11. <u>Pilot and Purge Gas Monitoring</u> Effective on and after July 1, 2011, the operator of a petroleum refinery flare or any flare that has a flaring capacity equal to or greater than 50 MMBtu per hour shall monitor the volumetric flows of purge and pilot gases with flow measuring devices or other parameters as specified on the Permit to Operate so that volumetric flows of pilot and purge gas may be calculated based on pilot design and the parameters monitored. <u>Water Seal Monitoring</u> Effective on and after July 1, 2011, the operator of a		

District Rule 4311 Requirements	Adopted June 20, 2002	Amended June 18, 2009
petroleum refinery flare or any flare that has a flaring capacity equal to or greater than 50 MMBtu per hour with a water seal shall monitor and record the water level and pressure of the water seal that services each flare daily or as specified on the Permit to Operate. General Monitoring Effective on and after July 1, 2011, the operator of a petroleum refinery flare or any flare that has a flaring capacity equal to or greater than 50 MMBtu per hour shall comply with the following, as applicable: Periods of flare monitoring system inoperation greater than 24 continuous hours shall be reported by the following working day, followed by notification of resumption of monitoring. Periods of inoperation of monitoring equipment shall not exceed 14 days per any 18-consecutive-month period. Periods of flare monitoring system inoperation do not include the periods when the system feeding the flare is not operating. During periods of inoperation of continuous analyzers or auto-samplers installed pursuant to Section 6.6, operators responsible for monitoring shall take one sample within 30 minutes of the commencement of flaring, from the flare header or from an alternate location at which samples are representative of vent gas composition and have samples analyzed pursuant to Section 6.3.4. During periods of inoperation of flow monitors required by Section 5.10, flow shall be calculated using good engineering practices. Maintain and calibrate all required monitors and recording devices in accordance with the applicable manufacturer's specifications. In order to claim that a manufacturer's specification is not applicable, the person responsible for emissions must have, and follow, a written maintenance policy that was developed for the device in question. The written policy must explain and justify the difference between the written procedure and the manufacturer's procedure. All in-line continuous analyzer and flow monitoring data must be continuously recorded by an electronic data acquisition system capable of one-minute averages. Flow monitoring data shall be recorded as one-minute averages. Video Monitoring Effective on and after July 1, 2011, the operator of a petroleum refinery flare shall install and maintain equipment that records a real-time digital image of the flare and flame at a frame rate of no less than one frame per minute. The recorded image of the flare shall be of sufficient size, contrast,		

District Rule 4311 Requirements	Adopted June 20, 2002	Amended June 18, 2009
and resolution to be readily apparent in the overall image or frame. The image shall include an embedded date and time stamp. The equipment shall archive the images for each 24-hour period. In lieu of video monitoring the operator may use an alternative monitoring method that provides data to verify date, time, vent gas flow, and duration of flaring events.		

ATTACHMENT E

District Rule 4601 Stringency Analysis

Stringency Comparison of District Rule 4601 Non-SIP Version (12/17/09) to Current SIP Version (10/31/01)

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
2.0 Applicability	This rule is applicable to any person who supplies, sells, offers for sale, applies, or solicits the application of any architectural coating, or who manufactures any architectural coating for use within the District.	This rule is applicable to any person who supplies, sells, offers for sale, applies, or solicits the application of any architectural coating, or who manufactures, blends or repackages any architectural coating for use within the District.	**No change in the applicability, therefore, non-SIP version of rule is as stringent as SIP version.**
4.0 Exemptions	The provisions of this rule shall not apply to: 4.1 Any architectural coating that is sold or manufactured for use outside of the District or for shipment to other manufacturers for reformulation or repackaging. 4.2 Any architectural coating that is sold in a containers with a volume of one liter (1.057 quarts) or less. 4.3 Any aerosol coating product.	4.1 The provisions of this rule shall not apply to: 4.1.1 Any architectural coating that is supplied, sold, offered for sale, or manufactured for use outside of the District or for shipment to other manufacturers for reformulation or repackaging. 4.1.2 Any aerosol coating product. 4.2 With the exception of Section 6.2, the provisions of this rule shall not apply to any architectural coating that is sold in a container with a volume of one liter (1.057 quarts) or less.	**The only change is to require reporting requirements as discussed in Section 6.2 of the non-SIP approved version. Therefore, the non-SIP version of the rule is more stringent than the SIP version of the rule.**
5.0 Requirements	**Note: Section 5.0 requirements refer to Table of Standards, Table of Standards 1, and Table of Standards 2. These tables are included as Attachment X.**		
	5.1 VOC Content Limits: Except as provided in Sections 5.2, 5.3, 5.8 and 8.0, no person shall; 5.1.1 manufacture, blend, or repackage for sale within the District; 5.1.2 supply, sell, or offer for sale within the district; 5.1.3 solicit for application or apply within the District any architectural coating with a VOC content in excess of the corresponding limit specified in the Table of Standards, after the specified effective date in the Table of Standards.	5.1 VOC Content Limits: Except as provided in Sections 5.2 and 5.3, no person shall: manufacture, blend, or repackage for use within the District; or supply, sell, or offer for sale within the District; or solicit for application or apply within the District any architectural coating with a VOC content in excess of the corresponding limit specified in the Table of Standards 1 or the Table of Standards 2, after the specified effective date in the Table of Standards 1 or the Table of Standards 2. Limits are expressed as VOC Regulatory, thinned to the manufacturer's maximum thinning recommendation, excluding any colorant added to tint bases.	**Sections 5.8 and 8.0 of the SIP version are not included in the non-SIP version. As discussed in corresponding sections the non-SIP version is more stringent. The Table of Standards and Table of Standards 1 have the same VOC limits. Table of Standard 2 is more stringent as discussed below. Therefore, the non-SIP version of the rule is more stringent than the SIP version of the rule.**
	5.2 Most Restrictive VOC Limit: If anywhere on the container of any architectural coating, or any label or sticker affixed to the container, or in any sales, advertising, or technical literature supplied by a manufacturer or anyone acting on their behalf, any representation is made that indicates that the coating meets the definition of or is recommended for use for more than one of the coating categories listed in the Table of Standards, then the most restrictive VOC content limit shall apply. This provision does not apply to the following coating categories: 5.2.1 Lacquer coatings (including lacquer sanding sealers) 5.2.2 Metallic pigmented coatings 5.2.3 Shellacs 5.2.4 Fire-retardant coatings 5.2.5 Pretreatment wash primers 5.2.6 Industrial maintenance coatings 5.2.7 Low-solids coatings	5.2 Most Restrictive VOC Limit: If a coating meets the definition in Section 3.0 for one or more specialty coating categories listed in the Table of Standards 1 or the Table of Standards 2, then that coating is not required to meet the VOC limits for Flat, Nonflat, or Nonflat – High Gloss coatings, but is required to meet the VOC limit for the applicable specialty coating listed in the Table of Standards 1 or the Table of Standards 2. 5.2.1 Effective until December 31, 2010, with the exception of the specialty coating categories specified in Section 5.2.3.1 through 5.2.3.15, if a coating is recommended for use in more than one of the specialty coating categories listed in the Table of Standards 1, the most restrictive (or lowest) VOC content limit shall apply. 5.2.2 Effective on and after January 1, 2011, with the exception of the	**The VOC limit of the non-SIP version is at least as stringent as the SIP version. Therefore, the non-SIP version of the rule is more stringent than the SIP version of the rule.**

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	5.2.8 Wood preservatives 5.2.9 High temperature coatings 5.2.10 Temperature-indicator safety coatings 5.2.11 Antenna coatings 5.2.12 Antifouling coatings 5.2.13 Flow coatings 5.2.14 Bituminous roof primers 5.2.15 Specialty primers, sealers and undercoaters	specialty coating categories specified in Sections 5.2.3.2, 5.2.3.3, 5.2.3.5 through 5.2.3.9, and 5.2.3.14 through 5.2.3.18, if a coating is recommended for use in more than one of the specialty coating categories listed in the Table of Standards 2, the most restrictive (or lowest) VOC content limit shall apply. 5.2.3 This requirement applies to: usage recommendations that appear anywhere on the coating container, anywhere on any label or sticker affixed to the container, or in any sales, advertising, or technical literature supplied by a manufacturer or anyone acting on their behalf. 5.2.3.1 Lacquer coatings (including lacquer sanding sealers) 5.2.3.2 Metallic pigmented coatings 5.2.3.3 Shellacs 5.2.3.4 Fire-retardant coatings 5.2.3.5 Pretreatment wash primers 5.2.3.6 Industrial maintenance coatings 5.2.3.7 Low-solids coatings 5.2.3.8 Wood preservatives 5.2.3.9 High temperature coatings 5.2.3.10 Temperature-indicator safety coatings 5.2.3.11 Antenna coatings 5.2.3.12 Antifouling coatings 5.2.3.13 Flow coatings 5.2.3.14 Bituminous roof primers 5.2.3.15 Specialty primers, sealers and undercoaters 5.2.3.16 Aluminum roof coatings 5.2.3.17 Zinc-rich primers 5.2.3.18 Wood Coatings	
	5.3 Sell-Through of Coatings: 5.3.1 A coating manufactured prior to the January 1, 2003 or January 1, 2004 effective date specified for that coating in the Table of Standards may be sold, supplied, or offered for sale for up to three years after the specified effective date. In addition, a coating manufactured before the effective date specified for that coating in the Table of Standards may be applied at any time, both before and after the specified effective date, so long as the coating complied with the standards in effect at the time the coating was manufactured. This Section 5.3 does not apply to any coating that does not display the date or date-code required by Section 6.1.1. 5.3.2 A coating included in an approved Averaging Program that does not comply with the specified limit in the	5.3 Sell-Through of Coatings: A coating manufactured prior to the effective date specified for that coating in the Table of Standards 1 or the Table of Standards 2, and that complied with the standards in effect at the time the coating was manufactured, may be sold, supplied, or offered for sale for up to three years after the specified effective date. In addition, a coating manufactured before the effective date specified for that coating in the Table of Standards 1 or the Table of Standards 2 may be applied at any time, both before and after the specified effective date, so long as the coating complied with the standards in effect at the time the coating was manufactured. This Section 5.3 does not apply to any coating that does not display the date or date-code required by Section 6.1.1.	**The VOC limit of the non-SIP version is at least as stringent as the SIP version. Section 5.3.2 was removed it is no longer applicable in the SIP version. Therefore, the non-SIP version of the rule is more stringent than the SIP version of the rule.**

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	Table of Standards may be sold, supplied, or offered for sale for up to three years after the end of the compliance period specified in the approved Averaging Program. In addition, such a coating may be applied at any time, both during and after the compliance period. This Section 5.3.2 does not apply to any coating that does not display on the container either the statement: "This product is subject to architectural coatings averaging provisions in California" or a substitute symbol specified by the Executive Officer of the California Air Resources Board (ARB). This Section 5.3.2 shall remain in effect until January 1, 2008.		
	5.4 Painting Practices: All architectural coating containers used to apply the contents therein to a surface directly from the container by pouring, siphoning, brushing, rolling, padding, ragging or other means, shall be closed when not in use. These architectural coating containers include, but are not limited to, drums, buckets, cans, pails, trays or other application containers. Containers of any VOC containing materials used for thinning and cleanup shall also be closed when not in use.	5.4 Painting Practices: All architectural coating containers used to apply the contents therein to a surface directly from the container by pouring, siphoning, brushing, rolling, padding, ragging or other means, shall be closed when not in use. These architectural coating containers include, but are not limited to, drums, buckets, cans, pails, trays or other application containers. Containers of any VOC-containing materials used for thinning and cleanup shall also be closed when not in use.	**No change in the requirements, therefore, non-SIP version of rule is as stringent as SIP version.**
	5.5 Thinning: No person who applies or solicits the application of any architectural coating shall apply a coating that is thinned to exceed the applicable VOC limit specified in the Table of Standards.	5.5 Thinning: No person who applies or solicits the application of any architectural coating shall apply a coating that is thinned to exceed the applicable VOC limit specified in the Table of Standards 1 or the Table of Standards 2.	**The VOC limit of the non-SIP version is at least as stringent as the SIP version. Therefore, the non-SIP version of the rule is more stringent than the SIP version of the rule.**
	5.6 Rust Preventative Coatings: Effective January 1, 2004, no person shall apply or solicit the application of any rust preventative coating for industrial use, unless such a rust preventative coating complies with the industrial maintenance coating VOC limit specified in the Table of Standards.	5.6 Rust Preventative Coatings: Effective through December 31, 2010, no person shall apply or solicit the application of any rust preventative coating for industrial use, unless such a rust preventative coating complies with the industrial maintenance coating VOC limit specified in the Table of Standards 1.	**The VOC limit of the non-SIP version is at least as stringent as the SIP version. Therefore, the non-SIP version of the rule is more stringent than the SIP version of the rule.**
	5.7 Coatings Not Listed in the Table of Standards: For any coating that does not meet any of the definitions for the specialty coatings categories listed in the Table of Standards, the VOC content limit shall be determined by classifying the coating as a flat coating or a nonflat coating, based on its gloss, as defined in Sections 3.21, 3.36 and 3.37 and the corresponding flat or nonflat VOC limit shall apply.	5.7 Coatings Not Listed in the Table of Standards 1 or the Table of Standards 2: For any coating that does not meet any of the definitions for the specialty coatings categories listed in the Table of Standards 1 or the Table of Standards 2, the VOC content limit shall be determined by classifying the coating as a Flat, Nonflat, or Nonflat – High Gloss coating, based on its gloss, and the corresponding Flat, Nonflat, or Nonflat – High Gloss VOC limit in the Table of Standards 1 or the Table of Standards 2 shall apply.	**The VOC limit of the non-SIP version is at least as stringent as the SIP version. Therefore, the non-SIP version of the rule is more stringent than the SIP version of the rule.**
	5.8 Lacquers: Notwithstanding the provisions of Section 3.1, a person or facility may add up to 10 percent by volume of VOC to a lacquer to avoid blushing of the finish during days with relative humidity greater	---	**This section has been removed. The operation is required to meet the lacquer VOC limit regardless of**

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	than 70 percent and temperature below 65°F, at the time of application, provided that the coating contains acetone and no more than 550 grams of VOC per liter of coating, less water and exempt compounds, prior to the addition of VOC.		**temperature and humidity. Therefore, non-SIP version of rule is as stringent as SIP version**
	5.9 Averaging Compliance Option: On or after January 1, 2003, in lieu of compliance with the specified limits in The Table of Standards for floor coatings; industrial maintenance coatings; primers, sealers, and undercoaters; quick-dry primers, sealers, and undercoaters; quick-dry enamels; roof coatings; bituminous roof coatings; rust preventative coatings; stains; waterproofing sealers, as well as flats and non-flats (excluding recycled coatings), manufacturers may average designated coatings such that their actual cumulative emissions from the averaged coatings are less than or equal to the cumulative emissions that would have been allowed under those limits over a compliance period not to exceed one year. Such manufacturers must also comply with the averaging provisions contained in Section 8.0, as well as maintain and make available for inspection records for at least three years after the end of the compliance period. This Section 5.9 and Section 8.0 shall cease to be effective on January 1, 2005, after which averaging will no longer be allowed.	---	**This section is removed from the non-SIP version, it is no longer applicable. Therefore, non-SIP version of rule is as stringent as SIP version.**
	---	5.8 Prior to January 1, 2011, any coating that meets a definition in Section 3.0 for a coating category listed in the Table of Standards 2 and complies with the applicable VOC limit in the Table of Standards 2 and with Sections 5.2 and 6.1 (including those provision of Section 6.1 otherwise effective on January 1, 2011) shall be considered in compliance with this rule.	**Table of Standards 2 is more stringent than the VOC limits of Table of Standards in the SIP-Approved version. Therefore, non-SIP version of rule is as stringent as SIP version.**
	Table of Standards (See Attachment X for Table)	Table of Standards 1 (Effective through 12/31/10) (See Attachment X for Table)	**The non-SIP rule requirements are the same as the Table of Standards in the SIP approved rule, except Table of Standards 1 expires at which time Table of Standards 2 is in effect. As discussed below these standards are more stringent. Therefore, non-SIP version of rule is as stringent as SIP version.**
		Table of Standards 2 (Effective on and after 1/1/11) (See Attachment X for Table)	**The requirements of Table of Standards 2 are more stringent than the Table of Standards in the SIP rule. Therefore, non-SIP version of rule is as stringent as SIP version.**
6.0 Administrative Requirements	6.1 Labeling Requirements: Each manufacturer of any architectural coating subject to this rule shall display the information listed in Sections	6.1 Labeling Requirements: Each manufacturer of any architectural coating subject to this rule shall display the	**The non-SIP approved rule contain sections listed in the SIP rule plus**

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	6.1.1 through 6.1.9 on the coating container (or label) in which the coating is sold or distributed. 6.1.1 Date Code: The date the coating was manufactured, or a date code representing the date, shall be indicated on the label, lid or bottom of the container. If the manufacturer uses a date code for any coating, the manufacturer shall file an explanation of each code with the Executive Officer of the ARB. 6.1.2 Thinning Recommendations: A statement of the manufacturer's recommendation regarding thinning of the coating shall be indicated on the label or lid of the container. This requirement does not apply to the thinning of architectural coatings with water. If thinning of the coating prior to use is not necessary, the recommendation must specify that the coating is to be applied without thinning. 6.1.3 VOC Content: Each container of any coating subject to this rule shall display either the maximum or actual VOC content of the coating, as supplied, including the maximum thinning as recommended by the manufacturer. VOC content shall be displayed in grams of VOC per liter of coating. VOC content displayed shall be calculated using product formulation data, or shall be determined using the test methods in Section 6.3.1. The equations in Sections 3.25 or 3.26, as appropriate, shall be used to calculate VOC content. 6.1.4 Industrial Maintenance Coatings: In addition to the information specified in Sections 6.1.1, 6.1.2 and 6.1.3, each manufacturer of any industrial maintenance coating subject to this rule shall display on the label or lid of the container in which the coating is sold or distributed one or more of the following descriptions listed in Section 6.1.4.1 through 6.1.4.3. 6.1.4.1 "For industrial use only" 6.1.4.2 "For professional use only" 6.1.4.3 "Not for residential use" or "Not intended for residential use" 6.1.5 Clear Brushing Lacquers: Effective January 1, 2003, the labels of all clear brushing lacquers shall prominently display the statements "For brush application only," and "This product must not be thinned or sprayed." 6.1.6 Rust Preventative Coatings: Effective January 1, 2003, the labels of all rust preventative coatings shall prominently display the statement "For Metal Substrates Only" 6.1.7 Specialty Primers, Sealers and Undercoaters: Effective January 1, 2003, the labels of all specialty primers, sealers and undercoaters shall prominently	information listed in Sections 6.1.1 through 6.1.14 on the coating container (or label) in which the coating is sold or distributed. 6.1.1 Date Code: The date the coating was manufactured, or a date code representing the date, shall be indicated on the label, lid or bottom of the container. If the manufacturer uses a date code for any coating, the manufacturer shall file an explanation of each code with the Executive Officer of the ARB. 6.1.2 Thinning Recommendations: A statement of the manufacturer's recommendation regarding thinning of the coating shall be indicated on the label or lid of the container. This requirement does not apply to the thinning of architectural coatings with water. If thinning of the coating prior to use is not necessary, the recommendation must specify that the coating is to be applied without thinning. 6.1.3 VOC Content: Each container of any coating subject to this rule shall display one of the following values, in grams of VOC per liter of coating: 6.1.3.1 Maximum VOC Content, as determined from all potential product formulations; or 6.1.3.2 VOC Content, as determined from actual formulation data; or 6.1.3.3 VOC Content, as determined using the test methods in Section 6.3.2. If the manufacturer does not recommend thinning, the container must display the VOC Content, as supplied. If the manufacturer recommends thinning, the container must display the VOC Content, including the maximum amount of thinning solvent recommended by the manufacturer. If the coating is a multicomponent product, the container must display the VOC content as mixed or catalyzed. If the coating contains silanes, siloxanes, or other ingredients that generate ethanol or other VOCs during the curing process, the VOC content must include the VOCs emitted during curing. 6.1.4 Faux Finishing Coatings: Effective January 1, 2011, the labels of all clear topcoat Faux Finishing coatings shall prominently display the statement "This product can only be sold or used as part of a Faux Finishing coating system". 6.1.5 Industrial Maintenance Coatings: Each manufacturer of any industrial maintenance coating subject to this rule shall display on the label or lid of	**additional requirements not found in the SIP version. Therefore, non-SIP version of rule is as stringent as SIP version.**

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	display one or more of the descriptions listed in Section 6.1.7.1 through 6.1.7.5. 6.1.7.1 For blocking stains. 6.1.7.2 For fire-damaged substrates. 6.1.7.3 For smoke-damaged substrates. 6.1.7.4 For water-damaged substrates. 6.1.7.5 For excessively chalky substrates. 6.1.8 Quick Dry Enamels: Effective January 1, 2003, the labels of all quick dry enamels shall prominently display the words "Quick Dry" and the dry hard time. 6.1.9 Non-flat – High Gloss Coatings: Effective January 1, 2003, the labels of all non-flat – high gloss coatings shall prominently display the words "High Gloss".	the container in which the coating is sold or distributed one or more of the following descriptions listed in Section 6.1.5.1 through 6.1.5.3. 6.1.5.1 "For industrial use only" 6.1.5.2 "For professional use only" 6.1.5.3 "Not for residential use" or "Not intended for residential use" 6.1.6 Clear Brushing Lacquers: The labels of all clear brushing lacquers shall prominently display the statements "For brush application only," and "This product must not be thinned or sprayed." (Category deleted effective January 1, 2011.) 6.1.7 Rust Preventative Coatings: The labels of all rust preventative coatings shall prominently display the statement "For Metal Substrates Only". 6.1.8 Specialty Primers, Sealers and Undercoaters: Effective until December 31, 2010, the labels of all specialty primers, sealers and undercoaters shall prominently display one or more of the descriptions listed in Section 6.1.8.1 through 6.1.8.5. Effective on and after January 1, 2011, the labels of all specialty primers, sealers, and undercoaters shall prominently display one or more of the descriptions listed in Sections 6.1.8.1 through 6.1.8.3. On and after January 1, 2011, Sections 6.1.8.4 and 6.1.8.5 will be no longer effective. 6.1.8.1 For fire-damaged substrates. 6.1.8.2 For smoke-damaged substrates. 6.1.8.3 For water-damaged substrates. 6.1.8.4 For excessively chalky substrates. 6.1.8.5 For blocking stains. 6.1.9 Quick Dry Enamels: The labels of all quick dry enamels shall prominently display the words "Quick Dry" and the dry hard time. (Category deleted effective January 1, 2011.) 6.1.10 Reactive Penetrating Sealers: Effective January 1, 2011, the labels of all Reactive Penetrating Sealers shall prominently display the statement "Reactive Penetrating Sealer." 6.1.11 Stone Consolidants: Effective January 1, 2011, the labels of all Stone Consolidants shall prominently display the statement "Stone Consolidant - For Professional Use Only." 6.1.12 Nonflat– High Gloss Coatings: The labels of all Nonflat – high gloss coatings shall prominently display the words "High Gloss."	

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		6.1.13 Wood Coatings: Effective January 1, 2011, the labels of all Wood Coatings shall prominently display the statement "For Wood Substrates Only." 6.1.14 Zinc Rich Primers: Effective January 1, 2011, the labels of all Zinc Rich Primers shall prominently display one or more of the following descriptions listed in Section 6.1.14.1 through 6.1.14.3. 6.1.14.1 "For industrial use only" 6.1.14.2 "For professional use only" 6.1.14.3 "Not for residential use" or "Not intended for residential use"	
	6.2 Reporting Requirements 6.2.1 Clear Brushing Lacquers: Each manufacturer of clear brushing lacquers shall, on or before April 1 of each calendar year beginning in the year 2004, submit an annual report to the Executive Officer of the ARB. The report shall specify the number of gallons of clear brushing lacquers sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales. 6.2.2 Rust Preventative Coatings: Each manufacturer of rust preventative coatings shall, on or before April 1 of each calendar year beginning in the year 2004, submit an annual report to the Executive Officer of the ARB. The report shall specify the number of gallons of rust preventative coatings sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales. 6.2.3 Specialty Primers, Sealers and Undercoaters: Each manufacturer of specialty primers, sealers and undercoaters shall, on or before April 1 of each calendar year beginning in the year 2004, submit an annual report to the Executive Officer of the ARB. The report shall specify the number of gallons of specialty primers, sealers and undercoaters sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales. 6.2.4 Toxic Exempt Compounds: For each architectural coating that contains perchloroethylene or methylene chloride, the manufacturer shall, on or before April 1 of each calendar year beginning in the year 2004, submit an annual report to the Executive Officer of the ARB the following information for products sold in the State during the preceding year: 6.2.4.1 the product brand name and a copy of the product label with legible usage instructions;	6.2 Reporting Requirements The reporting requirements specified in Sections 6.2.1 through 6.2.6 shall apply until December 31, 2010. 6.2.1 Clear Brushing Lacquers: Each manufacturer of clear brushing lacquers shall, on or before April 1 of each calendar year beginning in the year 2004, submit an annual report to the Executive Officer of the ARB. The report shall specify the number of gallons of clear brushing lacquers sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales. 6.2.2 Rust Preventative Coatings: Each manufacturer of rust preventative coatings shall, on or before April 1 of each calendar year beginning in the year 2004, submit an annual report to the Executive Officer of the ARB. The report shall specify the number of gallons of rust preventative coatings sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales. 6.2.3 Specialty Primers, Sealers and Undercoaters: Each manufacturer of specialty primers, sealers and undercoaters shall, on or before April 1 of each calendar year beginning in the year 2004, submit an annual report to the Executive Officer of the ARB. The report shall specify the number of gallons of specialty primers, sealers and undercoaters sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales. 6.2.4 Toxic Exempt Compounds: For each architectural coating that contains perchloroethylene or methylene chloride, the manufacturer shall, on or before April 1 of each calendar year beginning in the year 2004, submit an	**Until December 31, 2010 both versions of the rule have the same reporting requirements. After that date the non-SIP approved rule includes very specific information to be kept and is required for all architectural coatings. Therefore, non-SIP version of rule is as stringent as SIP version.**

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	6.2.4.2 the product category listed in the Table of Standards to which the coating belongs; 6.2.4.3 the total sales in California during the calendar year to the nearest gallon; 6.2.4.4 the volume percent, to the nearest 0.10 percent, of perchloroethylene and methylene chloride in the coating. 6.2.5 Recycled Coatings: Manufacturers of recycled coatings must submit a letter to the Executive Officer of the ARB certifying their status as a Recycled Paint Manufacturer. The manufacturer shall, on or before April 1 of each calendar year beginning with the year 2004, submit an annual report to the Executive Officer of the ARB. The report shall include, for all recycled coatings, the total number of gallons distributed in the State during the preceding year, and shall describe the method used by the manufacturer to calculate State distribution. 6.2.6 Bituminous Coatings: Each manufacturer of bituminous roof coatings or bituminous roof primers shall, on or before April 1 of each calendar year beginning with the year 2004, submit an annual report to the Executive Officer of ARB. The report shall specify the number of gallons of bituminous roof coatings or bituminous roof primers sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales.	annual report to the Executive Officer of the ARB the following information for products sold in the State during the preceding year: 6.2.4.1 the product brand name and a copy of the product label with legible usage instructions; 6.2.4.2 the product category listed in the Table of Standards 1 or the Table of Standards 2 to which the coating belongs; 6.2.4.3 the total sales in California during the calendar year to the nearest gallon; 6.2.4.4 the volume percent, to the nearest 0.10 percent, of perchloroethylene and methylene chloride in the coating. 6.2.5 Recycled Coatings: Manufacturers of recycled coatings must submit a letter to the Executive Officer of the ARB certifying their status as a Recycled Paint Manufacturer. The manufacturer shall, on or before April 1 of each calendar year beginning with the year 2004, submit an annual report to the Executive Officer of the ARB. The report shall include, for all recycled coatings, the total number of gallons distributed in the State during the preceding year, and shall describe the method used by the manufacturer to calculate State distribution. 6.2.6 Bituminous Coatings: Each manufacturer of bituminous roof coatings or bituminous roof primers shall, on or before April 1 of each calendar year beginning with the year 2004, submit an annual report to the Executive Officer of ARB. The report shall specify the number of gallons of bituminous roof coatings or bituminous roof primers sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate state sales. 6.2.7 Effective on and after January 1, 2011, Sales Data: All sales data listed in Sections 6.2.7.1 to 6.2.7.14 shall be maintained on-site by the responsible official for a minimum of three years. A responsible official from each manufacturer shall upon request of the Executive Officer of the ARB, or his or her delegate, provide data concerning the distribution and sales of architectural coatings. Sales data submitted by the responsible official to the Executive Officer of the ARB may be claimed as confidential, and such information shall be handled in accordance with the procedures specified in Title 17,	

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
		California Code of Regulations Sections 91000-91022. The responsible official shall within 180 days provide information, including, but not limited to the data listed in Sections 6.2.7.1 through 6.2.7.14: 6.2.7.1 the name and mailing address of the manufacturer; 6.2.7.2 the name, address and telephone number of a contact person; 6.2.7.3 the name of the coating product as it appears on the label and the applicable coating category; 6.2.7.4 whether the product is marketed for interior or exterior use or both; 6.2.7.5 the number of gallons sold in California in containers greater than one liter (1.057 quart) and equal to or less than one liter (1.057 quart); 6.2.7.6 the VOC Actual content and VOC Regulatory content in grams per liter. If thinning is recommended, list the VOC Actual content and VOC Regulatory content after maximum recommended thinning. If containers less than one liter have a different VOC content than containers greater than one liter, list separately. If the coating is a multi-component product, provide the VOC content as mixed or catalyzed; 6.2.7.7 the names and CAS numbers of the VOC constituents in the product; 6.2.7.8 the names and CAS numbers of any compounds in the product specifically exempted from the VOC definition; 6.2.7.9 whether the product is marketed as solvent-borne, waterborne, or 100% solids; 6.2.7.10 description of resin or binder in the product; 6.2.7.11 whether the coating is a single-component or multi-component product; 6.2.7.12 the density of the product in pounds per gallon; 6.2.7.13 the percent by weight of: solids, all volatile materials, water, and any compounds in the product specifically exempted from the VOC definition; and 6.2.7.14 the percent by volume of: solids, water, and any compounds in the product specifically exempted from the VOC definition.	

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	6.3 Test Methods 6.3.1 VOC Content of Coatings: To determine the physical properties of a coating in order to perform the calculations in Section 3.26 and 3.27, the reference method for VOC content is U.S. EPA Method 24, except as provided in Sections 6.3.2 and 6.3.15. An alternative method to determine the VOC content of coatings is SCAQMD Method 304-91 (Revised February 1996), incorporated by reference in Section 6.3.14. The exempt compounds content shall be determined by SCAQMD Method 303-91 (Revised August 1996), incorporated by reference in Section 6.3.12. To determine the VOC content of a coating, the manufacturer may use U.S. EPA Method 24, or an alternative method as provided in Section 6.3.2, formulation data, or any other reasonable means for predicting that the coating has been formulated as intended (e.g., quality assurance checks, recordkeeping). However, if there are any inconsistencies between the results of a Method 24 test and any other means for determining VOC content, the Method 24 test results will govern, except when an alternative method is approved as specified in Section 6.3.2. The District Air Pollution Control Officer (APCO) may require the manufacturer to conduct a Method 24 analysis. 6.3.2 Alternative Test Methods: Other test methods demonstrated to provide results that are acceptable for purposes of determining compliance with Section 6.3.1, after review and approved in writing by the staffs of the District, the ARB and the U.S. EPA, may also be used. 6.3.3 Methacrylate Traffic Marking Coatings: Analysis of methacrylate multicomponent coatings used as traffic marking coatings shall be conducted according to a modification of U.S. EPA Method 24 (40 CFR 59, subpart D, Appendix A), incorporated by reference in Section 6.3.15. This method has not been approved for methacrylate multicomponent coatings used for other purposes than as traffic marking coatings or for other classes of multicomponent coatings. 6.3.4 Flame Spread Index: The flame spread index of a fire-retardant coating shall be determined by ASTM Designation E 84-99, "Standard Test Method for Surface Burning Characteristics of Building Materials"(see Section 3, Fire-Retardant Coating). 6.3.5 Fire Resistance Rating: The fire	6.3 Test Methods The test methods listed below shall be used to demonstrate compliance with this rule. Alternate equivalent test methods may be used provided the test methods have been approved by the APCO and EPA. 6.3.1 Calculation of VOC Content: For the purpose of determining compliance with the VOC content limits in the Table of Standards 1 or the Table of Standards 2, the VOC content of a coating shall be determined as defined in Section 3.77, 3.78, or 3.79 as appropriate. The VOC content of a tint base shall be determined without colorant that is added after the tint base is manufactured. If the manufacturer does not recommend thinning, the VOC Content must be calculated for the product as supplied. If the manufacturer recommends thinning, the VOC Content must be calculated including the maximum amount of thinning solvent recommended by the manufacturer. If the coating is a multi-component product, the VOC content must be calculated as mixed or catalyzed. If the coating contains silanes, siloxanes, or other ingredients that generate ethanol or other VOC during the curing process, the VOC content must include the VOCs emitted during curing. 6.3.2 VOC Content of Coatings: To determine the physical properties of a coating in order to perform the calculations in Section 3.77 and 3.79, the reference method for VOC content is EPA Method 24, except as provided in Sections 6.3.3 and 6.3.16. An alternative method to determine the VOC content of coatings is SCAQMD Method 304-91 (Revised February 1996). The exempt compounds content shall be determined by SCAQMD Method 303-91 (Revised 1993), BAAQMD Method 43 (Revised 1996), or BAAQMD Method 41 (Revised 1995), as applicable. To determine the VOC content of a coating, the manufacturer may use EPA Method 24, or an alternative method as provided in Section 6.3.3, formulation data, or any other reasonable means for predicting that the coating has been formulated as intended (e.g., quality assurance checks, recordkeeping). However, if there are any inconsistencies between the results of EPA Method 24 test and any other means for determining VOC content, the EPA Method 24	**The non-SIP version includes all the requirements of the SIP version. Therefore, the non-SIP version of the rule is more stringent than the SIP version of the rule.**

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	resistance rating of a fire-resistive coating shall be determined by ASTM Designation E 119-98, "Standard Test Methods for Fire Tests of Building Construction Materials"(see Section 3, Fire-Resistive Coating). 6.3.6 Gloss Determination: The gloss of a coating shall be determined by ASTM Designation D 523-89 (1999), "Standard Test Method for Specular Gloss"(see Section 3, Flat Coating, Nonflat Coating, Nonflat-High Gloss Coating and Quick-Dry Enamel). 6.3.7 Metal Content of Coatings: The metallic content of a coating shall be determined by SCAQMD Method 318-95, Determination of Weight Percent Elemental Metal in Coatings by X-Ray Diffraction, *SCAQMD Laboratory Methods of Analysis for Enforcement Samples* (see Section 3, Metallic Pigmented Coating). 6.3.8 Acid Content of Coatings: The acid content of a coating shall be determined by ASTM Designation D 1613-96, "Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer and related products"(see Section 3, Pre-Treatment Wash Primer). 6.3.9 Drying Times: The set-to-touch, dry-hard, dry-to-touch and dry-to-recoat times of a coating shall be determined by ASTM Designation D 1640-95, "Standard Test Methods for Drying, Curing, or Film Formation of Organic Coatings at Room Temperature" (see Section 3, Quick-Dry Enamel and Quick-Dry Primer, Sealer and Undercoater) The tack-free time of a quickdry enamel coating shall be determined by the Mechanical Test Method of ASTM Designation D 1640-95. 6.3.10 Surface Chalkiness: The chalkiness of a surface shall be determined using ASTM Designation D4214-98, "Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films"(see Section 3, Specialty Primer, Sealer and Undercoater). 6.3.11 Exempt Compounds—Siloxanes: Exempt compounds that are cyclic, branched, or linear completely methylated siloxanes, shall be analyzed as exempt compounds for compliance with Section 6 by BAAQMD Method 43, "Determination of Volatile Methylsiloxanes in Solvent-Based Coatings, Inks, and Related Materials," *BAAQMD Manual of Procedures*, Volume III, adopted 11/6/96 (see Section 3, Volatile Organic Compound, and Section 6.3.1). 6.3.12 Exempt Compounds—	test results will govern, except when an alternative method is approved as specified in Section 6.3.3. The District Air Pollution Control Officer (APCO) may require the manufacturer to conduct an EPA Method 24 analysis. 6.3.3 Alternative Test Methods: Other test methods demonstrated to provide results that are acceptable for purposes of determining compliance with Section 6.3.2 ~~1~~, after review and approved in writing by the staffs of the District, ARB and EPA, may also be used. 6.3.4 Methacrylate Traffic Marking Coatings: Analysis of methacrylate multicomponent coatings used as traffic marking coatings shall be conducted according to a modification of EPA Method 24 (40 CFR 59, subpart D, Appendix A). This method has not been approved for methacrylate multicomponent coatings used for other purposes than as traffic marking coatings or for other classes of multicomponent coatings. 6.3.5 Flame Spread Index: The flame spread index of a fire-retardant coating shall be determined by ASTM E84-07, "Standard Test Method for Surface Burning Characteristics of Building Materials" (see Section 3.0, Fire-Retardant Coating). 6.3.6 Fire Resistance Rating: The fire resistance rating of a fire-resistive coating shall be determined by ASTM E119-07, "Standard Test Methods for Fire Tests of Building Construction Materials" (see Section 3.0, Fire-Resistive Coating). 6.3.7 Gloss Determination: The gloss of a coating shall be determined by ASTM D523-89 (1999), "Standard Test Method for Specular Gloss" (see Section 3.0, Flat Coating, Nonflat Coating, Nonflat-High Gloss Coating and Quick-Dry Enamel). 6.3.8 Metal Content of Coatings: The metallic content of a coating shall be determined by SCAQMD Method 318-95, Determination of Weight Percent Elemental Metal in Coatings by X-Ray Diffraction, *SCAQMD Laboratory Methods of Analysis for Enforcement Samples* (see Section 3.0, Metallic Pigmented Coating, Aluminum Roof Coating and Faux Finish. 6.3.9 Acid Content of Coatings: The acid content of a coating shall be determined by ASTM D1613-06, "Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer and related products" (see Section 3.0, Pre-Treatment Wash Primer).	

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	Parachlorobenzotrifluoride (PCBTF): The exempt compound parachlorobenzotrifluoride, shall be analyzed as an exempt compound for compliance with Section 6 by BAAQMD Method 41, "Determination of Volatile Organic Compounds in Solvent Based Coatings and Related Materials Containing Parachlorobenzotriflouride," *BAAQMD Manual of Procedures*, Volume III, adopted 12/20/95 (see Section 3, Volatile Organic Compound, and Section 6.3.1). 6.3.13 Exempt Compounds: The content of compounds under U.S. EPA Method 24 shall be analyzed by SCAQMD Method 303-91 (Revised 1996), "Determination of Exempt Compounds," *SCAQMD Laboratory Methods of Analysis for Enforcement Samples* (see Section 3, Volatile Organic Compound, and Section 6.3.1). 6.3.14 VOC Content of Coatings: The VOC content of a coating shall be determined by U.S. EPA Method 24 as it exists in appendix A of 40 *Code of Federal Regulations* (CFR) part 60, "Determination of Volatile Matter Content, Water Content, Density, Volume Solids and Weight Solids of Surface Coatings"(see Section 6.3.1). 6.3.15 Alternative VOC Content of Coatings: The VOC content of coatings may be analyzed either by U.S. EPA Method 24 or SCAQMD Method 304-91 (Revised 1996), "Determination of Volatile Organic Compounds (VOC) in Various Materials," *SCAQMD Laboratory Methods of Analysis for Enforcement Samples* (see Section 6.3.1). 6.3.16 Methacrylate Traffic Marking Coatings: The VOC content of methacrylate multicomponent coatings used as traffic marking coatings shall be analyzed by the procedures in 40 CFR part 59, subpart D, appendix A, "Determination of Volatile Matter Content of Methacrylate Multicomponent Coatings Used as Traffic Marking Coatings" (September 11, 1998) (see Section 6.3.3).	6.3.10 Drying Times: The set-to-touch, dry-hard, dry-to-touch and dry-to-recoat times of a coating shall be determined by ASTM D1640-95, "Standard Test Methods for Drying, Curing, or Film Formation of Organic Coatings at Room Temperature" (see Section 3.0, Quick-Dry Enamel and Quick-Dry Primer, Sealer and Undercoater) The tack-free time of a quick-dry enamel coating shall be determined by the Mechanical Test Method of ASTM D1640-95. (Category deleted effective January 1, 2011.) 6.3.11 Surface Chalkiness: The chalkiness of a surface shall be determined using ASTM D4214-98, "Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films"(see Section 3, Specialty Primer, Sealer and Undercoater). (Category deleted effective January 1, 2011.) 6.3.12 Exempt Compounds—Siloxanes: Exempt compounds that are cyclic, branched, or linear completely methylated siloxanes, shall be analyzed as exempt compounds for compliance with Section 6 by BAAQMD Method 43, "Determination of Volatile Methylsiloxanes in Solvent-Based Coatings, Inks, and Related Materials," *BAAQMD Manual of Procedures*, Volume III, adopted 11/6/96 (see Section 3.0, Volatile Organic Compound, and Section 6.3.2). 6.3.13 Exempt Compounds—Parachlorobenzotrifluoride (PCBTF): The exempt compound parachlorobenzotrifluoride, shall be analyzed as an exempt compound for compliance with Section 6 by BAAQMD Method 41, "Determination of Volatile Organic Compounds in Solvent Based Coatings and Related Materials Containing Parachlorobenzotriflouride," *BAAQMD Manual of Procedures*, Volume III, adopted 12/20/95 (see Section 3.0, Volatile Organic Compound, and Section 6.3.2). 6.3.14 Exempt Compounds: The content of compounds under U.S. EPA Method 24 shall be analyzed by SCAQMD Method 303-91 (Revised 1993), "Determination of Exempt Compounds," *SCAQMD Laboratory Methods of Analysis for Enforcement Samples* (see Section 3.0, Volatile Organic Compound, and Section 6.3.2). 6.3.15 VOC Content of Coatings: The VOC content of a coating shall be determined by EPA Method 24 as it exists in appendix A of 40 *Code of*	

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		Federal Regulations (CFR) part 60, "Determination of Volatile Matter Content, Water Content, Density, Volume Solids and Weight Solids of Surface Coatings" (see Section 6.3.2). 6.3.16 Alternative VOC Content of Coatings: The VOC content of coatings may be analyzed either by U.S. EPA Method 24 or SCAQMD Method 304-91 (Revised 1996), "Determination of Volatile Organic Compounds (VOC) in Various Materials," *SCAQMD Laboratory Methods of Analysis for Enforcement Samples.* 6.3.17 Methacrylate Traffic Marking Coatings: The VOC content of methacrylate multicomponent coatings used as traffic marking coatings shall be analyzed by the procedures in 40 CFR part 59, subpart D, appendix A, "Determination of Volatile Matter Content of Methacrylate Multicomponent Coatings Used as Traffic Marking Coatings" (September 11, 1998). 6.3.18 Hydrostatic Pressure for Basement Specialty Coatings: The hydrostatic pressure resistance for basement specialty coatings shall be analyzed using ASTM D7088-04, "Standard Practice for Resistance to Hydrostatic Pressure for Coatings Used in Below Grade Applications Applied to Masonry". 6.3.19 Tub and Tile Refinish Coating Adhesion: The adhesion of tub and tile coating shall be determined by ASTM D4585-99, "Standard Practice for Testing Water Resistance of Coatings Using Controlled Condensation" and ASTM D3359-02, "Standard Test Methods for Measuring Adhesion by Tape Test". 6.3.20 Tub and Tile Refinish Coating Hardness: The hardness of tub and tile refinish coating shall be determined by ASTM D3363-05, "Standard Test Method for Film Hardness by Pencil Test". 6.3.21 Tub and Tile Refinish Coating Abrasion Resistance: Abrasion resistance of tub and tile refinish coating shall be analyzed by ASTM D4060-07, "Standard Test Methods for Abrasion Resistance of Organic Coatings by the Taber Abraser". 6.3.22 Tub and Tile Refinish Coating Water Resistance: Water resistance of tub and tile refinish coatings shall be determined by ASTM D4585-99, "Standard Practice for Testing Water Resistance of Coatings Using Controlled Condensation" and ASTM D714-02e1, "Standard Test Method	

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
		for Evaluating Degree of Blistering of Paints". 6.3.23 Waterproofing Membrane: Waterproofing membrane shall be tested by ASTM C836-06, "Standard Specification for High Solids Content, Cold Liquid-Applied Elastomeric Waterproofing Membrane for Use with Separate Wearing Course". 6.3.24 Mold and Mildew Growth for Basement Specialty Coatings: Mold and mildew growth resistance for basement specialty coatings shall be determined by ASTM D3273-00, "Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber" and ASTM D3274-95, "Standard Test Method for Evaluating Degree of Surface Disfigurement of Paint Films by Microbial (Fungal or Algal) Growth or Soil and Dirt Accumulation". 6.3.25 Reactive Penetrating Sealer Water Repellency: Reactive penetrating sealer water repellency shall be analyzed by ASTM C67-07, "Standard Test Methods for Sampling and Testing Brick and Structural Clay Tile"; or ASTM C97-02, "Standard Test Methods for Absorption and Bulk Specific Gravity of Dimension Stone"; or ASTM C140-06, "Standard Test Methods for Sampling and Testing Concrete Masonry Units and Related Units". 6.3.26 Reactive Penetrating Sealer Water Vapor Transmission: Reactive penetrating sealer water vapor transmission shall be analyzed ASTM E96/E96M-05, "Standard Test Method for Water Vapor Transmission of Materials". 6.3.27 Reactive Penetrating Sealer - Chloride Screening Applications: Reactive penetrating sealers shall be analyzed by National Cooperative Highway Research Report 244 (1981), "Concrete Sealers for the Protection of Bridge Structures". 6.3.28 Stone Consolidants: Stone consolidants shall be tested using ASTM E2167-01, "Standard Guide for Selection and Use of Stone Consolidants".	
7.0 Compliance Schedule	Persons subject to this rule shall be in compliance with this rule by October 31, 2001.	Persons subject to this rule shall be in compliance with this rule by the dates specified within the rule.	**No change in the requirements, therefore, non-SIP version of rule is as stringent as SIP version.**
8.0 Averaging Compliance Option	8.1 On or after January 1, 2003, in lieu of compliance with the specified limits in the Table of Standards for floor coatings; industrial maintenance coatings; primers, sealers, and undercoaters; quick-dry primers, sealers, and undercoaters; quick-dry enamels; roof coatings; rust		**No change in the requirements, therefore, non-SIP version of rule is as stringent as SIP version.**

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	preventative coatings; stains; waterproofing sealers, as well as flats and non-flats (excluding recycled coatings), manufacturers may average designated coatings such that their actual cumulative emissions from the averaged coatings are less than or equal to the cumulative emissions that would have been allowed under those limits over a compliance period not to exceed one year. Such manufacturers must also comply with the averaging provisions contained in this Section, as well as maintain and make available for inspection records for at least three years after the end of the compliance period. This Section shall cease to be effective on January 1, 2005, after which averaging will no longer be allowed. Per Section 8.1, averaging is no longer applicable. Therefore, Section 8.2 through 8.14 are not listed.		

District Rule 4601 was amended (12/17/2009). As analyzed, each amended section of the non-SIP version of the rule is at least as stringent as, or more stringent than the corresponding section of the SIP version of the rule. Therefore, it is concluded that overall the non-SIP version of the rule is more stringent than the SIP version of the rule.

ATTACHMENT F

District Rule 4702 Stringency Analysis

Comparison of the Non-SIP amended version (amended August 18, 2011) of District Rule 4702 (Internal Combustion Engines) with the SIP approved version (amended January 18, 2007) of District Rule 4702 (Internal Combustion Engines – Phase 2)			
Section	**SIP Version of Rule 4702 (Amended January 18, 2007)**	**Non-SIP Version of Rule 4702 (Amended August 18, 2011)**	**Conclusion**
1.0 Purpose	1.0 The purpose of this rule is to limit the emissions of nitrogen oxides (NOx), carbon monoxide (CO), and volatile organic compounds (VOC) from internal combustion engines.	1.0 The purpose of this rule is to limit the emissions of nitrogen oxides (NOx), carbon monoxide (CO), volatile organic compounds (VOC), and sulfur oxides (SOx) from internal combustion engines.	**There is no change in the requirements of this section. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**
2.0 Applicability	2.0 This rule applies to any internal combustion engine with a rated brake horsepower greater than 50 horsepower.	2.0 This rule applies to any internal combustion engine rated at 25 brake horsepower or greater.	**There is no change in the requirements of this section. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**
4.0 Exemptions	4.1 The requirements of this rule shall not apply to the following engines: 4.1.1 An engine used to propel implements of husbandry, as that term is defined in Section 36000 of the California Vehicle Code, as that section existed on January 1, 2003. 4.1.2 An engine used exclusively to power a wind machine. 4.1.3 A de-rated spark-ignited engine not used in agricultural operations, provided the de-rating occurred before June 1, 2004. 4.1.4 A de-rated spark-ignited engine used in agricultural operations or a de-rated compression-ignited engine, provided the de-rating occurred before June 1, 2005. 4.1.5 An engine used exclusively to power Mobile Agricultural Equipment. 4.2 Except for the requirements of Section 5.7 and Section 6.2.3, the requirements of this rule shall not apply to: 4.2.1 An emergency standby engine as defined in Section 3.0 of this rule, and provided that it is operated with a nonresettable elapsed operating time meter. In lieu of a nonresettable time meter, the owner of an emergency engine may use an alternative device, method, or technique, in determining operating time provided that the alternative is approved by the APCO. The owner of the engine shall properly maintain and operate the time meter or alternative device in accordance with the manufacturer's instructions. 4.2.2 An internal combustion engine that is	4.1 The requirements of this rule shall not apply to the following engines: 4.1.1 An engine used to propel implements of husbandry, as that term is defined in Section 36000 of the California Vehicle Code, as that section existed on January 1, 2003. 4.1.2 An engine used exclusively to power a wind machine. 4.1.3 A de-rated spark-ignited engine not used in agricultural operations, provided the de-rating occurred before June 1, 2004. 4.1.4 A de-rated spark-ignited engine used in agricultural operations or a de-rated compression-ignited engine, provided the de-rating occurred before June 1, 2005. 4.1.5 An engine used exclusively to power Mobile Agricultural Equipment. 4.1.6 An internal combustion engine registered as a portable emissions unit under the Statewide Portable Equipment Registration Program pursuant to California Code of Regulations Title 13, Division 3, Chapter 9, Article 5, Sections 2450-2465. 4.1.7 An internal combustion engine registered as a portable emissions unit under Rule 2280 (Portable Equipment Registration). 4.2 Except for the requirements of Sections 5.9 and 6.2.3, the requirements of this rule shall not apply to an emergency standby engine or a low-use engine, provided that the engine is operated with an operating nonresettable elapsed time meter. 4.2.1 In lieu of operating a nonresettable	**The non-SIP version of this rule includes several operations that are not required to meet the requirements of this rule. These operations were added to clarify what operations are subject to this rule. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**

	operated no more than 200 hours per calendar year as determined by an operational nonresettable elapsed operating time meter and provided the engine is not used to perform any of the functions specified in Section 4.2.2.1 through Section 4.2.2.3 below. In lieu of a nonresettable time meter, the owner of an engine may use an alternative device, method, or technique, in determining operating time provided that the alternative is approved by the APCO. The owner of the engine shall properly maintain and operate the time meter or alternative device in accordance with the manufacturer's instructions. 4.2.2.1 To generate electrical power that is either fed into the electrical utility power grid or used to reduce electrical power purchased by a stationary source, 4.2.2.2 To generate mechanical power that is used to reduce electrical power purchased by a stationary source, or 4.2.2.3 In a distributed generation application. 4.3 Except for the administrative requirements of Section 6.2.3, the requirements of this rule shall not apply to: 4.3.1 An internal combustion engine that meets the following conditions: 4.3.1.1 The engine is operated exclusively to preserve or protect property, human life, or public health during a disaster or state of emergency, such as a fire or flood, and 4.3.1.2 Except for operations associated with Section 4.3.1.1, the engine is limited to operate no more than 100 hours per calendar year as determined by an operational nonresettable elapsed operating time meter, for periodic maintenance, periodic readiness testing, and readiness testing during and after repair work of the engine, and 4.3.1.3 The engine is operated with a nonresettable elapsed operating time meter. In lieu of installing a nonresettable time meter, the owner of an engine may use an alternative device, method, or technique, in determining operating time provided that the alternative is approved by the APCO. The owner of the engine shall properly maintain and operate the time meter or alternative device in accordance with the manufacturer's instructions. 4.3.2 An internal combustion engine registered as a portable emissions unit	elapsed time meter, the operator may use an alternative device, method, or technique, in determining operating time, provided that the alternative is approved by the APCO and EPA and is allowed by the Permit-to-Operate or Permit-Exempt Equipment Registration. The operator must demonstrate that the alternative device, method, or technique is equivalent to using a nonresettable elapsed time meter. 4.2.2 The operator shall properly maintain and operate the nonresettable elapsed time meter or alternative device in accordance with the manufacturer's instructions. 4.3 Except for the administrative requirements of Section 6.2.3, the requirements of this rule shall not apply to the following: 4.3.1 An internal combustion engine that meets the following conditions: 4.3.1.1 The engine is operated exclusively to preserve or protect property, human life, or public health during a disaster or state of emergency, such as a fire or flood; and 4.3.1.2 Except for operations associated with Section 4.3.1.1, the engine is limited to operate no more than 100 hours per calendar year as determined by an operational nonresettable elapsed time meter, for periodic maintenance, periodic readiness testing, and readiness testing during and after repair work of the engine; and 4.3.1.3 The engine is operated with an operational nonresettable elapsed time meter. In lieu of installing a nonresettable elapsed time meter, the operator of an engine may use an alternative device, method, or technique, in determining operating time provided that the alternative is approved by the APCO and EPA. The operator of the engine shall properly maintain and operate the nonresettable elapsed time meter or alternative device in accordance with the manufacturer's instructions. 4.3.2 Military Tactical Equipment and engines used to retract military aircraft arresting gear cables. 4.4 For existing facilities, a replacement unit installed for the sole purpose of complying with the requirements of this rule shall be considered to be an emission control technique and shall be exempt from the Best Available Control Technology (BACT) and offsets requirements of District Rule 2201 (New and Modified Stationary Source Review Rule) provided that all other requirements of Rule 2201 are met.	

	under Rule 2280 (Portable Equipment Registration) or the Statewide Portable Equipment Registration Program pursuant to Sections 2450-2465, Article 5, Title 13, California Code of Regulations. 4.3.3 Military Tactical Equipment and engines used to retract military aircraft arresting gear cables. 4.4. A replacement engine installed for the sole purpose of complying with the requirements of this rule shall be exempt from the Best Available Control Technology (BACT) and Offsets requirements of District Rule 2201 (New and Modified Stationary Source Review Rule) provided that all of the following conditions are met: 4.4.1 The replacement engine is of equal or lesser horsepower rating of the engine being replaced, 4.4.2 The replacement engine is subject to the same operational parameters (e.g. hours of operation, fuel use limitations, etc.) as the engine being replaced, 4.4.3 The replacement engine performs the same function as the engine being replaced, and 4.4.4 The emissions of the replacement engine are no greater than the emissions of the engine being replaced.	4.5 Except for the requirements of Section 5.1, the requirements of this rule shall not apply to stationary engines rated at least 25 Brake Horsepower, up to, and including 50 Brake Horsepower.	
5.0 Requirements	**Note:** Secton 5.0 requirements refer to Tables 1 through 4, which list the emission limits/standards for various categories of IC engines subject to this rule. These Tables are included at the end of this Stringency Comparison for each version of the rule.		
	N/A	5.1 Stationary Engines Rated at Least 25 Brake Horsepower, Up To, and Including 50 Brake Horsepower and Used in Non-Agricultural Operations (Non-AO) 5.1.1 On and after July 1, 2012, no person shall sell or offer for sale any non-AO spark-ignited engine or any non-AO compression-ignited engine unless the engine meets the applicable requirements and emission limits specified in 40 Code of Federal Regulation (CFR) 60 Subpart IIII (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines) and 40 CFR 60 Subpart JJJJ (Standards of Performance for Stationary Spark Ignition Internal Combustion Engines) for the year in which the ownership of the engine changes. 5.1.2 By January 1, 2013, the operator shall submit a one-time report that includes the number of engines at the stationary source, and the following information for each engine: 5.1.2.1 Location of each engine, 5.1.2.2 Engine manufacturer,	**The SIP version does not apply to engines rated between 25 and 50 bhp. Therefore, the Non-SIP Version of the rule is more stringent.**

		5.1.2.3 Model designation and engine serial number, 5.1.2.4 Rated brake horsepower, 5.1.2.5 Type of fuel and type of ignition, 5.1.2.6 Combustion type: rich-burn, lean-burn, or compression ignition, 5.1.2.7 Purpose, and intended use, of the engine, 5.1.2.8 Typical daily operating schedule, and 5.1.2.9 Fuel consumption (cubic feet for gas or gallons for liquid fuel) for the previous one-year period.	
	5.1 Engine Emission Limits/Standards 5.1.1 Spark-Ignited Internal Combustion Engine Emission Limits/Standards - The owner of a spark-ignited internal combustion engine shall not operate it in such a manner that results in emissions exceeding the limits in Table 1 below for the appropriate engine type according to the compliance schedules listed in Section 7.0 or according to the compliance dates specified in Table 1 below. A spark-ignited engine shall comply with the applicable emission limits pursuant to Section 5.1 or Section 8.0.	5.2 Stationary Engines Rated at Greater than 50 Brake Horsepower (>50 bhp) 5.2.1 Spark Ignited Engines Used in non-AO - Table 1 Emission Limits/Standards The operator of a spark-ignited internal combustion engine rated at >50 bhp that is used exclusively in non-AO shall not operate it in such a manner that results in emissions exceeding the limits in Table 1 for the appropriate engine type until such time that the engine has demonstrated compliance with Table 2 emission limits pursuant to the compliance deadlines in Section 7.5. In lieu of complying with Table 1 emission limits, the operator of a spark-ignited engine shall comply with the applicable emission limits pursuant to Section 8.0. 5.2.2 Spark-Ignited Engines Used in non-AO – Table 2 Emission Limits/Standards On and after the compliance schedule specified in Section 7.5, the operator of a spark-ignited engine > 50 bhp that is used in non-AO shall comply with all the applicable requirements of the rule and one of the following, on an engine-by-engine basis: 5.2.2.1 On and after the compliance schedule specified in Section 7.5, the operator of a spark-ignited engine that is used exclusively in non-AO shall comply with Sections 5.2.2.1.1 through 5.2.2.1.3 on an engine-by-engine basis: 5.2.2.1.1 NOx, CO, and VOC emission limits pursuant to Table 2; 5.2.2.1.2 SOx control requirements of Section 5.7, pursuant to the deadlines specified in Section 7.5; and 5.2.2.1.3 Monitoring requirements of Section 5.10, pursuant to the deadlines specified in Section 7.5. 5.2.2.2 In lieu of complying with the NOx emission limit requirement of Section 5.2.2.1.1, an operator may pay an annual fee to the District, as specified in Section 5.6, pursuant to Section 7.6.	**The requirements of Table 1 of both versions of the rule are identical. Table 2 from the non-SIP version found at the end of this document has emissions requirements that are more stringent than the requirements of Table 1 in both versions of the Rule. The standards of the non-SIP version are at least as stringent as the SIP version. Therefore, the non-SIP version of the rule is more stringent than the SIP version of the rule.**

		5.2.2.2.1 Engines in the fee payment program shall have actual emissions not greater than the applicable limits in Table 1 during the entire time the engine is part of the fee payment program. 5.2.2.2.2 Compliance with Section 5.7 and 5.10, pursuant to the deadlines specified in Section 7.5, is also required as part of the fee payment option. 5.2.2.3 In lieu of complying with the NOx, CO, and VOC limits of Table 2 on an engine-by-engine basis, an operator may elect to implement an alternative emission control plan pursuant to Section 8.0. An operator electing this option shall not be eligible to participate in the fee payment option outlined in Section 5.2.2.2 and Section 5.6. 5.2.3 Spark-Ignited Engines Used Exclusively in Agricultural Operations (AO) 5.2.3.1 The operator of a spark-ignited internal combustion engine rated at >50 bhp that is used exclusively in AO shall not operate it in such a manner that results in emissions exceeding the limits in Table 3 for the appropriate engine type on an engine-by-engine basis. 5.2.3.2 In lieu of complying with the NOx, CO, and VOC limits of Table 3 on an engine-by-engine basis, an operator may elect to implement an alternative emission control plan pursuant to Section 8.0. 5.2.3.3 An operator of an AO spark-ignited engine that is subject to the applicable requirements of Table 3 shall not replace such engine with an engine that emits more emissions of NOx, VOC, and CO, on a ppmv basis, (corrected to 15% oxygen on a dry basis) than the engine being replaced.	

	5.1.2 Compression-Ignited Internal Combustion Engine Emission Limits/Standards and Compliance Schedules – The owner of a compression-ignited internal combustion engine shall repower, replace or control the engine to comply with the applicable limits/standards and compliance dates in Table 2 below. The annual hours of operation shall be determined on a calendar year basis. A compression-ignited engine shall comply with the applicable emission limits/standards pursuant to Section 5.1.2 or Section 8.0. 5.1.3 On and after June 1, 2006, the owner of an AO rich-burn spark-ignited engine, AO lean-burn spark-ignited engine, or AO compression-ignited engine that is subject to the requirements of Section 5.1 shall not replace such engine with a rich-burn spark-ignited, lean-burn spark-ignited, or compression-ignited engine, respectively, that emits more emissions of NOx, VOC, and CO, on a ppmv basis, (corrected to 15% oxygen on a dry basis) than the engine being replaced. 5.1.4 The owner of a non-certified compression-ignited engine, in place on June 1, 2006, shall comply with the Emission Limit/Standard and Compliance Date in Table 2 based on the non-certified compression-ignited engine that was in place on June 1, 2006, unless the owner meets one of the following conditions: 5.1.4.1Replaces the non-certified compression-ignited engine with a non-modified Tier 3 or a non-modified Tier 4 engine after June 1, 2006, 5.1.4.2 Controls the non-certified compression-ignited engine after June 1, 2006, to emit emissions less than, or equal to, 80 ppm NOx, 2,000 ppm CO, and 750 ppm VOC, (corrected to 15% oxygen on a dry basis), or 5.1.4.3 Replaces the non-certified compression-ignited engine after June 1, 2006, with an engine or other source with emissions less than, or equal to, 80 ppm NOx, 2,000 ppm CO, and 750 ppm VOC (corrected to 15% oxygen on a dry basis).	5.2.4 Certified Compression-Ignited Engines (AO and non-AO) The operator of a certified compression-ignited engine rated >50 bhp shall comply with the following requirements: 5.2.4.1 Repower, replace, or control the engine's emissions to comply with the applicable limits/standards in Table 4 on an engine-by-engine basis by the compliance dates as specified in Table 4. 5.2.4.2 The annual hours of operation shall be determined on a calendar year basis. 5.2.4.3 In lieu of complying with the NOx, CO, and VOC limits of Table 4 on an engine-by-engine basis, an operator may elect to implement an alternative emission control plan pursuant to Section 8.0. 5.2.4.4 An operator of an AO compression-ignited engine that is subject to the applicable requirements of Table 4 shall not replace such engine with an engine that emits more emissions of NOx, VOC, and CO, on a ppmv basis, (corrected to 15% oxygen on a dry basis) than the engine being replaced. 5.2.5 Non-Certified Compression-Ignited Engines (AO and Non-AO) The operator of a non-certified compression-ignited engine, in place on or before June 1, 2006, shall comply with the Emission Limit/Standard and Compliance Date in Table 4 based on the non-certified compression ignited engine that was in place on June 1, 2006, unless the operator meets one of the following conditions: 5.2.5.1 Replace the non-certified compression-ignited engine with a nonmodified Tier 3 or a non-modified Tier 4 engine after June 1, 2006; 5.2.5.2 Control the non-certified compression-ignited engine after June 1, 2006, to emit emissions less than, or equal to, 80 ppmv NOx, 2,000 ppmv CO, and 750 ppmv VOC (corrected to 15% oxygen on a dry basis); or 5.2.5.3 Replace the non-certified compression-ignited engine after June 1, 2006, with an engine or other source with emissions less than, or equal to, 80 ppmv NOx, 2,000 ppmv CO, and 750 ppmv VOC (corrected to 15% oxygen on a dry basis).	**There is no change in the requirements of this section. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**

	5.2 All continuous emission monitoring systems (CEMS) emissions measurements shall be averaged over a period of 15 consecutive minutes. Any 15-consecutive-minute block average CEMS measurement exceeding the applicable emission limits of this rule shall constitute a violation of this rule. 5.3 Percent emission reductions, if used to comply with the NOx emission limits of Section 5.1, shall be calculated as follows: 5.3.1 For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. 5.3.2 For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. In this situation, the engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure that the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. 5.4 The owner of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits of Section 5.1 shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO.	5.3 All continuous emission monitoring systems (CEMS) emissions measurements shall be averaged over a period of 15 consecutive minutes. Any 15-consecutiveminute block average CEMS measurement exceeding the applicable emission limits of this rule shall constitute a violation of this rule. 5.4 Percent emission reductions, if used to comply with the NOx emission limits of Section 5.2, shall be calculated as follows: 5.4.1 For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. 5.4.2 For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. In this situation, the engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure that the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. 5.5 The operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits of Section 5.2 shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO.	**There is no change in the requirements of this section. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**
	N/A	5.6 Payment of an Annual Fee In Lieu of Complying with a NOx Emission Limit The operator of a non-AO spark-ignited engine who elects to comply under Section 5.2.2.2 shall comply with the requirements of Sections 5.6 by the schedule specified in Section 7.6 and all other applicable provisions of this rule. 5.6.1 An operator shall pay a total annual fee to the District based on the total NO_x emissions from those engines that will be subject to Section 5.2.2.2. The annual fee shall be calculated in the following manner: 5.6.1.1 The operator shall calculate the total emissions for all engines operating at a stationary source that will comply with Section 5.2.2.2. The total NOx emissions	**The annual fee option applies to units subject to Table 2.**

		shall be calculated in accordance with Section 5.6.1.3. 5.6.1.2 The total annual fee shall be calculated in accordance with Section 5.6.1.4. These calculations include only the units that have been identified to comply with Section 5.2.2.2. 5.6.1.3 Total Emissions (TE) Calculation E (engine) = A x B x C x D x 2.147 x 10-16 Where: E (engine) = Annual NOx emissions for each unit, in tons/year. A = NOx emission limit for the Permit-to-Operate, in ppmvd corrected to 15% oxygen. B = Annual fuel use (ft3/year) C = Fuel higher heating value (Btu/ft3) – for natural gas use 1,000 Btu/ft3 D = Fuel F-Factor at 60oF (Dscf/MMBtu) – for natural gas use 8,579 Dscf/MMBtu TE = ΣE(engine) Where: ΣE(engine) = Sum of all NOx emissions from all units in the annual fee program, in tons per year. 5.6.1.4 Total Annual Fee Calculation Total Annual Fee = (TE x FR) + Administrative Fee Where: TE = Total Emissions, in tons per year, as calculated in Section 5.6.1.3. FR (Fee Rate) = the cost of NOx reductions, in dollars per ton, as established by District Rule 9510. Under no circumstances shall the cost per ton of NO_X reductions exceed the cost effectiveness threshold for the Carl Moyer Cost Effectiveness, as established by the applicable state law. Administrative Fee = 4% x (TE x FR)	

	5.5 California Reformulated Gasoline shall be used as the fuel for all gasoline-fired, spark-ignited internal combustion engines.	5.7 Sulfur Oxides (SOx) Emission Control Requirements On and after the compliance schedule specified in Section 7.5, operators of non-AO spark-ignited engines and non-AO compression-ignited engines shall comply with one of the following requirements: 5.7.1 Operate the engine exclusively on PUC-quality natural gas, commercial propane, butane, or liquefied petroleum gas, or a combination of such gases; or 5.7.2 Limit gaseous fuel sulfur content to no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet; or 5.7.3 Use California Reformulated Gasoline for gasoline-fired spark-ignited engines; or 5.7.4 Use California Reformulated Diesel for compression-ignited engines; or 5.7.5 Operate the engine on liquid fuel that contains no more than 15 ppm sulfur, as determined by the test method specified in Section 6.4.6; or 5.7.6 Install and properly operate an emission control system that reduces SO2 emissions by at least 95% by weight as determined by the test method specified in Section 6.4.6.	**The non-SIP version of this rule contains SOx emissions control requirements not found in the SIP approved version. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**
	5.6 Monitoring Requirements A The owner of a non-AO spark-ignited engine subject to the requirements of Section 5.1 or any engine subject to the requirements of Section 8.0 shall comply with the following requirements: 5.6.1 For each engine with a rated brake horsepower of 1,000 hp or greater and which is allowed by Permit-to-Operate or Permit-Exempt Equipment Registration condition to operate more than 2,000 hours per calendar year, or with an external emission control device, either install, operate, and maintain continuous monitoring equipment for NOx, CO, and oxygen, as identified in Rule 1080 (Stack Monitoring), or install, operate, and maintain APCO-approved alternate monitoring. The monitoring system may be a continuous emissions monitoring system (CEMS), a parametric emissions monitoring system (PEMS), or an alternative monitoring system approved by the APCO. APCO-approved alternate monitoring shall consist of one or more of the following: 5.6.1.1 Periodic NOx and CO emission concentrations, 5.6.1.2 Engine exhaust oxygen concentration, 5.6.1.3 Air-to-fuel ratio, 5.6.1.4 Flow rate of reducing agents added to engine exhaust, 5.6.1.5 Catalyst inlet and exhaust temperature,	5.8 Monitoring Requirements: Non-AO Spark-Ignited Engines and Engines in an AECP (Section 8.0) The operator of a non-AO spark-ignited engine subject to the requirements of Section 5.2 or any engine subject to the requirements of Section 8.0 shall comply with the following requirements: 5.8.1 For each engine with a rated brake horsepower of 1,000 bhp or greater and which is allowed by Permit-to-Operate or Permit-Exempt Equipment Registration condition to operate more than 2,000 hours per calendar year, or with an external emission control device, either install, operate, and maintain continuous monitoring equipment for NOx, CO, and oxygen, as identified in Rule 1080 (Stack Monitoring), or install, operate, and maintain APCO approved alternate monitoring. The monitoring system may be a continuous emissions monitoring system (CEMS), a parametric emissions monitoring system (PEMS), or an alternative monitoring system approved by the APCO. APCO-approved alternate monitoring shall consist of one or more of the following: 5.8.1.1 Periodic NOx and CO emission concentrations, 5.8.1.2 Engine exhaust oxygen concentration, 5.8.1.3 Air-to-fuel ratio, 5.8.1.4 Flow rate of reducing agents added to engine exhaust,	**There is no change in the requirements of this section. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**

	5.6.1.6 Catalyst inlet and exhaust oxygen concentration, 5.6.1.7 Other operational characteristics. 5.6.2 For each engine not subject to Section 5.6.1, monitor operational characteristics recommended by the engine manufacturer or emission control system supplier, and approved by the APCO. 5.6.3 For each engine with an alternative monitoring system, submit to, and receive approval from the APCO, adequate verification of the alternative monitoring system's acceptability. This would include data demonstrating the system's accuracy under typical operating conditions for the specific application and any other information or data deemed necessary in assessing the acceptability of the alternative monitoring system. 5.6.4 For each engine with an APCO approved CEMS, operate the CEMS in compliance with the requirements of 40 Code of Federal Regulations (CFR) Part 51, 40 CFR Parts 60.7 and 60.13 (except subsection h), 40 CFR Appendix B (Performance Specifications), 40 CFR Appendix F (Quality Assurance Procedures), and applicable provisions of Rule 1080 (Stack Monitoring). 5.6.5 For each engine, have the data gathering and retrieval capabilities of an installed monitoring system described in Section 5.6 approved by the APCO. 5.6.6 For each engine, install and operate a nonresettable elapsed operating time meter. In lieu of installing a nonresettable time meter, the owner of an engine may use an alternative device, method, or technique, in determining operating time provided that the alternative is approved by the APCO and is allowed by Permit-to-Operate or Permit-Exempt Equipment Registration condition. The owner of the engine shall properly maintain and operate the time meter or alternative device in accordance with the manufacturer's instructions. 5.6.7 For each engine, implement the Inspection and Monitoring (I&M) plan, if any, submitted to and approved by the APCO pursuant to Section 6.5. 5.6.8 For each engine, collect data through the I&M plan in a form approved by the APCO. 5.6.9 For each engine use a portable NOx analyzer to take NOx emission readings to verify compliance with the emission requirements of Section 5.1 or Section 8.0 during each calendar quarter in which a source test is not performed and the engine is operated. All emission readings shall be taken with the engine operating either at conditions representative of normal operations or conditions specified in the Permit-to-Operate or Permit-Exempt	5.8.1.5 Catalyst inlet and exhaust temperature, 5.8.1.6 Catalyst inlet and exhaust oxygen concentration, or 5.8.1.7 Other operational characteristics. 5.8.2 For each engine not subject to Section 5.8.1, monitor operational characteristics recommended by the engine manufacturer or emission control system supplier, and approved by the APCO. 5.8.3 For each engine with an alternative monitoring system, submit to, and receive approval from the APCO, adequate verification of the alternative monitoring system's acceptability. This would include data demonstrating the system's accuracy under typical operating conditions for the specific application and any other information or data deemed necessary in assessing the acceptability of the alternative monitoring system. 5.8.4 For each engine with an APCO approved CEMS, operate the CEMS in compliance with the requirements of 40 Code of Federal Regulations (CFR) Part 51, 40 CFR Parts 60.7 and 60.13 (except subsection h), 40 CFR Appendix B (Performance Specifications), 40 CFR Appendix F (Quality Assurance Procedures), and applicable provisions of Rule 1080 (Stack Monitoring). 5.8.5 For each engine, have the data gathering and retrieval capabilities of an installed monitoring system described in Section 5.8 approved by the APCO. 5.8.6 For each engine, install and operate a nonresettable elapsed time meter. 5.8.6.1 In lieu of installing a nonresettable elapsed time meter, the operator may use an alternative device, method, or technique, in determining operating time provided that the alternative is approved by the APCO and EPA and is allowed by a Permit-to- Operate or Permit-Exempt Equipment Registration condition. 5.8.6.2 The operator shall properly maintain and operate the nonresettable elapsed time meter or alternative device in accordance with the manufacturer's instructions. 5.8.7 For each engine, implement the Inspection and Monitoring (I&M) plan, if any, submitted to and approved by the APCO pursuant to Section 6.5. 5.8.8 For each engine, collect data through the I&M plan in a form approved by the APCO. 5.8.9 For each engine, use a portable NOx analyzer to take NOx emission readings to verify compliance with the emission requirements of Section 5.2 or Section 8.0 during each calendar quarter in which a	

	Equipment Registration. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. All NOx emissions readings shall be reported to the APCO in a manner approved by the APCO. NOx emission readings taken pursuant to this section 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. 5.6.10 The APCO shall not approve an alternative monitoring system unless it is documented that continued operation within ranges of specified emissions-related performance indicators or operational characteristics provides a reasonable assurance of compliance with applicable emission limits. The operator shall source test over the proposed range of surrogate operating parameters to demonstrate compliance with the applicable emission standards. 5.6.11 For each engine subject to Section 8.0, install and operate a nonresettable fuel meter. In lieu of installing a nonresettable fuel meter, the owner may use an alternative device, method, or technique in determining daily fuel consumption provided that the alternative is approved by the APCO. The owner shall properly maintain, operate, and calibrate the required fuel meter in accordance with the manufacturer's instructions.	source test is not performed and the engine is operated. 5.8.9.1 If an engine is operated less than 120 calendar days per calendar year, take one NOx emission reading during the calendar year in which a source test is not performed and the engine is operated. 5.8.9.2 All emission readings shall be taken with the engine operating either at conditions representative of normal operations or conditions specified in the Permit-to-Operate or Permit-Exempt Equipment Registration. 5.8.9.3 The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. 5.8.9.4 All NOx emissions readings shall be reported to the APCO in a manner approved by the APCO. 5.8.9.5 NOx emission readings taken pursuant to this section 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 consecutiveminute period. 5.8.10 The APCO shall not approve an alternative monitoring system unless it is documented that continued operation within ranges of specified emissions related performance indicators or operational characteristics provides a reasonable assurance of compliance with applicable emission limits. The operator shall source test over the proposed range of surrogate operating parameters to demonstrate compliance with the applicable emission standards. 5.8.11 For each engine subject to Section 8.0, install and operate a nonresettable fuel meter. 5.8.11.1 In lieu of installing a nonresettable fuel meter, the operator may use an alternative device, method, or technique in determining daily fuel consumption provided that the alternative is approved by the APCO and EPA. 5.8.11.2 The operator shall properly maintain, operate, and calibrate the required fuel meter in accordance with the manufacturer's instructions.	
	5.7 Monitoring Requirements B 5.7.1 The owner of any of the following engines shall comply with the requirements specified	5.9 Monitoring Requirements: All Other Engines 5.9.1 The operator of any of the following engines shall comply with the requirements	**There is no change in the requirements of this section. Therefore, the non-SIP version of the**

	in Section 5.7.2 through Section 5.7.5 below: 5.7.1.1 An AO spark-ignited engine subject to the requirements of Section 5.1, 5.7.1.2 A compression-ignited engine subject to the requirements of Section 5.1, or 5.7.1.3 An engine subject to Section 4.2. 5.7.2 Properly operate and maintain each engine as recommended by the engine manufacturer or emission control system supplier. 5.7.3 Monitor the operational characteristics of each engine as recommended by the engine manufacturer or emission control system supplier. 5.7.4 Install and operate a nonresettable elapsed operating time meter. In lieu of installing a nonresettable time meter, the owner of an engine may use an alternative device, method, or technique, in determining operating time provided that the alternative is approved by the APCO and is allowed by Permit-to-Operate or Permit-Exempt Equipment Registration condition. The owner of the engine shall properly maintain and operate the time meter or alternative device in accordance with the manufacturer's instructions. 5.7.5 The owner of an AO spark-ignited engine that has been retro-fitted with a NOx exhaust control that has not been certified in accordance with Section 9.0 Exhaust Control System Certification Requirements, or a compression-ignited engine that has been retro-fitted with a NOx exhaust control shall comply with the following: 5.7.5.1 Use a portable NOx analyzer to take NOx emission readings to demonstrate compliance with the emission requirements of Section 5.1. 5.7.5.2 The owner of a compression-ignited engine that is subject to the limits/standards of Section 5.1.2 Table 2 Category 1.d shall use a portable NOx analyzer to take NOx emission readings at least once every six months that the engine is operated. 5.7.5.3 The owner of any other engine that has been retro-fitted with a NOx exhaust control shall use a portable NOx analyzer to take NOx emission readings at least once every 24 months that the engine is operated. 5.7.5.4 All emission readings shall be taken with the engine operating either at conditions representative of normal operations or conditions specified in the Permit-to-Operate or Permit-Exempt Equipment Registration.	specified in Section 5.9.2 through Section 5.9.5 below: 5.9.1.1 An AO spark-ignited engine subject to the requirements of Section 5.2; 5.9.1.2 A compression-ignited engine subject to the requirements of Section 5.2; or 5.9.1.3 An engine subject to Section 4.2. 5.9.2 Properly operate and maintain each engine as recommended by the engine manufacturer or emission control system supplier. 5.9.3 Monitor the operational characteristics of each engine as recommended by the engine manufacturer or emission control system supplier. 5.9.4 Install and operate a nonresettable elapsed time meter. 5.9.4.1 In lieu of installing a nonresettable elapsed time meter, the operator may use an alternative device, method, or technique, in determining operating time provided that the alternative is approved by the APCO and EPA and is allowed by a Permit-to- Operate or Permit-Exempt Equipment Registration condition. 5.9.4.2 The operator shall properly maintain and operate the nonresettable elapsed time meter or alternative device in accordance with the manufacturer's instructions. 5.9.5 The operator of an AO spark-ignited engine that has been retro-fitted with a NOx exhaust control that has not been certified in accordance with Section 9.0 Exhaust Control System Certification Requirements, or a compression ignited engine that has been retro-fitted with a NOx exhaust control shall comply with the following: 5.9.5.1 Use a portable NOx analyzer to take NOx emission readings to demonstrate compliance with the emission requirements of Section 5.2. 5.9.5.2 The operator of a compression-ignited engine that is subject to the limits/standards of Section 5.2 Table 4 Category 1.d shall use a portable NOx analyzer to take NOx emission readings at least once every six (6) months that the engine is operated. 5.9.5.3 The operator of any other engine that has been retro-fitted with a NOx exhaust control shall use a portable NOx analyzer to take NOx emission readings at least once every 24 months that the engine is operated. 5.9.5.4 All emission readings shall be taken with the engine operating either at	**rule is as stringent as the SIP version of the rule.**

	5.7.5.5 The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. 5.7.5.6 All NOx emissions readings shall be reported to the APCO in a manner approved by the APCO. 5.7.5.7 NOx emission readings taken pursuant to this section 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.	conditions representative of normal operations or conditions specified in the Permit-to-Operate or Permit-Exempt Equipment Registration. 5.9.5.5 The portable NOx analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. 5.9.5.6 All NOx emissions readings shall be reported to the APCO in a manner approved by the APCO. 5.9.5.7 NOx emission readings taken pursuant to this section 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.	
		5.10 SOx Emissions Monitoring Requirements On and after the compliance schedule specified in Section 7.5, an operator of a non-AO engine shall comply with the following requirements: 5.10.1 An operator of an engine complying with Sections 5.7.2 or 5.7.5 shall perform an annual sulfur fuel analysis in accordance with the test methods in Section 6.4. The operator shall keep the records of the fuel analysis and shall provide it to the District upon request, 5.10.2 An operator of an engine complying with Section 5.7.6 by installing and operating a control device with at least 95% by weight SOx reduction efficiency shall submit for approval by the APCO the proposed the key system operating parameters and frequency of the monitoring and recording not later than July 1, 2013, and 5.10.3 An operator of an engine complying with Section 5.7.6 shall perform an annual source test unless a more frequent sampling and reporting period is included in the Permit-to-Operate. Source tests shall be performed in accordance with the test methods in Section 6.4.	**The non-SIP approved version contains SO_x emissions monitoring requirements not required in the SIP approved version. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**

	5.8 Permit-Exempt Equipment Registration Requirements The owner of an engine used exclusively in agricultural operations shall register such engine pursuant to Rule 2250 (Permit-Exempt Equipment Registration), except for an engine that meets any one of the following conditions: 5.8.1 The engine is required to have a Permit-to-Operate pursuant to California Health and Safety Code Section 42301.16, or 5.8.2 The engine is not required to comply with Section 5.1 of this rule.	5.11 Permit-Exempt Equipment Registration Requirements The operator of an engine used exclusively in agricultural operations shall register such engine pursuant to Rule 2250 (Permit-Exempt Equipment Registration), except for an engine that meets any one of the following conditions: 5.11.1 The engine is required to have a Permit-to-Operate pursuant to California Health and Safety Code Section 42301.16; or 5.11.2 The engine is not required to comply with Section 5.2 of this rule.	**There is no change in the requirements of this section. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**
6.0 Administrative Requirements	6.1 Emission Control Plan The owner of an engine subject to the requirements of Section 5.1 or Section 8.0, except for an engine specified in Section 6.1.1, of this rule shall submit to the APCO an APCO-approvable emission control plan of all actions to be taken to satisfy the emission requirements of Section 5.1 and the compliance schedules of Section 7.0. 6.1.1 The requirement to submit an emission control plan shall not apply to an engine specified below: 6.1.1.1 A certified compression-ignited engine that has not been retro-fitted with an exhaust control and is not subject to the requirements of Section 8.0, 6.1.1.2 A certified spark-ignited engine that has not been retro-fitted with an exhaust control and is not subject to the requirements of Section 8.0, 6.1.1.3 An AO spark-ignited engine that has not been retro-fitted with a catalytic emission control device and is not subject to the requirements of Section 8.0, 6.1.1.4 An engine subject to Section 4.2, or 6.1.1.5 An engine subject to Section 4.3. 6.1.1.6 An engine with an operating exhaust control system that has been certified in accordance with Section 9.0 Exhaust Control System Certification Requirements. 6.1.2 Such emission control plan shall contain the following information, as applicable for each engine: 6.1.2.1 Permit-to-Operate number, Authority-to-Construct number, or Permit-Exempt Equipment Registration number 6.1.2.2 Engine manufacturer 6.1.2.3 Model designation and engine serial	6.1 Emission Control Plan The operator of an engine subject to the requirements of Section 5.2 of this rule 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 and the compliance schedules of Section 7.0. 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. 6.1.1 The requirement to submit an emission control plan shall apply to the following engines: 6.1.1.1 Engines that have been retrofitted with an exhaust control device, except those certified per Section 9.0; 6.1.1.2 Engines subject to Section 8.0; 6.1.1.3 An AO spark-ignited engine that is subject to the requirements of Section 8.0; 6.1.1.4 An AO spark-ignited engine that has been retrofitted with a catalytic emission control and is not subject to the requirements of Section 8.0. 6.1.2 Such emission control plan shall contain the following information, as applicable for each engine: 6.1.2.1 Permit-to-Operate number, Authority-to-Construct number, or Permit-Exempt Equipment Registration number, 6.1.2.2 Engine manufacturer, 6.1.2.3 Model designation and engine serial number, 6.1.2.4 Rated brake horsepower, 6.1.2.5 Type of fuel and type of ignition, 6.1.2.6 Combustion type: rich-burn or lean-	**The non-SIP approved version of this rule includes what engine categories are subject to this section. The SIP approved version has a list of what engines are exempt from this section. However, there is no change in the actual engine categories that are required to meet these section requirements. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**

	number 6.1.2.4 Rated brake horsepower 6.1.2.5 Type of fuel and type of ignition 6.1.2.6 Combustion type: rich-burn or lean-burn 6.1.2.7 Total hours of operation in the previous one-year period, including typical daily operating schedule 6.1.2.8 Fuel consumption (cubic feet for gas or gallons for liquid) for the previous one-year period 6.1.2.9 Stack modifications to facilitate continuous in-stack monitoring and to facilitate source testing 6.1.2.10 Type of control to be applied, including in-stack monitoring specifications 6.1.2.11 Applicable emission limits 6.1.2.12 Documentation showing existing emissions of NOx, VOC, and CO, and 6.1.2.13 Date that the engine will be in full compliance with Rule 4702. 6.1.3 The emission control plan shall identify the type of emission control device or technique to be applied to each engine and a construction/removal schedule, or shall provide support documentation sufficient to demonstrate that the engine is in compliance with the emission requirements of this rule. 6.1.4 For an engine being permanently removed from service, the emission control plan shall include a letter of intent pursuant to Section 7.2.	burn, 6.1.2.7 Total hours of operation in the previous one-year period, including typical daily operating schedule, 6.1.2.8 Fuel consumption (cubic feet for gas or gallons for liquid) for the previous one-year period, 6.1.2.9 Stack modifications to facilitate continuous in-stack monitoring and to facilitate source testing, 6.1.2.10 Type of control to be applied, including in-stack monitoring specifications, 6.1.2.11 Applicable emission limits, 6.1.2.12 Documentation showing existing emissions of NOx, VOC, and CO, and 6.1.2.13 Date that the engine will be in full compliance with this rule. 6.1.3 The emission control plan shall identify the type of emission control device or technique to be applied to each engine and a construction/removal schedule, or shall provide support documentation sufficient to demonstrate that the engine is in compliance with the emission requirements of this rule. 6.1.4 For an engine being permanently removed from service, the emission control plan shall include a letter of intent pursuant to Section 7.2.	
	6.2 Recordkeeping 6.2.1 Except for engines subject to Section 4.0, the owner of an engine subject to the requirements of Section 5.1 of this rule shall maintain an engine operating log to demonstrate compliance with this rule. This information shall be retained for a period of at least five years, shall be readily available, and be made available to the APCO upon request. The engine operating log shall include, on a monthly basis, the following information: 6.2.1.1 Total hours of operation, 6.2.1.2 Type of fuel used, 6.2.1.3 Maintenance or modifications performed, 6.2.1.4 Monitoring data, 6.2.1.5 Compliance source test results, and	6.2 Recordkeeping 6.2.1 The operator of an engine subject to the requirements of Section 5.2 of this rule shall maintain an engine operating log to demonstrate compliance with this rule. This information shall be retained for a period of at least five years, shall be readily available, and be made available to the APCO upon request. The engine operating log shall include, on a monthly basis, the following information: 6.2.1.1 Total hours of operation, 6.2.1.2 Type of fuel used, 6.2.1.3 Maintenance or modifications performed, 6.2.1.4 Monitoring data, 6.2.1.5 Compliance source test results, and	**There is no change in the requirements of this section. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**

	6.2.1.6 Any other information necessary to demonstrate compliance with this rule. 6.2.1.7 For an engine subject to Section 8.0, the quantity (cubic feet of gas or gallons of liquid) of fuel used on a daily basis. 6.2.2 The data collected pursuant to the requirements of Section 5.6 and Section 5.7 shall be maintained for at least five years, shall be readily available, and made available to the APCO upon request. 6.2.3 An owner claiming an exemption under Section 4.2 or Section 4.3 shall maintain annual operating records. This information shall be retained for at least five years, shall be readily available, and provided to the APCO upon request. The records shall include, but are not limited to, the following: 6.2.3.1 Total hours of operation, 6.2.3.2 The type of fuel used, 6.2.3.3 The purpose for operating the engine, 6.2.3.4 For emergency standby engines, all hours of non-emergency and emergency operation shall be reported, and 6.2.3.5 Other support documentation necessary to demonstrate claim to the exemption.	6.2.1.6 Any other information necessary to demonstrate compliance with this rule. 6.2.1.7 For an engine subject to Section 8.0, the quantity (cubic feet of gas or gallons of liquid) of fuel used on a daily basis. 6.2.2 The data collected pursuant to the requirements of Section 5.8 and Section 5.9 shall be maintained for at least five years, shall be readily available, and made available to the APCO upon request. 6.2.3 An operator claiming an exemption under Section 4.2 or Section 4.3 shall maintain annual operating records. This information shall be retained for at least five years, shall be readily available, and provided to the APCO upon request. The records shall include, but are not limited to, the following: 6.2.3.1 Total hours of operation, 6.2.3.2 The type of fuel used, 6.2.3.3 The purpose for operating the engine, 6.2.3.4 For emergency standby engines, all hours of non-emergency and emergency operation shall be reported, and 6.2.3.5 Other support documentation necessary to demonstrate claim to the exemption.	
	6.3 Compliance Testing The owner of an engine subject to the requirements of Section 5.1 or the requirements of Section 8.0, shall comply with the following requirements, except for an engine specified in Section 6.3.1: 6.3.1 The requirements of Section 6.3.2 through Section 6.3.4 shall not apply to any of the following engines: 6.3.1.1 A certified compression-ignited engine that has not been retro-fitted with an exhaust control and is not subject to the requirements of Section 8.0. 6.3.1.2 A certified spark-ignited engine that has not been retro-fitted with an exhaust control and is not subject to the requirements of Section 8.0. 6.3.1.3 An AO spark-ignited engine that has not been retro-fitted with a catalytic emission control device and is not subject to the requirements of Section 8.0. 6.3.1.4 An engine subject to Section 4.2. 6.3.1.5 An engine subject to Section 4.3. 6.3.1.6 An engine with an operating exhaust	6.3 Compliance Testing The operator of an engine subject to the requirements of Section 5.2 or the requirements of Section 8.0 shall comply with the following requirements: 6.3.1 The requirements of Section 6.3.2 through Section 6.3.4 shall apply to the following engines: 6.3.1.1 Engines that have been retrofitted with an exhaust control device, except those certified per Section 9.0; 6.3.1.2 Engines subject to Section 8.0; 6.3.1.3 An AO spark-ignited engine that is subject to the requirements of Section 8.0; 6.3.1.4 An AO spark-ignited engine that has been retrofitted with a catalytic emission control and is not subject to the requirements of Section 8.0. 6.3.2 Demonstrate compliance with applicable limits, ppmv or percent reduction, in accordance with the test methods in Section 6.4, as specified below: 6.3.2.1 By the applicable date specified in	**The non-SIP approved version of this rule includes what engine categories are subject to this section. The SIP approved version has a list of what engines are exempt from this section. However, there is no change in the actual engine categories that are required to meet this section requirements. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**

	control system that has been certified in accordance with Section 9.0 Exhaust Control System Certification Requirements. 6.3.2 Demonstrate compliance with applicable limits, ppmv or percent reduction, in accordance with the test methods in Section 6.4, as specified below: 6.3.2.1 By the applicable date specified in Section 5.1.1, Section 5.1.2, Section 7.3, Section 7.4, Section 7.5, or Section 7.6 and at least once every 24 months thereafter, except for an engine subject to Section 6.3.2.2. 6.3.2.2 By the applicable date specified in Section 5.1.1, Section 5.1.2,Section 7.3, Section 7.4, Section 7.5, or Section 7.6 and at least once every 60 months thereafter, for an AO spark-ignited engine that has been retro-fitted with a catalytic emission control device and is not subject to the requirements of Section 8.0. 6.3.2.3 A portable NOx analyzer may be used to show initial compliance with the applicable limits/standards in Section 5.1 for AO spark-ignited engines, provided the criteria specified in Sections 6.3.2.3.1 to 6.3.2.3.5 are met, and a source test is conducted in accordance with Section 6.3.2 within 12 months from the required compliance date. 6.3.2.3.1 A minimum of 15 minutes of runtime must be measured with data recorded at a minimum of 15, evenly spaced time intervals. Compliance is to be determined with the arithmetic average of the oxygen-corrected data. 6.3.2.3.2 The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Analyzer calibration records shall be made available at the District's request. 6.3.2.3.3 The analyzer shall be checked with EPA protocol span gas at the beginning and end of each test day. The results of these checks shall be recorded and copies submitted to the District with each engine test. If the analyzer exhibits more than a 10% deviation from the span check, the instrument must be re-calibrated. Any analysis performed prior to an end-of-day span check failure shall be void. 6.3.2.3.4. The test results of each engine, including span check results, shall be submitted to the District within 30 days of the test date. Test results shall clearly identify the engine tested including owner, location, permit or	Section 5.2, and at least once every 24 months thereafter, except for an engine subject to Section 6.3.2.2 By the applicable date specified in Section 5.2 and at least once every 60 months thereafter, for an AO spark-ignited engine that has been retro-fitted with a catalytic emission control device. 6.3.2.3 A portable NOx analyzer may be used to show initial compliance with the applicable limits/standards in Section 5.2 for AO spark ignited engines, provided the criteria specified in Sections 6.3.2.3.1 to 6.3.2.3.5 are met, and a source test is conducted in accordance with Section 6.3.2 within 12 months from the required compliance date. 6.3.2.3.1 A minimum of 15 minutes of runtime must be measured with data recorded at a minimum of 15, evenly spaced time intervals. Compliance is to be determined with the arithmetic average of the oxygen corrected data; 6.3.2.3.2 The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Analyzer calibralion records shall be made available at the District's request; 6.3.2.3.3 The analyzer shall be checked with EPA protocol span gas at the beginning and end of each test day. The results of these checks shall be recorded and copies submitted to the District with each engine test. If the analyzer exhibits more than a 10% deviation from the span check, the instrument must be recalibrated. Any analysis performed prior to an end-of-day span check failure shall be void; 6.3.2.3.4 The test results of each engine, including span check results, shall be submitted to the District within 30 days of the test date. Test results shall clearly identify the engine tested including operator, location, permit or registration number, manufacturer, model, and serial number; and 6.3.2.3.5 The analyzer utilized for each check shall be clearly identified in the material submitted with the test results. Identification shall include manufacturer and serial number of the analyzer used, and the last calibration date. 6.3.3 Conduct emissions source testing with the engine operating either at conditions representative of normal operations or conditions specified in the Permit-to-Operate or Permit-Exempt Equipment Registration. For emissions source testing performed pursuant to Section 6.3.2 for the	

	registration number, manufacturer, model, and serial number. 6.3.2.3.5. The analyzer utilized for each check shall be clearly identified in the material submitted with the test results. Identification shall include manufacturer and serial number of the analyzer used, and the last calibration date. 6.3.3 Conduct emissions source testing with the engine operating either at conditions representative of normal operations or conditions specified in the Permit-to-Operate or Permit-Exempt Equipment Registration. For emissions source testing performed pursuant to Section 6.3.2 for the purpose of determining compliance with an applicable standard or numerical limitation, the arithmetic average of three (3) 30-consecutive-minute test runs shall apply. If two (2) of three (3) runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC shall be reported as methane. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15 percent oxygen. For engines that comply with a percent reduction limit in Table 1, the percent reduction of NOx emissions shall also be reported. 6.3.4 In addition to other information, the source test protocol shall describe which critical parameters will be measured and how the appropriate range for these parameters shall be established. The range for these parameters shall be incorporated into the I&M plan. 6.3.5 Engines that are limited by Permit-to-Operate or Permit-Exempt Equipment Registration condition to be fueled exclusively with PUC quality natural gas shall not be subject to the reoccurring source test requirements of Section 6.3.2 for VOC emissions.	purpose of determining compliance with an applicable standard or numerical limitation, the arithmetic average of three (3) 30-consecutive-minute test runs shall apply. If two (2) of three (3) runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC shall be reported as methane. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15 percent oxygen. For engines that comply with a percent reduction limit, the percent reduction of NO_x emissions shall also be reported. 6.3.4 In addition to other information, the source test protocol shall describe which critical parameters will be measured and how the appropriate range for these parameters shall be established. The range for these parameters shall be incorporated into the I&M plan. 6.3.5 Engines that are limited by Permit-to-Operate or Permit-Exempt Equipment Registration condition to be fueled exclusively with PUC quality natural gas shall not be subject to the reoccurring source test requirements of Section 6.3.2 for VOC emissions.	
	6.3.6 Representative Testing For spark-ignited engines, in lieu of compliance with the applicable requirements of Section 6.3.2, compliance with the applicable emission limits in Section 5.1 shall be demonstrated by submittal of annual emission test results, within 30 days of the test date, to the District, from a unit or units that represents a specified group of units, provided all of the following are requirements are satisfied: 6.3.6.1 The units are located at the same stationary source; 6.3.6.2 The units were produced by the same manufacturer, have the same model number or other manufacturer's designation in common, and have the same rated capacity and operating specifications;	6.3.6 Representative Testing For spark-ignited engines, in lieu of compliance with the applicable requirements of Section 6.3.2, compliance with the applicable emission limits in Section 5.2 shall be demonstrated by submittal of annual emission test results, within 30 days of the test date, to the District, from a unit or units that represents a specified group of units, provided all of the following requirements are satisfied: 6.3.6.1 The units are located at the same stationary source; 6.3.6.2 The units were produced by the same manufacturer, have the same model number or other manufacturer's designation in common, and have the same rated	**There is no change in the requirements of this section. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**

	6.3.6.3 The units are operated and maintained in a similar manner; and 6.3.6.4 At least 20% of the total number of units are tested during each annual test cycle. 6.3.6.5 The District, based on documentation submitted by the stationary source: 6.3.6.5.1 Determines that the margin of compliance for the identical units tested is significant and can be maintained on an on-going basis; or 6.3.6.5.2 Determines based on a review of sufficient emissions data that, though the margin of compliance is not substantial, other factors allow for the determination that the variability of emissions for identical tested units is low enough for confidence that the untested unit will be in compliance. These factors may include, but are not limited to, the following: 6.3.6.5.2.1 Historical records at the tested unit 6.3.6.5.2.2 Fuel characteristics yielding low variability and therefore assurance that emissions will be constant and below allowable levels; 6.3.6.5.2.3 Statistical analysis of a robust emissions data set demonstrate sufficiently low variability to convey assurance that the margin of compliance, though small, is reliable. 6.3.6.6 Should any of the representative units exceed the required emission limits, or if the District notifies the operator that the criteria in Sections 6.3.6.1 through 6.3.6.5 have not been fulfilled, each of the units in the group shall individually demonstrate compliance by emissions testing. Failure to complete emissions testing within 90 days of the failed test shall result in the untested units being in violation of this rule. After compliance with the requirements of Section 6.3.6.6 has been demonstrated, subsequent source testing shall be performed pursuant to Sections 6.3.2 or 6.3.6.	capacity and operating specifications; 6.3.6.3 The units are operated and maintained in a similar manner; and 6.3.6.4 At least 20% of the total number of units are tested during each annual test cycle. 6.3.6.5 The District, based on documentation submitted by the stationary source: 6.3.6.5.1 Determines that the margin of compliance for the identical units tested is significant and can be maintained on an on-going basis; or 6.3.6.5.2 Determines based on a review of sufficient emissions data that, though the margin of compliance is not substantial, other factors allow for the determination that the variability of emissions for identical tested units is low enough for confidence that the untested unit will be in compliance. These factors may include, but are not limited to, the following: 6.3.6.5.2.1 Historical records at the tested unit showing consistent invariant load; 6.3.6.5.2.2 Fuel characteristics yielding low variability and therefore assurance that emissions will be constant and below allowable levels; 6.3.6.5.2.3 Statistical analysis of a robust emissions data set demonstrating sufficiently low variability to convey assurance that the margin of compliance, though small, is reliable. 6.3.6.6 Should any of the representative units exceed the required emission limits, or if the District notifies the operator that the criteria in Sections 6.3.6.1 through 6.3.6.5 have not been fulfilled, each of the units in the group shall individually demonstrate compliance by emissions testing. Failure to complete emissions testing within 90 days of the failed test shall result in the untested units being in violation of this rule. After compliance with the requirements of this section has been demonstrated, subsequent source testing shall be performed pursuant to Sections 6.3.2 or 6.3.6.	
	6.4 Test Methods Compliance with the requirements of Section 5.0 shall be determined, as required, in accordance with the following test procedures or any other method approved by EPA and the APCO: 6.4.1 Oxides of nitrogen - EPA Method 7E, or ARB Method 100. 6.4.2 Carbon monoxide - EPA Method 10, or ARB Method 100.	6.4 Test Methods Compliance with the requirements of Section 5.2 shall be determined, as required, in accordance with the following test procedures or any other method approved by EPA and the APCO: 6.4.1 Oxides of nitrogen - EPA Method 7E, or ARB Method 100. 6.4.2 Carbon monoxide - EPA Method 10, or ARB Method 100.	**The Non-SIP approved version of this rule added SO_x test methods to the SIP approved version of this rule. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**

	6.4.3 Stack gas oxygen - EPA Method 3 or 3A, or ARB Method 100. 6.4.4 Volatile organic compounds - EPA Method 25A or 25B, or ARB Method 100. 6.4.5 Operating horsepower determination - any method approved by EPA and the APCO.	6.4.3 Stack gas oxygen - EPA Method 3 or 3A, or ARB Method 100. 6.4.4 Volatile organic compounds - EPA Method 25A or 25B, or ARB Method 100. Methane and ethane, which are exempt compounds, shall be excluded from the result of the test. 6.4.5 Operating horsepower determination - any method approved by EPA and the APCO. 6.4.6 SOx Test Methods 6.4.6.1 Oxides of sulfur – EPA Method 6C, EPA Method 8, or ARB Method 100. 6.4.6.2 Determination of total sulfur as hydrogen sulfide (H2S) content – EPA Method 11 or EPA Method 15, as appropriate. 6.4.6.3 Sulfur content of liquid fuel – American Society for Testing and Materials (ASTM) D 6920-03 or ASTM D 5453-99. 6.4.6.4 The SOx emission control system efficiency shall be determined using the following: % Control Efficiency = [(CSO2, inlet – CSO2, outlet) / CSO2, inlet] X 100 Where: CSO2, inlet = concentration of SOx (expressed as SO2) at the inlet side of the SOx emission control system, in lb/Dscf CSO2, outlet = concentration of SOx (expressed as SO2) at the outlet side of the SOx emission control system, in lb/Dscf 6.4.7 The Higher Heating Value (hhv) of the fuel shall be determined by one of the following test methods: 6.4.7.1 ASTM D 240-02 or ASTM D 3282-88 for liquid hydrocarbon fuels. 6.4.7.2 ASTM D 1826-94 or ASTM 1945-96 in conjunction with ASTM D 3588-89 for gaseous fuel.	

	6.5 Inspection and Monitoring (I&M) Plan The owner of an engine that is subject to the requirements of Section 5.1 or the requirements of Section 8.0, except for an engine specified in Section 6.5.1, shall submit to the APCO for approval, an I&M plan that specifies all actions to be taken to satisfy the following requirements and the requirements of Section 5.6. The actions to be identified in the I&M plan shall include, but are not limited to, the information specified below: 6.5.1 The requirements of Section 6.5.2 through Section 6.5.9 shall not apply to any of the following engines: 6.5.1.1 A certified compression-ignited engine that has not been retro-fitted with an exhaust control and is not subject to the requirements of Section 8.0. 6.5.1.2 A certified spark-ignited engine that has not been retro-fitted with an exhaust control and is not subject to the requirements of Section 8.0. 6.5.1.3 An AO spark-ignited engine that has not been retro-fitted with a catalytic emission control device and is not subject to the requirements of Section 8.0. 6.5.1.4 An engine subject to Section 4.2. 6.5.1.5 An engine subject to Section 4.3. 6.5.1.6 An engine with an operating exhaust control system that has been certified in accordance with Section 9.0 Exhaust Control System Certification Requirements. 6.5.2 Procedures requiring the owner or operator to establish ranges for control equipment parameters, engine operating parameters, and engine exhaust oxygen concentrations that source testing has shown result in pollutant concentrations within the rule limits. 6.5.3 Procedures for monthly inspections as approved by the APCO. The applicable control equipment parameters and engine operating parameters will be inspected and monitored monthly in conformance with a regular inspection schedule listed in the I&M plan. 6.5.4 Procedures for the corrective actions on the noncompliant parameter(s) that the owner or operator will take when an engine is found to be operating outside the acceptable range for control equipment parameters, engine operating parameters, and engine exhaust NOx, CO, VOC, or oxygen concentrations. 6.5.5 Procedures for the owner or operator to notify the APCO when an engine is found to be operating outside the acceptable range for control equipment parameters, engine operating parameters, and engine exhaust	6.5 Inspection and Monitoring (I&M) Plan The operator of an engine that is subject to the requirements of Section 5.2 or the requirements of Section 8.0 shall submit to the APCO for approval, an I&M plan that specifies all actions to be taken to satisfy the following requirements and the requirements of Section 5.8. The actions to be identified in the I&M plan shall include, but are not limited to, the information specified below. If there is no change to the previously approved I&M plan, the operator shall submit a letter to the District indicating that previously approved plan is still valid. 6.5.1 The requirements of Section 6.5.2 through Section 6.5.9 shall apply to the following engines: 6.5.1.1 Engines that have been retrofitted with an exhaust control device, except those certified per Section 9.0; 6.5.1.2 Engines subject to Section 8.0; 6.5.1.3 An AO spark-ignited engine that is subject to the requirements of Section 8.0. 6.5.1.4 An AO spark-ignited engine that has been retrofitted with a catalytic emission control and is not subject to the requirements of Section 8.0. 6.5.2 Procedures requiring the operator to establish ranges for control equipment parameters, engine operating parameters, and engine exhaust oxygen concentrations that source testing has shown result in pollutant concentrations within the rule limits. 6.5.3 Procedures for monthly inspections as approved by the APCO. The applicable control equipment parameters and engine operating parameters will be inspected and monitored monthly in conformance with a regular inspection schedule listed in the I&M plan. 6.5.4 Procedures for the corrective actions on the noncompliant parameter(s) that the operator will take when an engine is found to be operating outside the acceptable range for control equipment parameters, engine operating parameters, and engine exhaust NOx, CO, VOC, or oxygen concentrations. 6.5.5 Procedures for the operator to notify the APCO when an engine is found to be operating outside the acceptable range for control equipment parameters, engine operating parameters, and engine exhaust NOx, CO, VOC, or oxygen concentrations. 6.5.6 Procedures for preventive and corrective maintenance performed for the purpose of maintaining an engine in proper operating	**The non-SIP approved version of this rule includes what engine categories are subject to this section. The SIP approved version has a list of what engines are exempt from this section. However, there is no change in the actual engine categories that are required to meet these section requirements. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**

	NOx, CO, VOC, or oxygen concentrations. 6.5.6 Procedures for preventive and corrective maintenance performed for the purpose of maintaining an engine in proper operating condition. 6.5.7 Procedures and a schedule for using a portable NOx analyzer to take NOx emission readings pursuant to Section 5.6.9. 6.5.8 Procedures for collecting and recording required data and other information in a form approved by the APCO including, but not limited to, data collected through the I&M plan and the monitoring systems described in Sections 5.6.1 and 5.6.2. Data collected through the I&M plan shall have retrieval capabilities as approved by the APCO. 6.5.9 Procedures for revising the I&M plan. The I&M plan shall be updated to reflect any change in operation. The I&M plan shall be updated prior to any planned change in operation. An engine owner that changes significant I&M plan elements must notify the District no later than seven days after the change and must submit an updated I&M plan to the APCO no later than 14 days after the change for approval. The date and time of the change to the I&M plan shall be recorded in the engine operating log. For new engines and modifications to existing engines, the I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit-to-Operate or Permit-Exempt Equipment Registration. The owner of an engine may request a change to the I&M plan at any time.	condition. 6.5.7 Procedures and a schedule for using a portable NOx analyzer to take NO_x emission readings pursuant to Section 5.8.9. 6.5.8 Procedures for collecting and recording required data and other information in a form approved by the APCO including, but not limited to, data collected through the I&M plan and the monitoring systems described in Sections 5.8.1 and 5.8.2. Data collected through the I&M plan shall have retrieval capabilities as approved by the APCO. 6.5.9 Procedures for revising the I&M plan. The I&M plan shall be updated to reflect any change in operation. The I&M plan shall be updated prior to any planned change in operation. An engine operator that changes significant I&M plan elements must notify the District no later than seven days after the change and must submit an updated I&M plan to the APCO no later than 14 days after the change for approval. The date and time of the change to the I&M plan shall be recorded in the engine operating log. For new engines and modifications to existing engines, the I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit-to-Operate or Permit-Exempt Equipment Registration. The operator of an engine may request a change to the I&M plan at any time.	
7.0 Compliance Schedules	7.1 Loss of Exemption The owner of an engine which becomes subject to the emission limits/standards of this rule through loss of exemption shall not operate the subject engine, except as required for obtaining a new or modified Permit-to-Operate or Permit-Exempt Equipment Registration for the engine, until the owner demonstrates that the subject engine is in full compliance with the requirements of this rule.	7.1 Loss of Exemption The operator of an engine which becomes subject to the emission limits/standards of this rule through loss of exemption shall not operate the subject engine, except as required for obtaining a new or modified Permit-to-Operate or Permit-Exempt Equipment Registration for the engine, until the operator demonstrates that the subject engine is in full compliance with the requirements of this rule.	**There is no change in the requirements of this section. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**
	7.2 Permanent Removal of an Engine The owner of an engine who elects to permanently remove the engine from service shall comply with all of the following conditions: 7.2.1 Comply with all applicable requirements of this rule until the engine is permanently removed from service; 7.2.2 Submit a letter to the APCO no later than 14 days before the engine is permanently removed from service, stating the intent to	7.2 Permanent Removal of an Engine The operator of an engine who elects to permanently remove the engine from service shall comply with all of the following conditions: 7.2.1 Comply with all applicable requirements of this rule until the engine is permanently removed from service; 7.2.2 Submit a letter to the APCO no later than 14 days before the engine is permanently	**There is no change in the requirements of this section. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**

	permanently remove the engine from service. The engine removal letter can be submitted with the emission control plan, if any; and 7.2.3 Permanently remove the engine from service and officially surrender the Permit-to-Operate or Permit-Exempt Equipment Registration, if any, to the APCO no later than 30 days after the engine is permanently removed from service.	removed from service, stating the intent to permanently remove the engine from service. The engine removal letter can be submitted with the emission control plan, if any; and 7.2.3 Permanently remove the engine from service and officially surrender the Permit-to-Operate or Permit-Exempt Equipment Registration, if any, to the APCO no later than 30 days after the engine is permanently removed from	
	7.3 Compliance Schedule for an AO Compression-Ignited Engine 7.3.1 Compliance Schedule - Submission of Emission Control Plan, I&M Plan, Permit-Exempt Equipment Registration Application and Authority-to-Construct for an AO Compression-Ignited Engine 7.3.1.1 The owner of an engine that is subject to Section 4.2 or Section 4.3 and that is required to submit an Emission Control Plan, an I&M Plan, or an Authority-to-Construct in order to comply with the requirements of Rule 4702, shall submit such document(s) no later than January 1, 2006. 7.3.1.2 The owner of an engine that is subject to Section 5.1 and that is required to submit an Authority-to-Construct application in order to comply with the requirements of Rule 4702, shall submit the Authority-to-Construct application, and any required Emission Control Plan or I&M Plan, no later than six months before the engine is required to be in compliance with the requirements of Section 5.1 of Rule 4702. 7.3.1.3 The owner of an engine that is subject to Section 5.1 and that is required to submit a Permit-Exempt Equipment Registration application in order to comply with the requirements of Rule 4702, shall submit the Permit-Exempt Equipment Registration application, and any required Emission Control Plan or I&M Plan, no later than three months before the engine is required to be in compliance with the requirements of Section 5.1 of Rule 4702. 7.3.2 Compliance Schedule - Monitoring and Recordkeeping for an AO Compression-Ignited Engine Subject to Section 5.1 and Section 5.7 On and after June 1, 2006, the owner of an engine that is subject to Section 5.1 and Section 5.7 of Rule 4702 shall be in compliance with the requirements of Section 5.7, Section 6.2.1.1, and Section 6.2.1.2. 7.3.3 Compliance Schedule - General for an AO Compression-Ignited Engine	7.3 AO Compression-Ignited Engine 7.3.1 The operator of an AO compression-ignited engine that is subject to Section 5.2 and that is required to submit an Authority-to-Construct application in order to comply with the requirements of this rule, shall submit the Authority-to-Construct application, and any required Emission Control Plan or I&M Plan, no later than six months before the engine is required to be in compliance with the requirements of Section 5.2. 7.3.2 The operator of an AO compression-ignited engine that is subject to Section 5.2 and that is required to submit a Permit-Exempt Equipment Registration application in order to comply with the requirements of Rule 4702, shall submit the Permit-Exempt Equipment Registration application, and any required Emission Control Plan or I&M Plan, no later than three months before the engine is required to be in compliance with the requirements of Section 5.2. 7.3.3 Unless otherwise specified, the operator of an engine that is subject to the requirements of Section 5.2 of Rule 4702 shall be in full compliance with Rule 4702 by the indicated dates in Table 4.	**The Non-SIP approved version of this rule only includes current requirements from the SIP approved version. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**

	7.3.3.1 On and after January 1, 2006, unless otherwise specified, the owner of an engine that is subject to the requirements of Section 4.2 or Section 4.3 of Rule 4702 shall be in full compliance with Rule 4702. 7.3.3.2 Unless otherwise specified, the owner of an engine that is subject to the requirements of Section 5.1 of Rule 4702 shall be in full compliance with Rule 4702 by the indicated dates pursuant to Section 5.1.2.		
	7.4 Compliance Schedule for an AO Spark-Ignited Engine 7.4.1 Compliance Schedule - Submission of Emission Control Plan, I&M Plan, Permit-Exempt Equipment Registration Application and Authority-to-Construct for an AO Spark-Ignited Engine 7.4.1.1 The owner of an engine that is subject to Section 4.2 or Section 4.3 and that is required to submit an Emission Control Plan, an I&M Plan, or an Authority-to-Construct in order to comply with the requirements of Rule 4702, shall submit such document(s) no later than January 1, 2006. 7.4.1.2 The owner of an engine that is subject to Section 5.1 and that is required to submit an Authority-to-Construct application in order to comply with the requirements of Rule 4702, shall submit the Authority-to-Construct application, and any required Emission Control Plan or I&M Plan, by June 1, 2006, or six months before the engine is required to be in compliance with the requirements of Section 5.1 of Rule 4702, whichever is later. 7.4.1.3 The owner of an engine that is subject to Section 5.1 and that is required to submit a Permit-Exempt Equipment Registration application in order to comply with the requirements of Rule 4702, shall submit the Permit-Exempt Equipment Registration application, and any required Emission Control Plan or I&M Plan by January 1, 2007, or three months before the engine is required to be in compliance with the requirements of Section 5.1 of Rule 4702, whichever is later. 7.4.2 Compliance Schedule - Monitoring and Recordkeeping for an AO Spark-Ignited Engine Subject to Section 5.1 and Section 5.7 On and after June 1, 2006, the owner of an engine that is subject to Section 5.1 and Section 5.7 of Rule 4702 shall be in compliance with the requirements of Section 5.7.3 through Section		**AO speak-ignited engines are were required to be in full compliance with this rule by 1/1/10. The requirements from this section of the rule are obsolete and not required on the Non-SIP approved version of the rule. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**

	5.7.5, Section 6.2.1.1, and Section 6.2.1.2. 7.4.3 Compliance Schedule - General for an AO Spark-Ignited Engine 7.4.3.1 On and after June 1, 2006, unless otherwise specified, the owner of an engine that is subject to the requirements of Section 4.2 or Section 4.3 of Rule 4702 shall be in full compliance with Rule 4702. 7.4.3.2 Unless otherwise specified, the owner of an engine that is subject to the requirements of Section 5.1 of Rule 4702 shall be in full compliance with Rule 4702 by the indicated dates pursuant to Section 5.1.1.		
	7.5 Compliance Schedule for a Non-AO Compression-Ignited Engine 7.5.1 Compliance Schedule - Submission of Emission Control Plan, I&M Plan, and Authority-to-Construct for a Non-AO Compression-Ignited Engine 7.5.1.1 The owner of an engine that is subject to Section 4.2 or Section 4.3 and that is required to submit an Emission Control Plan, an I&M Plan, or an Authority-to-Construct in order to comply with the requirements of Rule 4702, shall submit such document(s) no later than June 1, 2006. 7.5.1.2 The owner of an engine that is subject to Section 5.1 and that is required to submit an Emission Control Plan, an I&M Plan, or an Authority-to-Construct in order to comply with the requirements of Rule 4702, shall submit such document(s) by June 1, 2006 or six months before the engine is required to be in compliance with the requirements of Section 5.1 of Rule 4702, whichever is later. 7.5.2 Compliance Schedule - General for a Non-AO Compression-Ignited Engine 7.5.2.1 On and after June 1, 2006, unless otherwise specified, the owner of an engine that is subject to the requirements of Section 4.1, Section 4.2, or Section 4.3 of Rule 4702 shall be in full compliance with Rule 4702. 7.5.2.2 Unless otherwise specified, the owner of an engine that is subject to the requirements of Section 5.1 of Rule 4702 shall be in full compliance with Rule 4702 by the indicated dates pursuant to Section 5.1.2. 7.5.2.3 The owner of an engine that is subject to the requirements of Section 4.0 or Section 5.0 of Rule 4701 (Internal Combustion Engines – Phase 1) shall no longer be subject to the requirements of Rule 4701 pursuant to the following requirements: 7.5.2.3.1 For an engine that is subject to the requirements of Section 4.1, Section 4.2, or	7.4 Non-AO Compression-Ignited Engine 7.4.1 The operator of a non-AO compression-ignited engine that is subject to Section 5.2 and that is required to submit an Emission Control Plan, an I&M Plan, or an Authority-to-Construct in order to comply with rule requirements, shall submit such document(s) no later than six months before the engine is required to be in compliance with the requirements of Section 5.2. 7.4.2 Unless otherwise specified, the operator of an engine that is subject to the requirements of Section 5.2 shall be in full compliance with Rule 4702 by the indicated dates in Table 4.	**The Non-SIP approved version of this rule only includes current requirements from the SIP approved version. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**

	Section 4.3 of Rule 4702, the requirements of Rule 4701 shall not apply effective on the date that such engine is required to be in full compliance with Rule 4702, or 7.5.2.3.2 For an engine that is subject to the requirements of Section 5.1 of Rule 4702, the requirements of Rule 4701 shall not apply effective on the date that such engine is required to be in full compliance with Rule 4702.		
	7.6 Compliance Schedule for a Non-AO Spark-Ignited Engine 7.6.1Compliance Schedule - Submission of Emission Control Plan, I&M Plan, and Authority-to-Construct for a Non-AO Spark-Ignited Engine Effective on and after June 16, 2005, the owner of an engine that is required to submit an Emission Control Plan, an I&M Plan, or an Authority-to-Construct in order to comply with the requirements of Rule 4702, shall submit such document(s) no later than six months before the engine is required to be in full compliance with Rule 4702. 7.6.2Compliance Schedule – Emission Limits for a Non-AO Spark-Ignited Engine The owner of a non-AO spark-ignited engine subject to the requirements of Rule 4702 shall not operate the engine unless the owner demonstrates and maintains the engine in compliance with the applicable requirements of Rule 4702 by the indicated dates below. Compliance Schedule 1 – Non-AO Spark-Ignited Engine For the purposes of Section 7.6, the total number of non-AO spark-ignited engines at a stationary source on a specified date includes those non-AO spark-ignited engines subject to Rule 4702 pursuant to Section 2.0 and excludes any engines exempt from Rule 4702 pursuant to Section 4.1 on the specified date. 7.6.3Compliance Schedule - General for a Non-AO Spark-Ignited Engine 7.6.3.1 On and after January 1, 2006, unless otherwise specified, the owner of an engine that is subject to the requirements of Section 4.1 of Rule 4702 shall be in full compliance with Rule 4702.	Note: This section refers to Table 5. Table 5 can be found as an attachment to this document. 7.5 Non-AO Spark-Ignited Engine 7.5.1 An operator with non-AO spark-ignited engines at a stationary source subject to Table 2 or Section 8.0 emission limits, SOx control requirements of Section 5.7, and the SOx monitoring requirements of Section 5.10 shall comply with the schedule specified in Table 5. 7.5.2 As shown in Table 5, the column labeled: 7.5.2.1 "Emission Control Plan" identifies the date by which the operator shall submit an emission control plan pursuant to the applicable provisions of Section 6.1. The emission control plan shall identify all the Non-AO spark-ignited engines subject to Table 2 emission limits, SOx control and monitoring requirements. The emission control plan shall identify all the steps to be taken to comply with this rule. If there is no change to the previously approved emission control plan, the operator does not need to submit a new emission control plan. However, the operator shall submit a letter to the District indicating that previously approved plan is still valid. 7.5.2.2 "Authority to Construct and Inspection and Maintenance Plan" identifies the date by which the operator shall submit an Authority to Construct (if needed) and an Inspection and Monitoring Plan as specified in the applicable provisions of Section 6.5 for each engine subject to Table 2 emission limits, SOx control and monitoring requirements. If there is no change to the previously approved I&M plan, the operator does not need to submit a new I&M Plan. However, the operator shall submit a letter to the District indicating that previously approved I&M plan is still valid. 7.5.2.3 "Full Compliance" identifies the date by which the operator shall demonstrate that each unit is in compliance with Table 2	**The Non-SIP approved version of this rule only includes current requirements from the SIP approved version. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**

	7.6.3.2 Unless otherwise specified, the owner of an engine subject to the requirements of Rule 4702 shall be in full compliance with Rule 4702 by the applicable compliance date pursuant to Section 7.6.2. 7.6.3.3 The owner of an engine that is subject to the requirements of Rule 4701 shall no longer be subject to the requirements of Rule 4701 pursuant to the following requirements: 7.6.3.3.1 For an engine that is subject to the requirements of Section 4.1 of Rule 4702, the requirements of Rule 4701 shall not apply effective on and after January 1, 2006, or 7.6.3.3.2 For an engine that is subject to the requirements of Section 4.2, Section 4.3, or Section 5.1 of Rule 4702, the requirements of Rule 4701 shall not apply effective on the date that such engine is required to be in full compliance with Rule 4702.	emission limits, SOx control and monitoring requirements.	
		7.6 Operator of Non-AO Spark-Ignited Engine Who Elects to Pay Fees In lieu of complying with Table 2 NOx emission limits, the operator of a non-AO spark-ignited engine who elects to pay annual fees under Section 5.2.2.2 and Section 5.6 shall comply with the following requirements: 7.6.1 By the date specified in Table 5, submit an Emission Control Plan which includes the following information: 7.6.1.1 Number of engines at a stationary source that will comply under Section 5.2.2.2, 7.6.1.2 Location of each engine, 7.6.1.3 Engine manufacturer, model designation, engine serial number, and Permit-to-Operate number, and 7.6.1.4 Each engine's rated brake horsepower, fuel type, and type of ignition. 7.6.2 The total annual fees shall be paid to the District in the following manner: 7.6.2.1 Payment shall be paid no later than June 30 of each year, for the emissions of the previous calendar year, 7.6.2.2 The first payment is due to the District no later than June 30 of the year in which full compliance is required for the specified percent of engines at a stationary as specified in Table 5 that the operator has opted to pay the annual fees,	**This section was added to address a new unit category. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**

		7.6.2.3 Should June 30 fall on a day when the District is closed, the payment shall be made by the next District working day after June 30, and 7.6.2.4 Payments shall continue annually until the engine either is permanently removed from use in the San Joaquin Valley Air Basin and the Permit-to-Operate is surrendered or the operator demonstrates compliance with the applicable Table 2 emission limits. 7.6.2.5 The emissions fee for units that operate for less than the full calendar year before demonstrating compliance under Section 5.2, shall be based on the actual fuel used during the portion of the calendar year prior to demonstrating compliance or removing the unit from operation within the San Joaquin Valley Air Basin.	
8.0 Alternative Emission Control Plan (AECP)	An owner may comply with the NOx emission requirements of Section 5.1 for a group of engines by meeting the requirements below. An owner that is subject to the requirements below shall also comply with all the applicable requirements of Sections 5.0, 6.0, and 7.0. An engine that is not subject to Section 5.1 is not eligible for inclusion in an AECP. 8.1 During any 7 (seven) consecutive calendar day period, the owner shall operate all engines in the AECP to achieve an actual aggregate NOx emission level that is not greater than 90 percent of the NOx emissions that would be obtained by controlling the engines to comply individually with the NOx limits in Section 5.1. The owner shall operate engines in the AECP such that $AE_{Actual} <= 0.90\ (AE_{Limit})$ and shall notify the APCO within 24 hours of a violation of this section. 8.1.1 The actual aggregate NOx emissions (AE_{Actual}) is the sum of the actual NOX emissions, over a 7 (seven) consecutive calendar day period, from all engines in the AECP which were actually operated during that period. AE_{Actual} shall be calculated as follows: $$AE_{Actual} = \sum_i (EF_i)(F_i)(k_i)$$ where: i identifies each engine in the AECP. EF_i is the NOx emission factor of the engine established pursuant to Section 8.2 and approved by the APCO. F_i is the actual total fuel used by the engine	An operator may comply with the NOx emission requirements of Section 5.2 for a group of engines by meeting the requirements below. An operator that is subject to the requirements below shall also comply with all the applicable requirements of Sections 5.0, 6.0, and 7.0. Only engines subject to Section 5.2 are eligible for inclusion in an AECP. 8.1 During any seven (7) consecutive calendar day period, the operator shall operate all engines in the AECP to achieve an actual aggregate NOx emission level that is not greater than 90 percent of the NOx emissions that would be obtained by controlling the engines to comply individually with the NOx limits in Section 5.2. The operator shall operate engines in the AECP such that $AE_{Actual} \leq 0.90\ (AE_{Limit})$ and shall notify the APCO within 24 hours of any violation of this section. 8.1.1 The actual aggregate NOx emissions (AE_{Actual}) is the sum of the actual NO_X emissions, over a seven (7) consecutive calendar day period, from all engines in the AECP which were actually operated during that period. AE_{Actual} shall be calculated as follows: $$AE_{Actual} = \sum_i (EF_i)(F_i)(k_i)$$ where: i identifies each engine in the AECP. EF_i is the NOx emission factor of the engine established pursuant to Section 8.2 and approved by the APCO. F_i is the actual total fuel used by the engine	**There is no change in the requirements of this section. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**

	during the 7 (seven) consecutive calendar day period. k_i is a constant used to convert an engine's fuel use and NOx emission factor to the amount of NOx emitted. k_i is dependent on the engine and the pollutant emitted. Calculation of k_i shall be accomplished using 40 CFR Part 60, Appendix A, Method 19, or an equivalent method approved by EPA, ARB and the APCO. 8.1.2 The estimated aggregate NOx emissions limit (AE_{Limit}) is the sum of the NOx emissions, over a 7 (seven) consecutive calendar day period, for the same engines in the AECP which were actually operated during the same period as considered in Section 8.1.1, calculated with the NOx limits of Section 5.1 and the actual fuel usage during that 7 (seven) consecutive calendar day period. AE_{Limit} shall be calculated as follows: $$AE_{Limit} = \sum_i (EL_i)(F_i)(k_i)$$ where: i identifies each engine in the AECP. EL_i is the NOx emission limit from Section 5.1 for each engine. F_i is the actual total fuel used by the engine during the 7 (seven) consecutive calendar day period. k_i is a constant used to convert an engine's fuel use and NOx emission limit to the amount of NOx emitted. k_i is dependent on the engine and the pollutant emitted. Calculation of k_i shall be accomplished using 40 CFR Part 60, Appendix A, Method 19, or an equivalent method approved by EPA, ARB and the APCO. 8.1.3 Only engines in the AECP which were operated during the 7 (seven) consecutive calendar day period shall be included in the calculations of AE_{Limit} and AE_{Actual}. 8.1.4 The owner shall, at least one time each day the AECP is used, calculate and record the actual aggregate NOx emissions (AE_{Actual}) and the aggregate NOx emission limit (AE_{Limit}) for the preceding 7 (seven) consecutive calendar day period.	during the 7 (seven) consecutive calendar day period. k_i is a constant used to convert an engine's fuel use and NOx emission factor to the amount of NOx emitted. k_i is dependent on the engine and the pollutant emitted. Calculation of k_i shall be accomplished using 40 CFR Part 60, Appendix A, Method 19, or an equivalent method approved by EPA, ARB and the APCO. 8.1.2 The estimated aggregate NOx emissions limit (AE_{Limit}) is the sum of the NOx emissions, over a seven (7) consecutive calendar day period, for the same engines in the AECP which were actually operated during the same period as considered in Section 8.1.1, calculated with the NOx limits of Section 5.2 and the actual fuel usage during that seven (7) consecutive calendar day period. AE_{Limit} shall be calculated as follows: $$AE_{Limit} = \sum_i (EL_i)(F_i)(k_i)$$ where: i = identifies each engine in the AECP. EL_i = the NOx emission limit from Section 5.2 for each engine. F_i = the actual total fuel used by the engine during the seven (7) consecutive calendar day period. k_i = a constant used to convert an engine's fuel use and NOx emission limit to the amount of NOx emitted. k_i is dependent on the engine and the pollutant emitted. Calculation of k_i shall be accomplished using 40 CFR Part 60, Appendix A, Method 19, or an equivalent method approved by EPA, ARB and the APCO. 8.1.3 Only engines in the AECP which were operated during the seven (7) consecutive calendar day period shall be included in the calculations of AE_{Limit} and AE_{Actual}. 8.1.4 The operator shall, at least one time each day the AECP is used, calculate and record the actual aggregate NOx emissions (AE_{Actual}) and the aggregate NOx emission limit (AE_{Limit}) for the preceding seven (7) consecutive calendar day period.	
	8.2 The owner shall establish a NOx emission factor limit for each engine. The established NOx emission factor of an engine shall be no less than the NOx emission factor of the engine from the most recent source test conducted pursuant to Section 6.3 and approved by the APCO. The owner shall not operate an AECP engine in such a manner that NOx emissions exceed the established NOx emission factor of the engine.	8.2 The operator shall establish a NOx emission factor limit for each engine. The established NOx emission factor of an engine shall be no less than the NOx emission factor of the engine from the most recent source test conducted pursuant to Section 6.3 and approved by the APCO. The operator shall not operate an AECP engine in such a manner that NOx emissions exceed the established NOx emission factor of the engine.	**There is no change in the requirements of this section. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**

	8.3 The owner shall submit the AECP to the APCO at least 18 months before compliance with the emission limits in Section 5.1 is required. The AECP shall: 8.3.1 Not be implemented prior to APCO approval. 8.3.2 Be enforceable on a daily basis by the District. 8.3.3 Contain any information necessary to determine eligibility of the engines for alternative emission control, including, but not limited to: 8.3.3.1 A list of engines subject to the AECP. All engines in an AECP shall be under the operational control of a single owner and shall be located at a single stationary source. 8.3.3.2 The NOx emission factor established by the engine owner for each engine pursuant to Section 8.2. 8.3.3.3 The estimated aggregate NOx emissions calculated according to Section 8.1.2. 8.3.4 Present the methodology for determining equivalency of actual NOx emissions under the proposed AECP as compared to the estimated NOx emissions allowed by this rule. 8.3.5 Detail the method of recording and verifying daily compliance with the AECP. 8.3.6 Demonstrate to the satisfaction of the APCO that the difference between the NOx emission limits of this rule and any lower actual NOx emissions will not be used to increase emissions from the same or another source. 8.3.7 Demonstrate that the engines subject to the requirements of Section 5.1 are in compliance with or on an approved schedule for compliance with all applicable District rules.	8.3 The operator shall submit the AECP to the APCO at least 18 months before compliance with the emission limits in section 5.2 is required. The AECP shall: 8.3.1 Not be implemented prior to APCO approval. 8.3.2 Be enforceable on a daily basis by the District. 8.3.3 Contain any information necessary to determine eligibility of the engines for alternative emission control, including, but not limited to: 8.3.3.1 A list of engines subject to the AECP. All engines in an AECP shall be under the operational control of a single operator and shall be located at a single stationary source, 8.3.3.2 The NOx emission factor established by the engine operator for each engine pursuant to Section 8.2, and 8.3.3.3 The estimated aggregate NOx emissions calculated according to Section 8.1.2. 8.3.4 Present the methodology for determining equivalency of actual NO_x emissions under the proposed AECP as compared to the estimated NO_x emissions allowed by this rule. 8.3.5 Detail the method of recording and verifying daily compliance with the AECP. 8.3.6 Demonstrate to the satisfaction of the APCO that the difference between the NOx emission limits of this rule and any lower actual NOx emissions will not be used to increase emissions from the same or another source. 8.3.7 Demonstrate that the engines subject to the requirements of Section 5.2 are in compliance with or on an approved schedule for compliance with all applicable District rules.	**There is no change in the requirements of this section. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**
	8.4 The owner shall submit an updated or modified AECP for approval by the APCO prior to any of the following: 8.4.1 Modification of the engine(s) which would require an Authority-to-Construct. 8.4.2 When new or amended rules are adopted which regulate the emissions from the engines. 8.4.3 When the NOx emission factor established by the engine owner for an engine pursuant to Section 8.2 is modified.	8.4 The operator shall submit an updated or modified AECP for approval by the APCO prior to any of the following: 8.4.1 Modification of the engine(s) which would require an Authority-to- Construct; 8.4.2 When new or amended rules are adopted which regulate the emissions from the engines; or 8.4.3 When the NOx emission factor established by the engine operator for an engine pursuant to Section 8.2 is modified.	**There is no change in the requirements of this section. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**

	8.5 In addition to the records kept pursuant to Section 6.2, the owner shall maintain records, on a daily basis, of the parameters needed to demonstrate compliance with the applicable NOx emission limits when operating under the AECP. These records shall be retained for at least five years, shall be readily available, and be made available to the APCO upon request. The records shall include, but are not limited to, the following for each engine unless otherwise indicated: 8.5.1 Total hours of operation. 8.5.2 Type and quantity (cubic feet of gas or gallons of liquid) of fuel used. 8.5.3 The actual NOx emissions limits to be included in the calculation of AE_{Adual} pursuant to Section 8.1.1. 8.5.4 The actual aggregate NOx emissions (AE_{Actual}) for all the engines in the AECP calculated pursuant to Section 8.1.1. 8.5.5 The estimated NOx emissions limits to be included in the calculation of AE_{Limit} pursuant to Section 8.1.2. 8.5.6 The estimated aggregate NOx emissions (AE_{Limit}) for all the engines in the AECP calculated pursuant to Section 8.1.2. 8.5.7 The comparison of the actual aggregate NOx emissions (AE_{Actual}) for all the engines in the AECP and 90 percent of the estimated aggregate NOx emissions (AE_{Limit}) for all the engines in the AECP to demonstrate compliance with Section 8.1. 8.5.8 Any other parameters needed to demonstrate daily compliance with the applicable NOx emission limits when operating under the AECP.	8.5 In addition to the records kept pursuant to Section 6.2, the operator shall maintain records, on a daily basis, of the parameters needed to demonstrate compliance with the applicable NOx emission limits when operating under the AECP. These records shall be retained for at least five years, shall be readily available, and be made available to the APCO upon request. The records shall include, but are not limited to, the following for each engine unless otherwise indicated: 8.5.1 Total hours of operation, 8.5.2 Type and quantity (cubic feet of gas or gallons of liquid) of fuel used, 8.5.3 The actual NOx emissions limits to be included in the calculation of AE_{Actual} pursuant to Section 8.1.1, 8.5.4 The actual aggregate NOx emissions (AE_{Actual}) for all the engines in the AECP calculated pursuant to Section 8.1.1, 8.5.5 The estimated NOx emissions limits to be included in the calculation of AE_{Limit} pursuant to Section 8.1.2, 8.5.6 The estimated aggregate NOx emissions (AE_{Limit}) for all the engines in the AECP calculated pursuant to Section 8.1.2, 8.5.7 The comparison of the actual aggregate NOx emissions (AE_{Actual}) for all the engines in the AECP and 90 percent of the estimated aggregate NO_X emissions (AE_{Limit}) for all the engines in the AECP to demonstrate compliance with Section 8.1, and 8.5.8 Any other parameters needed to demonstrate daily compliance with the applicable NOx emission limits when operating under the AECP.	**There is no change in the requirements of this section. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**
	8.6 For the purpose of determining the quantity of spark-ignited engines in compliance pursuant to Section 7.6, a spark-ignited engine in an AECP shall not be considered to be in compliance until all spark-ignited engines in the AECP that have been designated to meet more stringent NOx emission factors pursuant to Section 8.2 are in compliance with the rule.	8.6 For the purpose of determining the quantity of spark-ignited engines in compliance pursuant to Section 7.5, a spark-ignited engine in an AECP shall not be considered to be in compliance until all spark-ignited engines in the AECP that have been designated to meet more stringent NOx emission factors pursuant to Section 8.2 are in compliance with the rule.	**There is no change in the requirements of this section. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**

9.0 Exhaust Control System Certification Requirements	9.1 To be considered for APCO certification, the manufacturer or operator shall comply with all of the following requirements: 9.1.1 Certification shall be based upon the emission source testing results of a specific exhaust control system. 9.1.2 A source testing protocol shall be submitted in accordance with the provisions of Rule 1081 (Source Sampling) for approval by the APCO prior to conducting the source test. The source testing protocol approved by the APCO shall be strictly adhered to during certification source testing. 9.1.3 Source testing shall be conducted over the range of operating parameters for which the unit(s) will be operated. 9.1.4 The source testing results shall demonstrate compliance with the emission limits of this rule for each model of exhaust control system(s) to be certified. 9.1.5 The source testing procedure and reports shall be prepared by an ARB- approved independent testing laboratory, and shall contain all the elements identified in the APCO-approved source testing protocol. 9.1.6 Source testing shall be conducted no more than 90 days prior to the date of submission of request for certification by the APCO. 9.1.7 Any additional supporting information required by the APCO to address other performance parameters.	9.1 To be considered for APCO certification, the manufacturer or operator shall comply with all of the following requirements: 9.1.1 Certification shall be based upon the emission source testing results of a specific exhaust control system, 9.1.2 A source testing protocol shall be submitted in accordance with the provisions of Rule 1081 (Source Sampling) for approval by the APCO prior to conducting the source test. The source testing protocol approved by the APCO shall be strictly adhered to during certification source testing, 9.1.3 Source testing shall be conducted over the range of operating parameters for which the unit(s) will be operated, 9.1.4 The source testing results shall demonstrate compliance with the emission limits of this rule for each model of exhaust control system(s) to be certified, 9.1.5 The source testing procedure and reports shall be prepared by an ARB approved independent testing laboratory, and shall contain all the elements identified in the APCO-approved source testing protocol, 9.1.6 Source testing shall be conducted no more than 90 days prior to the date of submission of request for certification by the APCO, and 9.1.7 Any additional supporting information required by the APCO to address other performance parameters.	**There is no change in the requirements of this section. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**
	9.2 The manufacturer or operator requesting certification shall submit to the APCO the following information: 9.2.1 Copies of the source testing results conducted pursuant to the requirements of Section 9.1, and other pertinent technical data to demonstrate compliance with the emission limits of this rule. 9.2.2 The applicant shall sign and date the statement attesting to the accuracy of all information in the statement. 9.2.3 Name and address of the exhaust control system manufacturer or operator, brand name of the exhaust control unit, model number, and description of model of system(s) being certified.	9.2 The manufacturer or operator requesting certification shall submit to the APCO the following information: 9.2.1 Copies of the source testing results conducted pursuant to the requirements of Section 9.1, and other pertinent technical data to demonstrate compliance with the emission limits of this rule, 9.2.2 The applicant shall sign and date the statement attesting to the accuracy of all information in the statement, and 9.2.3 Name and address of the exhaust control system manufacturer or operator, brand name of the exhaust control unit, model number, and description of model of system(s) being certified.	**There is no change in the requirements of this section. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**

	9.3 The APCO will only approve an application for certification to the extent that the requirements of Sections 9.1 through 9.2 are met and the source testing results demonstrate that the emission limits of this rule are met.	9.3 The APCO will only approve an application for certification to the extent that the requirements of Sections 9.1 through 9.2 are met and the source testing results demonstrate that the emission limits of this rule are met.	**There is no change in the requirements of this section. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**
	9.4 The APCO-approved certification is valid only for the range of operating parameters and conditions for which certification is issued.	9.4 The APCO-approved certification is valid only for the range of operating parameters and conditions for which certification is issued.	**There is no change in the requirements of this section. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**
	9.5 The APCO shall publish a list of certified exhaust control systems after the certification process is completed.	9.5 The APCO shall publish a list of certified exhaust control systems after the certification process is completed.	**There is no change in the requirements of this section. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**

District Rule 4702 was amended (8/18/2011). As analyzed, each amended section of the non-SIP version of the rule is at least as stringent as, or more stringent than the corresponding section of the SIP version of the rule. Therefore, it is concluded that overall the non-SIP version of the rule is more stringent than the SIP version of the rule

SIP APPROVED VERSION OF DISTRICT RULE 4702

Table 1 Emission Limits/Standards for a Spark-Ignited Internal Combustion Engine and Emission Limits/Standards and Compliance Schedule for a Spark-Ignited Engine Used Exclusively in Agricultural Operations (corrected to 15% oxygen on a dry basis)

Engine Type	NOx	CO	VOC
1. Rich-Burn			
a. Waste gas fueled	50 ppmv or 90% reduction	2000 ppmv	250 ppmv
b. Cyclic loaded, field gas fueled	50 ppmv	2000 ppmv	250 ppmv
c. All other engines	25 ppmv or 96% reduction	2000 ppmv	250 ppmv
2. Lean-Burn			
a. Two stroke, gaseous fueled, less than 100 horsepower	75 ppmv or 85% reduction	2000 ppmv	750 ppmv
b. All other engines	65 ppmv or 90% reduction	2000 ppmv	750 ppmv
3. Rich-Burn Engine Used Exclusively in Agricultural Operations			
a. Comply by 1/1/2009, or if owner has an agreement to electrify, comply by 1/1/2010	90 ppmv or 80% reduction	2000 ppmv	250 ppmv
4. Lean-Burn Engine Used Exclusively in Agricultural Operations			
a. Comply by 1/1/2009 or if owner has an agreement to electrify comply by 1/1/2010	150 ppmv or 70% reduction	2000 ppmv	750 ppmv
5. Certified Spark-Ignited Engine Used Exclusively in AO and installed on or before June 16, 2005			
a. Comply by 6/1/2006	Meet Certified Spark-Ignited Engine Standard of HC+NOx < 0.6 g/bhp-hr		

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Table 2 Emission Limits/Standards and Compliance Schedule for a Compression-Ignited Internal Combustion Engine (corrected to 15% oxygen on a dry basis)

Engine Type	Emission Limit/ Standard	Compliance Date
1. Non-Certified Compression-Ignited Engine		
a. Greater than 50 bhp but not more than 500 bhp	EPA Tier 3 or Tier 4	1/1/2010
b. Greater than 500 bhp but not more than 750 bhp and less than 1000 annual operating hours	EPA Tier 3	1/1/2010
c. Greater than 750 bhp and less than 1000 annual operating hours	EPA Tier 4	7/1/2011
d. Greater than 500 bhp and greater than or equal to 1000 annual operating hours	80 ppm NOx, 2,000 ppm CO, 750 ppm VOC	1/1/2008 or, if owner has an agreement to electrify, comply by 1/1/2010
2. Certified Compression-Ignited Engine		
a. EPA Certified Tier 1 or Tier 2 Engine	EPA Tier 4	1/1/2015 or 12 years after installation date, whichever is later
b. EPA Certified Tier 3 or Tier 4 Engine	Meet Certified Compression-Ignited Engine Standard in effect at time of installation	At time of installation

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Compliance Schedule 1 – Non-AO Spark-Ignited Engine

Quantity of Non-AO Spark-Ignited Engines to be in Compliance at a Stationary Source	Compliance Date
a. 25% or more of the total number of non-AO spark-ignited engines at a stationary source on June 1, 2005	6/1/05
b. 62.5% or more of the total number of non-AO spark-ignited engines at a stationary source on June 1, 2006	6/1/06
c. 100% of the total number of non-AO spark-ignited engines at a stationary source on June 1, 2007	6/1/07

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Table 1 Emission Limits/Standards for a Spark-Ignited Internal Combustion Engine rated at >50 bhp Used Exclusively in Non-AO (All ppmv limits are corrected to 15% oxygen on a dry basis.).			
Engine Type	NOx	CO	VOC
1. Rich-Burn			
a. Waste gas fueled	50 ppmv or 90% reduction	2000 ppmv	250 ppmv
b. Cyclic loaded, field gas fueled	50 ppmv	2000 ppmv	250 ppmv
c. All other engines	25 ppmv or 96% reduction	2000 ppmv	250 ppmv
2. Lean-Burn			
a. Two stroke, gaseous fueled, less than 100 horsepower	75 ppmv or 85% reduction	2000 ppmv	750 ppmv
b. All other engines	65 ppmv or 90% reduction	2000 ppmv	750 ppmv

Table 2 Emission Limits for a Spark-Ignited Internal Combustion Engine Rated at >50 bhp Used Exclusively in Non-AO (All ppmv limits are corrected to 15% oxygen on a dry basis). Emission Limits are effective according to the compliance schedule specified in Section 7.5.			
Engine Type	NOx (ppmv)	CO (ppmv)	VOC (ppmv)
1. Rich-Burn			
a. Waste Gas Fueled	50	2000	250
b. Cyclic Loaded, Field Gas Fueled	50	2000	250
c. Limited Use	25	2000	250
d. Rich-Burn Engine, not listed above	11	2000	250
2. Lean-Burn Engines			
a. Two-Stroke, Gaseous Fueled, >50 bhp and < 100 bhp	75	2000	750
b. Limited Use	65	2000	750
c. Lean-Burn Engine used for gas compression	65 ppmv or 93% reduction	2000	750
d. Lean-Burn Engine, not listed above	11	2000	750

Table 3 Emission Limits/Standards and Compliance Schedule for a Spark-Ignited Internal Combustion Engine >50 bhp Used Exclusively in AO (All ppmv limits are corrected to 15% oxygen on a dry basis).			
Engine Type	NOx Limit	CO Limit	VOC Limit
1. Rich-Burn	90 ppmv or 80% reduction	2000 ppmv	250 ppmv
2. Lean-Burn	150 ppmv or 70% reduction	2000 ppmv	750 ppmv
3. Certified and installed on or before June 16, 2005	Meet a Certified Spark-Ignited Engine Standard of HC + NOx < 0.6 g/bhp-hr		

Table 4 Emission Limits/Standards and Compliance Schedule for Compression-Ignited Internal Combustion Engine (corrected to 15% oxygen on a dry basis)		
Engine Type	Emission Limit/ Standard	Compliance Date
1. Non-Certified Compression-Ignited Engine Installed on or before June 1, 2006		
a. Greater than 50 bhp but not more than 500 bhp	EPA Tier 3 or Tier 4	1/1/2010
b. Greater than 500 bhp but not more than 750 bhp and less than 1000 annual operating hours	EPA Tier 3	1/1/2010
c. Greater than 750 bhp and less than 1000 annual operating hours	EPA Tier 4	7/1/2011
d. Greater than 500 bhp and greater than or equal to 1000 annual operating hours	80 ppmv NOx, 2,000 ppmv CO, 750 ppmv VOC	1/1/2008 or, if owner has an agreement to electrify, comply by 1/1/2010
2. Certified Compression-Ignited Engine		
a. EPA Certified Tier 1 or Tier 2 Engine	EPA Tier 4	1/1/2015 or 12 years after installation date, but not later than 6/1/2018
b. EPA Certified Tier 3 or Tier 4 Engine	Meet Certified Compression-Ignited Engine Standard in effect at time of installation	At time of installation

Table 5 Compliance Schedule for Non-AO Spark-Ignited Engines Subject to Table 2 Emission Limits, and SOx Control and Monitoring Requirements			
Engines to be in Compliance at a Stationary Source	Emission Control Plan	Authority to Construct and Inspection and Monitoring Plan	Full Compliance
Operator with a single engine at a stationary source			
Single Engine	1/1/12	1/1/13	1/1/14
Operator with at least two engines, but less than 12 engines at a stationary source			
33% or more of the engines subject to Table 2 emission limits as of August 18, 2011	7/1/12	1/1/13	1/1/14
66% or more of the engines subject to Table 2 emission limits as of August 18, 2011	7/1/12	1/1/14	1/1/15
100% of the engines subject to Table 2 emission limits	7/1/12	1/1/15	1/1/16
Operator with at least 12 engines at a stationary source			
25% or more of the engines subject to Table 2 emission limits as of August 18, 2011	7/1/12	1/1/13	1/1/14
50% or more of the engines subject to Table 2 emission limits as of August 18, 2011	7/1/12	1/1/14	1/1/15
75% or more of the engines subject to Table 2 emission limits as of August 18, 2011	7/1/12	1/1/15	1/1/16
100% of the engines subject to Table 2 emission limits	7/1/12	1/1/16	1/1/17