



OCT 06 2015

Mr. Wes Knapp
Oildale Energy LLC
P.O. Box 5487
Bakersfield, CA 93388

**Re: Notice of Preliminary Decision – Title V Permit Renewal
District Facility # S-73
Project # 1143865**


Dear Mr. Knapp:

Enclosed for your review and comment is the District's analysis of the application to renew the Federally Mandated Operating Permit for Oildale Energy LLC at 1134 Manor Street in Bakersfield, California.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. After addressing all comments made during the 30-day public notice and the 45-day EPA comment periods, the District intends to issue the renewed Federally Mandated Operating Permit. Please submit your written comments on this project within the 30-day public comment period, as specified in the enclosed public notice.

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

Sincerely,



Arnaud Marjollet
Director of Permit Services

AM: dt/ya

Enclosures

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

Seyed Sadredin
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**SAN JOAQUIN VALLEY
AIR POLLUTION CONTROL DISTRICT**

**Proposed Title V Permit Renewal Evaluation
Oildale Energy LLC
S-73**

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TITLE V PERMIT RENEWAL EVALUATION


Cogeneration

Engineer: David Torii

Date:

Lead Engineer: Rich Karrs

Facility Number: S-73
Facility Name: Oildale Energy LLC
Mailing Address: P.O. Box 5487
Bakersfield, CA 93388

 9/22/15

Contact Name: Wes Knapp
Phone: (661) 392-0301

Responsible Official: Wes Knapp
Title: Plant Manager of the Asset Manager

Project #: 1143865

Deemed Complete: 10/10/14

I. PROPOSAL

Oildale Energy LLC (OE) was issued a Title V permit on 7/23/99. 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 last Title V permit renewal on 3/15/11.

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

Oildale Energy LLC is located at 1134 Manor Street, Bakersfield.

III. EQUIPMENT LISTING

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

IV. GENERAL PERMIT TEMPLATE USAGE

For this application the applicant did not request to utilize current template No. SJV-UM-0-3, Facility Wide Umbrella. However, previous Title V permit S-73-0-3 utilized the previous version of SJV-UM-0-3 which is essentially the same as SJV-UM-0-3.

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

V. SCOPE OF EPA AND PUBLIC REVIEW

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

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

The following permit conditions, including their underlying applicable requirements, originate from model general permit templates and are not subject to further EPA or public review.

Conditions 1 through 40 of the requirements for permit unit S-73-0-4.

VI. FEDERALLY ENFORCEABLE REQUIREMENTS

A. Rules Updated

- District Rule 2020 Exemptions, (Amended December 18, 2014)
- District Rule 2201, New and Modified Stationary Source Review Rule (amended April 21, 2011)
- 40 CFR Part 60, Subpart D, Standards of Performance for Fossil-Fuel-Fired Steam Generators (amended February 16, 2012)

- 40 CFR Part 60, Subpart Da, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units (amended February 16, 2012)
- 40 CFR Part 60, Subpart Db, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units (amended February 16, 2012)
- 40 CFR Part 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units (amended February 16, 2012)
- 40 CFR Part 60, Subpart GG, Standards of Performance for Stationary Gas Turbines (2/27/14)
- 40 CFR Part 63, Subpart DDDDD National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters
- 40 CFR Part 63, Subpart JJJJJJ National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources
- 40 CFR Part 82, Subpart B Stratospheric Ozone (June 25, 2013)
- 40 CFR Part 82, Subpart F Stratospheric Ozone (June 25, 2013)

B. Rules Removed

none

C. Rules Added

Following rules are that are applicable to operation of this facility has been adopted since issuance of the initial Title V permit.

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

D. Rules Not Updated

The following rules have been not been amended since the renewed Title V permit was issued. The most recent date reflects the version which has been approved by the EPA into the SIP.

- District Rule 1070 Inspections (Amended December 17, 1992)
- District Rule 1080, Stack Monitoring (Amended December 17, 1992)
- District Rule 1081, Source Sampling (Amended December 16, 1993)
- District Rule 1100, Equipment Breakdown (amended December 17, 1992)
- District Rule 1160, Emission Statements (adopted November 18, 1992)
- District Rule 2010, Permits Required (amended December 17, 1992)
- District Rule 2031, Transfer of Permits (amended December 17, 1992)

- District Rule 2040, Applications (amended December 17, 1992)
- District Rule 2070, Standards for Granting Applications (amended December 17, 1992)
- District Rule 2080, Conditional Approval (amended December 17, 1992)
- District Rule 2520, Federally Mandated Operating Permits (amended June 21, 2001)
- District Rule 4101, Visible Emissions (amended February 17, 2005)
- District Rule 4102, Nuisance (amended December 17, 1992)
- District Rule 4201, Particulate Matter Concentration (amended December 17, 1992)
- District Rule 4202, Particulate Matter - Emission Rate (amended December 17, 1992)
- District Rule 4301, Fuel Burning Equipment (amended December 17, 1992)
- District Rule 4304 Equipment Tuning Procedure for Boilers, Steam Generators, and Process Heaters (adopted October 19, 1995)
- District Rule 4305, Boilers, Steam Generators, Process Heaters - Phase 2 (amended August 21, 2003)
- District Rule 4306 Boilers, Steam Generators, and Process Heaters - Phase 3 (amended October 16, 2008)
- District Rule 4309, Dryers, Dehydrators, and Ovens (Adopted December 15, 2005)
- District Rule 4320, Advanced Emission Reduction Options For Boilers, Steam Generators, And Process Heaters Greater Than 5.0 MMBtu/Hr (Adopted October 16, 2008)
- District Rule 4351, Boilers, Steam Generators, Process Heaters - Phase 1 (amended August 21, 2003)
- District Rule 4601 Architectural Coatings (Amended December 17, 2009)
- District Rule 4703 Stationary Gas Turbines (amended September 20, 2007)
- District Rule 4623, Storage of Organic Liquids (amended May 19, 2005)
- District Rule 4701, Internal Combustion Engines, Phase 1 (amended August 21, 2003)
- District Rule 4801, Sulfur Compounds (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 September 16, 2004)
- 40 CFR Part 60, Subpart GG, Standards of Performance for Stationary Gas Turbines (10/17/2000)

- 40 CFR Part 60, Subpart KKKK, Standards of Performance for Stationary Combustion Turbines (3/20/09)
- 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos
- 40 CFR Part 63 Subpart YYYY—National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines
- 40 CFR Part 64, Compliance Assurance Monitoring (CAM)
- 40 CFR Part 68, Chemical Accident Prevention Provisions

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:

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

Condition 49 of permit unit S-73-0-4 and 22 and 23 of S-73-2-26 are based on District Rule 4102 and will therefore not be discussed any further.

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 or most recent renewal of the 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 amendments to this rule do not have any effect on current permit requirements and will therefore not be addressed in this evaluation.

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

District Rule 2201 has been amended since this facility's initial Title V permit was issued. This Title V permit renewal does not constitute a modification

per section 3.26, 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 at this time.

C. District Rule 2410 – Prevention of Significant Deterioration

The prevention of significant deterioration (PSD) program is a construction permitting program for new major stationary sources and major modifications to existing major stationary sources located in areas classified as attainment or in areas that are unclassifiable for any criteria air pollutant. The provisions of this rule apply to any source and the owner or operator of any source subject to any requirement under Title 40 Code of Federal Regulations (40 CFR) Part 52.21 as incorporated into this rule.

The rule did not create new requirements, but merely transfers the authority for the 40 CFR Part 52.21 requirements to the District. Prior to adoption of this rule, that authority was vested with the USEPA. This action does not involve construction and thus does not trigger additional PSD requirements for this source. Therefore, the facility is not subject to this rule and no further discussion is required.

D. District Rule 2520 - Federally Mandated Operating Permits

Greenhouse Gas Requirements

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.

E. 40 CFR Part 60, Subpart D, Standards of Performance for Fossil-Fuel-Fired Steam Generators (amended February 16, 2012)

This subpart potentially applies to heater S-73-3. Pursuant to §60.40(a) this subpart does not apply to steam generating units rated less than 250 MMBtu/hr. S-73-3 is rated at 93 MMBtu/hr. Therefore, this subpart does not apply.

F. 40 CFR Part 60, Subpart Da, Standards of Performance for Electric Utility Steam Generating Units (amended February 16, 2012)

This subpart potentially applies to heater S-2076-1. Pursuant to §60.40(a) this subpart does not apply to steam generating units rated less than 250 MMBtu/hr. S-73-3 is rated at 93 MMBtu/hr. Therefore, this subpart does not apply.

G. 40 CFR Part 60, Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units (amended February 16, 2012)

This subpart potentially applies to heater S-73-3. Pursuant to §60.40(a) this subpart does not apply to steam generating units rated less than 100 MMBtu/hr. S-73-3 is rated at 93 MMBtu/hr. Therefore, this subpart does not apply.

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

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 Dc applies to Small Industrial-Commercial-Institutional Steam Generators between 10 MMBtu/hr and 100 MMBtu/hr (post-6/9/89 construction, modification or, reconstruction). Subpart Dc has standards for SO_x and PM₁₀. The 93 MMBtu/hr heater S-73-3 is subject to Subpart Dc requirements.

60.42c – Standards for Sulfur Dioxide

Since coal is not combusted by the heater, the requirements of this section are not applicable.

60.43c – Standards for Particulate Matter

The heater does not fire on coal, combust mixtures of coal with other fuels, combust wood, combust mixtures of wood with other fuels, or oil; therefore, it is not subject to the requirements of this section.

60.44c – Compliance and Performance Tests Methods and Procedures for Sulfur Dioxide.

Since the heater is not subject to the sulfur dioxide requirements of this subpart, no testing to show compliance is required. Therefore, the requirements of this section are not applicable to the heater.

60.45c – Compliance and Performance Test Methods and Procedures for Particulate Matter

Since the heater is not subject to the particulate matter requirements of this subpart, no testing to show compliance is required. Therefore, the requirements of this section are not applicable to the heater.

60.46c – Emission Monitoring for Sulfur Dioxide

Since the heater is not subject to the sulfur dioxide requirements of this subpart, no monitoring is required. Therefore, the requirements of this section are not applicable to the heater.

60.47c – Emission Monitoring for Particulate Matter

Since the heater is not subject to the particulate matter requirements of this subpart, no monitoring is required. Therefore, the requirements of this section are not applicable to the heater.

60.48c – Reporting and Recordingkeeping Requirements

Section 60.48c (a) states that the owner or operator of each affected facility shall submit notification of the date of construction or reconstruction, anticipated startup, and actual startup, as provided by §60.7 of this part. This notification shall include:

- (1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.

The design heat input capacity and type of fuel combusted at the facility will be listed on the unit's equipment description. No conditions are required to show compliance with this requirement.

- (2) If applicable, a copy of any federally enforceable requirement that limits the annual capacity factor for any fuel mixture of fuels under §60.42c or §40.43c.

This requirement is not applicable since the unit is not subject to §60.42c or §40.43c.

- (3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.

The facility has not proposed an annual capacity factor; therefore one will not be required.

- (4) Notification if an emerging technology will be used for controlling SO₂ emissions. The Administrator will examine the description of the control device and will determine whether the technology qualifies as an emerging technology. In making this determination, the Administrator may require the owner or operator of the affected facility to submit additional information concerning the control device. The affected facility is subject to the provisions of §60.42c(a) or (b)(1), unless and until this determination is made by the Administrator

This requirement is not applicable since the unit will not be equipped with an emerging technology used to control SO₂ emissions.

Section 60.48c (g) states that the owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each day. The following conditions will be added to the permit to ensure compliance with this section.

- A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of fuel combusted in the unit shall be installed, utilized and maintained. [District Rule 2201 and 40 CFR 60.48c (g)]
- Permittee shall maintain daily records of the type and quantity of fuel combusted by the heater. [District Rule 2201 and 40 CFR 60.48c (g)]

Section 60.48c (i) states that all records required under this section shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record. District Rule 4320 requires that records be kept for five years. Compliance is ensured with the following condition:

- 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, 4320, and 40 CFR 60.48c (i)]

Therefore, compliance with the requirements of this rule is expected.

I. 40 CFR Part 60, Subpart GG, Standard of Performance for Stationary Gas Turbines

This requirement limits emissions of nitrogen oxides. Emissions shall not exceed a NO_x emission rate of 75 ppmv or 150 ppmv, depending on the unit size (at 15% O₂ with the ISO correction factor). The following analysis shows that the

proposed requirement of District Rule 4703 is more stringent than 40 CFR requirements pertaining to NO_x emissions. Streamlining procedures, as documented in the following steps is utilized to substitute the proposed set of requirements for the otherwise applicable requirements.

The following table has side-by-side comparison of applicable requirements:

Type of Requirement	District Rule 4703	Subpart GG, § 60.332, 60.333 and 60.334	Proposed Requirement
Emissions Limit	Table 5-2, section e - for > 10 MW, 3 ppmv @ 15% O ₂ . (Tier II Enhanced Option)	60.332(a)(1) – 75 ppmv @ 15% O ₂ . (Lowest possible concentration) 60.333(a) No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine any gases which contain sulfur dioxide in excess of 0.015% by volume at 15% oxygen and on a dry basis.	3 ppmv @ 15% O ₂ .
Work place standards	N/A	60.333(b) No owner or operator subject to the provisions of this subpart shall burn in any stationary gas turbine any fuel, which contains sulfur in excess of 0.8% by weigh (8000 ppmw).	This unit shall be fired exclusively on PUC-quality natural gas which has a total sulfur content of less than or equal to 1.0 gr/100 scf
Monitoring	(6.2.1) 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	60.334(a) The owner or operator of any stationary gas turbine subject to the provisions of this subpart and using water injection to control NO _x emissions shall install or operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water to fuel being fired in the turbine. 60.334(b) Install, certify, maintain, operate, and quality-assure a continuous emissions monitoring system for NO _x and O ₂ . 60.334(h)(3) The sulfur content of each fuel source shall be: (i) documented in a valid purchase contract, a supplier certification, a tariff sheet or transportation contract or (ii) demonstrated by representative fuel sampling data which shows that sulfur content of gas does not exceed 0.25 gr/100 scf. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of Appendix D of 40 CFR part 75 is required	The owner or operator shall install, , certify, maintain, operate, and quality-assure a system which continuously measures and records the exhaust gas NO _x and O ₂ concentrations. The sulfur content of each fuel source shall be: (i) documented in a valid purchase contract, a supplier certification, a tariff sheet or transportation contract or (ii) monitored weekly using ASTM Methods D4084, D5504, D6228, or Gas Processors Association Standard 2377. If sulfur content is less than 1.0 gr/100 scf for 8 consecutive weeks, then the Monitoring frequency shall be every six (6) months. If any six (6) month monitoring show exceedance, weekly monitoring shall resume and exceedance shall be reported to APCO

Type of Requirement	District Rule 4703	Subpart GG, § 60.332, 60.333 and 60.334	Proposed Requirement
Reporting	As per District Rule 1080: Time intervals, data and magnitude of excess NOx emissions, nature and cause of excess (if known), corrective actions taken and preventive measures adopted; 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; 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; A negative declaration when no excess emissions occurred	60.334(J) the owner or operator shall submit reports of excess emissions and monitor downtime as required under §60.7(c), periods of excess emissions that shall be reported are defined as follows: 60.334(J)(1)(iii) - An hour of excess emissions shall be 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 diluent (or both). 60.334(J)(5): all reports required under §60.7(c) shall be post marked by 30 th day following the end of each calendar quarter.	The owner or operator shall submit a written report of CEM operations 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 the following: Time intervals, data and magnitude of excess NOx emissions, nature and cause of excess (if known), corrective actions taken and preventive measures adopted; 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; Applicable time and date of each period during which the CEM was inoperative (monitor downtime), except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. 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 diluent (or both)
Testing	Annual Testing for nitrogen oxides (NOx) concentrations using EPA Method 20 or 7E and oxygen (O ₂) using Method 3, 3A, or 20.	Initial NOx performance testing using EPA method 20 or 7E and EPA method 3, 3A for O ₂ .	Annual Testing for nitrogen oxides (NOx) concentrations using EPA Method 20 or 7E and oxygen (O ₂) using Method 3, 3A, or 20.

The District Rule 4703 requirement to limit NOx concentration to 3 ppmv @ 15% O₂ is clearly more stringent than the Subpart GG emissions limit of 75 ppmv as discussed below. Condition 27 to the draft PTO assures compliance with this requirement.

Compliance with SO_x Emission Concentration Limit - 60.333(a):

Natural gas suppliers in California (PG&E, SOCal Gas, etc) regulate the quality of the gas as following:

- Pacific Gas & Electric (PG&E) has a transportation agreement to deliver gas with a maximum total sulfur content of 1.0 gr/100 scf (actual: 0.3 to 0.5 gr/100 scf, based on source testing).
- Southern California Edison's (SoCal Gas) Standard Specifications for Natural Gas and Substitute Fuel Gases (from SoCal Gas Company Procedures, 12/26/85) has a recommended total sulfur limit of 0.75 gr/100 scf.

- Mojave Gas Company's FERC Gas Tariff General Terms and Conditions (12/30/91) requires delivered natural gas to contain no more than 0.75 gr/100 scf total sulfur.

The California Air Resource Board (ARB), in their document Guidance for Power Plant Siting (Stationary Source Div., 6/99), also determined that 1.0 gr S/100 scf is the sulfur content of gas supplied by a utility regulated by the Public Utilities Commission (PUC).

All natural gas that is regulated enters the PUC pipeline for distribution to consumers and is tested to assure that its composition conforms to above standards. Therefore, total sulfur content of 1.0 gr/100 scf is consistent with quality of gas supplied by the utilities.

Compliance is expected as shown by the following calculations at 1 grain of total sulfur per 100 standard cubic feet of gas, assuming all sulfur is converted to SO₂.

$$\begin{aligned} \%S(\text{lb/lbNG}) &= \left(\frac{1 \text{ gr}}{100 \text{ scf}} \right) \left(\frac{1 \text{ lb}}{7000 \text{ gr}} \right) \left(\frac{24.5 \text{ L}}{\text{mol NG}} \right) \left(\frac{1 \text{ mol}}{16 \text{ g}} \right) \left(\frac{454 \text{ g}}{1 \text{ lb}} \right) \left(\frac{0.035 \text{ scf}}{1 \text{ L}} \right) (100) \\ &= 0.00348\% \text{ sulfur by weight} \end{aligned}$$

$$\begin{aligned} \text{lb SO}_2/\text{scf gas} &= (0.0000348)(1 \text{ lb}/23.8 \text{ scf gas})(64 \text{ lb SO}_2/32 \text{ lb S}) \\ &= 2.92 \text{ E-6 lb SO}_2/\text{scf gas} \end{aligned}$$

$$\text{lb SO}_2/V_{\text{exhaust}} = (\text{lb SO}_2/\text{scf gas}) \div (\text{F factor}) (\text{Btu content of natural gas})$$

$$\left(\frac{\text{lb SO}_2}{V_{\text{exhaust}}} \right) = \frac{\left(2.92 \text{ E-6 } \frac{\text{lb SO}_2}{\text{scf gas}} \right) \left(\frac{10^6 \text{ Btu}}{\text{MMBtu}} \right)}{\left(8710 \frac{\text{dscf}}{\text{MMBtu}} \right) \left(1000 \frac{\text{Btu}}{\text{scf}} \right)} = 3.35 \text{ E-7 } \frac{\text{lb SO}_2}{\text{dscf exhaust}}$$

$$V_{\text{SO}_2}/V_{\text{exhaust}} = nRT/P$$

where,

$$n = \text{moles SO}_2 = (3.35 \text{ E-7 lb SO}_2/\text{dscf exhaust}) / (64 \text{ lb SO}_2/\text{lb-mol})$$

$$R = \text{universal gas constant} = 10.73 \text{ psi-ft}^3/\text{lb-mol-R}$$

$$T = \text{standard temperature} = 60 \text{ }^\circ\text{F} = 520 \text{ }^\circ\text{R}$$

$$P = \text{standard pressure} = 14.7 \text{ psi}$$

$$\text{Therefore, } \left(\frac{V_{\text{SO}_2}}{V_{\text{exhaust}}} \right) = \frac{\left(\frac{3.35 \text{ E-6 lb SO}_2}{\text{dscf exhaust}} \right) \left(\frac{10.73 \text{ psi-ft}^3}{\text{lb-mole-}^\circ\text{R}} \right) (520 \text{ }^\circ\text{R})}{\left(\frac{64 \text{ lb SO}_2}{\text{lb-mol}} \right) (14.7 \text{ psi})} = 1.99 \text{ E-6 } \frac{\text{dscf}}{\text{dscf exhaust}}$$

$$= 1.99 \text{ ppmv dry}$$

Diluting it to 15% O₂

$$\text{ppmv @ 15\% O}_2 = \text{ppmv dry} \times \left(\frac{20.9 - 15}{20.9} \right) = 0.56 \text{ ppmv}$$

0.56 ppmv << 150 ppmv.

Compliance with 150 ppmv SO_x at 15% excess O₂ and dry standard conditions and 2,000 ppmv is assured because the unit has a fuel sulfur content of 1.0 gr/100 scf. Condition 41 of the permit ensures compliance with this rule and condition.

Compliance with Sulfur Fuel Content Limit - 60.333(b):

Natural gas with fuel sulfur content of 1.0 gr/100 scf or less assures compliance with the 0.8% sulfur by weight limit of New Source Performance Standard, Subpart GG - 40 CFR Subpart 60.333(b). This standard can be converted to an expression of weight percent of sulfur in the natural gas (ng):

$$\begin{aligned} \%S(\text{lb/lbNG}) &= \left(\frac{1 \text{ gr}}{100 \text{ scf}} \right) \left(\frac{1 \text{ lb}}{7000 \text{ gr}} \right) \left(\frac{24.5 \text{ L}}{\text{mol NG}} \right) \left(\frac{1 \text{ mol}}{16 \text{ g}} \right) \left(\frac{454 \text{ g}}{1 \text{ lb}} \right) \left(\frac{0.035 \text{ scf}}{1 \text{ L}} \right) (100) \\ &= 0.00348\% \text{ sulfur by weight} \end{aligned}$$

Thus natural gas with fuel sulfur content of 1.0 gr/100 scf or less assures compliance with the 0.8% sulfur by weight limit of New Source Performance Standard, Subpart GG - 40 CFR Subpart 60.333(b).

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

These regulations apply to servicing motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC). Sections of this regulation were amended in 2013, and conditions 27 and 28 of S-723-0-3 assure compliance with the requirements.

K. District Rule 4101 - Visible Emissions

District Rule 4101 has been submitted to the EPA to replace SIP approved Rule 401 (all counties of the SJVUAPCD). EPA made a preliminary determination that District Rule 4101 is "more stringent" than the county versions previously referenced, per correspondence dated August 20, 1996.

Section 5.0 prohibits the discharge of any air contaminant for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker in shade as that designated as No. 1 on the Ringelmann Chart; or is of such opacity as to obscure an observer's view to a degree equal to or greater

than the smoke described in Section 5.1 of Rule 4101. Condition 22 of permit unit -0-4 ensures compliance.

IX. PERMIT SHIELD

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

A. Requirements Addressed by Model General Permit Templates

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

B. Requirements not Addressed by Model General Permit Templates

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

C. Obsolete Permit Shields From Existing Permit Requirements

No permit shields were removed.

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

ATTACHMENT A

Draft Renewed Title V Operating Permit

San Joaquin Valley Air Pollution Control District

FACILITY: S-73-0-4

EXPIRATION DATE: 08/31/2015

FACILITY-WIDE REQUIREMENTS

1. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [Kern County Rule 111; and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
2. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [Kern County Rule 111; and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
3. {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
4. {4365} Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (12/20/07). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
5. {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
6. {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
7. {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
8. {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
9. {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

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate. Any amendments to these Facility-wide Requirements that affect specific Permit Units may constitute modification of those Permit Units.

Facility Name: OILDALE ENERGY LLC
Location: 1134 MANOR ST & NORRIS RD, OILDALE, CA 93308
8-73-0-4 : Sep 14 2015 7:30AM - TORID

10. {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
11. {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
12. {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
13. {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
14. {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
15. {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
16. {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
17. {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
18. {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
19. {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
20. {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
21. {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

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

22. {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
23. {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
24. {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
25. {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
26. {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
27. {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
28. {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
29. {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
30. {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
31. {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
32. {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
33. {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

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

34. {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
35. {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
36. {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
37. {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
38. {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
39. {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
40. {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
41. Equipment covered by this permit shall at all times be maintained in good working order and be operated as efficiently as possible so to minimize air pollutant emissions. [PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
42. In the event of changes in control or ownership, this Operating Permit shall be binding on new owners and operators. The applicant shall notify successor of the existence of this Operating Permit and its conditions in writing and forward a copy to the District, California Air Resources Board, and EPA. [PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
43. The applicant shall construct and operate the facility in compliance with all other applicable provisions of 40 CFR Parts 52, 60 and 61 and all other applicable Federal, State and District air quality regulations. [PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
44. At all times, including periods of startup, shutdown, and malfunction, the emissions units and associated air pollution control equipment shall be operated in a manner consistent with good air pollution control practice for minimizing emissions. [PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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

45. Operation of rental units during periods of startup, shutdown, or malfunction of equipment covered by this permit shall be reported to EPA in the quarterly excess emissions report. Reports shall include the date and time of startup of all rental units, the date and time of shutdown of all rental units, and any excess emissions associated with the operation of the rental units. [PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
46. All conditions contained within this permit are applicable to the operation of any rental units. [PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
47. Variances issued by the APCO or the ARB do not relieve the permittee from compliance with any of the terms or conditions imposed by the PSD permit. [PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
48. All correspondence as required by this Operating Permit shall be forwarded to: the District; Director, Air Div. (Attn: Air-3-3), EPA Region 9, 75 Hawthorne St. San Francisco, CA 94105; and Director, Stationary Source Div., CARB, Box 2815, Sacramento, CA 95812. [PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
49. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
50. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin September 23 of each 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

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

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-73-2-26

EXPIRATION DATE: 08/31/2015

SECTION: 07 TOWNSHIP: 29S RANGE: 28E

EQUIPMENT DESCRIPTION:

COGENERATION SYSTEM WITH GENERAL ELECTRIC LM6000 GAS TURBINE ENGINE (GTE) WITH STEAM INJECTION, OXIDATION CATALYST, WASTE HEAT RECOVERY SYSTEM, EMERGENCY BYPASS STACK, AND DORMANT DUCT BURNER

PERMIT UNIT REQUIREMENTS

1. When the duct burner is not operated, the fuel line to the duct burner shall be physically disconnected. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
2. When duct burner is dormant, monitoring, source testing and other operational requirements shall be waived for the duct burner. Upon recommencing operation of the duct burner, permittee shall adhere to all monitoring, source testing and operational requirements as set forth on this permit. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
3. A source test to demonstrate compliance with the NOx and CO emission limits for the gas turbine engine and duct burner shall be performed within 60 days of recommencing operation of the duct burner. [District Rule 4703] Federally Enforceable Through Title V Permit
4. Permittee shall notify the District at least seven (7) calendar days prior to recommencing operation of the duct burner. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
5. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102] Federally Enforceable Through Title V Permit
6. Waste heat recovery system shall include: heat transfer fluid (HTF) system; high pressure steam generator with economizer, evaporator, superheater, and Coen Low-NOx auxiliary duct burner upstream of heat recovery steam generator; oxidation catalyst bed; low pressure steam generator system with economizer and evaporator, and feedwater heater supplying high pressure steam generator; main exhaust stack downstream of waste heat recover unit; and emergency bypass exhaust stack positioned before waste heat recovery unit. [District Rule 2201 and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
7. Gas turbine engine and duct burner shall be equipped with operational recording fuel flowmeters. [District Rules 2201, 2080; and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
8. Selective catalytic reduction system shall be equipped with continuously recording ammonia injection flowmeter and continuously recording inlet temperature indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Steam injection system shall be equipped with continuously recording flowmeter. [District Rules 2201, 2080; and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
10. Electrical generator shall be equipped with recording power output meter. [District Rules 2201 and 2080] Federally Enforceable Through Title V Permit
11. GTE shall be equipped with NOx monitor upstream of SCR unit and NOx and CO CEM after SCR unit. [District Rule 1080] Federally Enforceable Through Title V Permit

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

12. Heat transfer fluid (HTF) shall not contain any volatile organic compounds as defined in District Rule 1020 (amended December 18, 1997). [District Rule 2201] Federally Enforceable Through Title V Permit
13. There shall be no visible emissions from coalescer exhaust stack. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Gas turbine engine and duct burner shall be fired only on PUC quality natural gas. [District Rule 2201; 40 CFR 60.333(a) & (b); 60.332(a); Kern County Rule 407; and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
15. Gas turbine engine may operate concurrently with heaters listed in any single permit S-44-1, -2, -3, -4, or -6 provided the cumulative concurrent operation of gas turbine engine with any heaters listed in any of permit units S-44-1, -2, -3, -4, and -6 does not exceed 360 hours per year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Gas turbine engine may operate when boiler S-44-13 is operating, provided boiler S-44-13 is operating only at low fire. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The gas turbine engine and duct burner shall only operate as a cogeneration facility. [District Rule 2080] Federally Enforceable Through Title V Permit
18. Heat recovered in HTF system shall be used only at facility S-44. [District Rule 2080] 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. Startup and shutdown shall not exceed a time period of two hours and two hours, respectively, per occurrence. [District Rules 2080 and 4703, 3.23, 3.26 & 3.29] Federally Enforceable Through Title V Permit
20. Steam injection and SCR systems for NOx control shall be utilized at all times, except during startup/shutdown, to achieve compliance with NOx mass emission and concentration limits. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Ammonia shall be injected whenever the selective catalytic reduction system catalyst temperature exceeds the minimum ammonia injection temperature recommended by the manufacturer. [District Rule 2201] Federally Enforceable Through Title V Permit
22. Compliance with ammonia slip limit shall be demonstrated by using the following calculation procedure: ammonia slip ppmv @ 15% O2 = $((a-bxc/1,000,000)) \times 1,000,000 / b \times d$, where a = ammonia injection rate(lb/hr)/17(lb/lb. mol), b = dry exhaust gas flow rate (lb/hr)/(29(lb/lb. mol), c = change in measured NOx concentration ppmv at 15% O2 across catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip. [District Rule 4102]
23. Ammonia emission rate shall not exceed 10 ppmvd @ 15% O2 on a twenty four hour rolling average. [District Rule 4102]
24. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically feasible during startup, shutdown or reduced load period. [District Rule 4703, 5.3] Federally Enforceable Through Title V Permit
25. Emission rate from GTE and duct burner shall not exceed PM10: 142.0 lb/day, SOx (as SO2): 12.8 lb/day, NOx (as NO2): 930.4 lb/day nor 175,581 lb/yr, VOC: 115.7 lb/day, and CO: 446.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Except during periods of startup/shutdown, GTE and duct burner emission rates (three-hour rolling average) shall not exceed PM10: 5.92 lb/hr, SOx as SO2: 0.54 lb/hr, NOx as NO2: 6.07 lb/hr, VOC: 4.82 lb/hr, and CO: 18.61 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
27. Except during startup, shutdown, and reduced load periods as defined in Rule 4703, emissions shall not exceed : NOx (as NO2): 3 ppmv, and CO: 18.3 ppmv, dry @ 15% O2, (three-hour rolling average). [District Rules 2201 and 4703, 5.1 and 5.2, and 40 CFR 60.332(a)(1)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

28. On days of GTE startup/shutdown, permittee shall demonstrate compliance with NOx and CO daily emission limitations by records of calculations using CEM data, fuel rate data, and daily hours of operation. [District Rule 2201] Federally Enforceable Through Title V Permit
29. HHV and LHV of the fuel shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945. [District Rule 4703, 6.4] Federally Enforceable Through Title V Permit
30. 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
31. NOx, ammonia, and CO emissions shall be determined by District-witnessed sample collection by independent testing laboratory not less than once every 12 months and at such other times as may be specified by EPA. [District Rule 2201 and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
32. The District must be notified 30 days prior to any compliance source testing and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081, 7.1] Federally Enforceable Through Title V Permit
33. At least 30 days prior to actual testing, operator shall submit to EPA Region IX a written test plan detailing methods and procedures to be used and a written quality assurance project plan that conforms to EPA guidelines for developing project plans, QAMS 0505/80. [PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
34. Compliance source testing shall be conducted at fuel use rates and load conditions which represent maximum rated output (depending on ambient conditions) of the gas turbine engine. [District Rule 2201 and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
35. Operator shall perform source testing for the NOx, CO, and O2 concentrations using following methods: EPA Method 7E or 20 for NOx; EPA Method 10 or 10B for CO; and EPA Method 3, 3A, or 20 for O2; or equivalent methods may be used with prior written approval from EPA. Ammonia testing methods will be those approved by either the District or CARB. [40 CFR 60.335(a)(b)(e) and District Rule 4703, 6.4] Federally Enforceable Through Title V Permit
36. The operator shall provide source test information on the SCR system annually. [District Rule 4703, 5.0] Federally Enforceable Through Title V Permit
37. Compliance source testing shall be conducted on the gas turbine operating alone, and on both the gas turbine and duct burner operating together. These tests shall be conducted at the outlet stack of the heat recovery unit. [40 CFR 60.335(b); District Rule 4703, 6.3; and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
38. The main exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples using approved EPA test methods. The facility shall comply with this and all applicable compliance testing procedures described in District Rule 1081 (amended December 17, 1992). [District Rule 4703; District Rule 1081; Kern County Rule 108.1; and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
39. The results of each source test shall be submitted to the District, the ARB, and EPA, postmarked no later than 30 days following completion of the testing. [District Rule 1081 and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
40. The owner or operator shall install, certify, maintain in calibration, operate and quality-assure a Continuous Emission Monitoring System (CEMS) which continuously measures and records control system operating parameters; elapsed time of operation; and exhaust gas NOx, CO, and O2 concentrations. [District Rules 2201, 1080, 4703; 40 CFR 60.334(a)(b) & 60.335(c); PSD ATC SJ 83-07; and 40 CFR 64] Federally Enforceable Through Title V Permit
41. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 1080, 6.5; 40 CFR 60.334(b); 40 CFR 64 and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
42. 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); 40 CFR 64; District Rule 4703, 5.1; and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit

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

43. 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, 7.2; and 40 CFR 64] Federally Enforceable Through Title V Permit
44. The owner or operator shall maintain CEMS records that contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance, duration of any periods during which a continuous monitoring system or monitoring device is inoperative, and emission measurements. [District Rule 1080, 7.3; 40 CFR 60.7 (b); 40 CFR 64 and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
45. The owner or operator shall submit a written report of CEM operations 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 the following: Time intervals, data and magnitude of excess NOx emissions, nature and the cause of excess (if known), corrective actions taken and preventive measures adopted; 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; Applicable time and date of each period during which the CEM was inoperative (monitor downtime), except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080, 8.0; 40 CFR 60.7 (b); 40 CFR 64 and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
46. Excess emissions shall be defined as any operating hour in which 3-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). [District Rule 2201 and 40 CFR 60.334(J)(1)(iii)] Federally Enforceable Through Title V Permit
47. The 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
48. 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. [District Rule 4703, 6.2] Federally Enforceable Through Title V Permit
49. Testing methods contained in 40 CFR 60, Appendix A, and CEMs monitoring data may be used to determine compliance with the emission limits for NOx and CO contained within this permit. [PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
50. Permittee shall maintain records of gas turbine engine and duct burner fuel use, electrical power output, and gas turbine engine steam injection to fuel ratio on a mass basis. Records shall be retained for a period of at least five years and shall be made available for District inspection upon request. [District Rules 2201, 4703, 6.2 and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
51. Total combined natural gas usage for the gas turbine engine, the duct burner, and the HTF heater shall not exceed 4.74 billion cubic feet per year. [PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
52. 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, 9.4.2 and District Rule 4703, 6.2] Federally Enforceable Through Title V Permit
53. The permittee may operate the gas turbine at loads less than 100% of rated capacity provided that the turbine comply with all applicable District, State, and Federal regulations and meet all other permit conditions. [PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
54. The cogeneration facility shall comply with all portions of 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines. [PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit

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

55. Sulfur content of the natural gas being fired shall be tested weekly using ASTM method D 1072, D 4084 or D 3246 except that if compliance with the daily SO_x limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2 and 40 CFR 60.334(h)(1)] Federally Enforceable Through Title V Permit
56. The owner or operator shall demonstrate and maintain compliance with the Tier 2 NO_x emission limit of 3.0 ppmvd @ 15% O₂ (enhanced option), by the earlier of: April 30, 2008; or within 90 days following the next major overhaul that occurs after April 30, 2004. [District Rule 4703, 7.2] Federally Enforceable Through Title V Permit

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

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-73-3-9

EXPIRATION DATE: 08/31/2015

SECTION: 07 TOWNSHIP: 29S RANGE: 28E

EQUIPMENT DESCRIPTION:

DORMANT 93 MMBTU/HR NATURAL GAS FIRED VERTICAL HEAT TRANSFER FLUID (HTF) HEATER WITH CALLIDUS MODEL LE-CGS-W BURNER, FLUE GAS RECIRCULATION (FGR), AND OXYGEN MONITOR/CONTROLLER

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit
2. Permittee shall institute dormant emissions unit status by physically disconnecting the fuel supply line from this unit or by enacting other APCO approved method(s) to ensure that this unit is not operated. [District Rules 2201, 4305 and 4306] Federally Enforceable Through Title V Permit
3. During dormant emissions unit status, monitoring, source testing and other operational requirements shall be waived. Upon recommencing operation of this unit, permittee shall adhere to all monitoring, source testing and operational requirements as set forth on this permit. [District Rules 2201, 4305 and 4306] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the indicated NOx and CO emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4305 and 4306] Federally Enforceable Through Title V Permit
5. Permittee shall notify the District at least seven (7) calendar days prior to recommencing operation of this unit, at which time this permit will be administratively modified to remove all references to dormant emissions unit status. [District Rule 2201, 4305 and 4306] Federally Enforceable Through Title V Permit
6. HTF heater shall be fired only on PUC quality natural gas. [District Rule 2201 and PSD ATC SJ83-07] Federally Enforceable Through Title V Permit
7. Emission rates shall not exceed any of the following PM10: 0.92 lb/hr, SOx (as SO2): 0.05 lb/hr, NOx (as NO2): 25 ppmvd @ 3% O2 or 0.031 lb/MMBtu, VOC: 1.00 lb/hr, and CO: 3.71 lb/hr and 400 ppmv @ 3% O2. [District Rules 2201, 4305, 4306 and 4351] Federally Enforceable Through Title V Permit
8. When the heater is fired more than 220 MSCFD (hot standby) the permittee shall measure and record exhaust gas NOx (as NO2), CO, and O2 concentration on a monthly basis. Measurement shall be performed using a District-approved portable analyzer. The portable analyzer shall be calibrated prior to each use with two point calibration method (zero and span) using protocol 1 gases. [District Rules 2201, 4305, 4306, 4351 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. If the NOx or CO concentrations, as measured by the portable analyzer, exceed the allowable emission rate, the permittee shall promptly notify the District and take corrective action. If the portable analyzer readings continue to exceed the allowable emissions rate, the permittee shall conduct an emissions test within 60 days, utilizing District-approved test methods. [District Rules 2201, 4305, 4306 and 4351] Federally Enforceable Through Title V Permit

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

10. Source testing for NOx and CO emissions shall be conducted not less than once every 12 months. Gaseous fired units shall test not less than once every 36 months, if compliance is shown for two consecutive years. If a test shows noncompliance with NOx requirements, the source shall return to annual source testing until compliance is again shown for two consecutive years. [District Rules 4305, 6.3.1; 4306, 6.3; and 4351, 6.3; and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
11. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081, 7.2] Federally Enforceable Through Title V Permit
12. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 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, 7.1] Federally Enforceable Through Title V Permit
13. NOx emissions (ppmv) shall be determined by EPA Method 7E (or ARB Method 100), CO emissions (ppmv) by EPA Method 10 (or ARB Method 100), stack gas oxygen by EPA Method 3 or 3A (or ARB Method 100), NOx emission rate (heat input basis) by EPA Method 19, stack gas velocities by EPA Method 2, and stack gas moisture content by EPA Method 4 or equivalent methods may be used with prior written approval from EPA. [District Rules 4305, 6.2; 4306, 6.2; and 4351, 6.2; and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
14. When the heater is fired more than 220 MSCFD (hot standby) the permittee shall keep records of the NOx and CO concentrations corrected to 3% O₂, and the O₂ concentration on a monthly basis. The records shall include a description of any corrected action taken to maintain the emissions within the acceptable range. [District Rules 2201, 2520, 4305, and 4306; and PSD ATC 83-07] Federally Enforceable Through Title V Permit
15. Source testing shall be conducted at fuel use rate and load conditions which represent maximum rated output (depending on ambient conditions) of the HTF heater. These tests shall be conducted at the HTF heater outlet stack. [PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
16. At least 30 days prior to actual testing, operator shall submit to EPA Region IX a written test plan detailing methods and procedures to be used and a written quality assurance project plan that conforms to EPA guidelines for developing project plans, QAMS 0505/80. [PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
17. The main exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples using approved EPA test methods. The facility shall comply with this and all applicable compliance testing procedures described in District Rule 1081 (amended December 17, 1992). [District Rule 1081; and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
18. The owner or operator shall ensure that all required source testing conforms to the compliance testing procedures described in District Rule 1081. [District Rule 1081, 6.0] Federally Enforceable Through Title V Permit
19. The results of each source test shall be submitted to the District, the ARB, and EPA, postmarked no later than 30 days following completion of the testing. [District Rule 2520, 9.3.2; and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
20. Particulate matter emissions shall not exceed 0.1 grain/dscf at operating conditions, nor 0.1 grain/dscf calculated to 12% CO₂, nor 10 lb/hr. [District Rules 4201, and 4301, 5.1 & 5.2.3] Federally Enforceable Through Title V Permit
21. Fuel hhv shall be certified by third party fuel supplier or determined by: ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rules 2520, 9.3.2; 4305, 6.2.1.2, 4306; and 4351, 6.2] Federally Enforceable Through Title V Permit
22. Records of fuel heating value and daily consumption shall be maintained for at least five years and shall be made available for District inspection upon request. [District Rule 2520, 9.3.2, 9.4.2; and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
23. Total combined natural gas usage for the gas turbine engine, the duct burner, and the HTF heater shall not exceed 4.74 billion cubic feet per year. [PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
24. The owner or operator shall maintain all records for at least five years and conform to the recordkeeping requirements described in District Rule 2520. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

25. Sulfur content of the natural gas being fired shall be tested weekly using ASTM method D 1072, D 4084, or D 3246 except that if compliance with the hourly SOx limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
26. 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 4306. [District Rules 4305 and 4306, 5.5] 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 Rules 4305 and 4306, 5.5] Federally Enforceable Through Title V Permit
28. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305 and 4306, 5.5] Federally Enforceable Through Title V Permit
29. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of fuel combusted in the unit shall be installed, utilized and maintained. [District Rule 2201 and 40 CFR 60.48c (g)] Federally Enforceable Through Title V Permit
30. Permittee shall maintain daily records of the type and quantity of fuel combusted by the heater. [District Rule 2201 and 40 CFR 60.48c (g)] 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 Rules 1070, 4305, 4306, 4320, and 40 CFR 60.48c (i)] Federally Enforceable Through Title V Permit

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

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ATTACHMENT B

Previous Title V Operating Permit

San Joaquin Valley Air Pollution Control District

FACILITY: S-73-0-3

EXPIRATION DATE: 08/31/2015

FACILITY-WIDE REQUIREMENTS

1. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [Kern County Rule 111; and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
2. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [Kern County Rule 111; and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
3. The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
4. Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020. [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
5. The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.8.1 and 9.12.1] Federally Enforceable Through Title V Permit
6. A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031 and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
7. Every application for a permit required under Rule 2010 (Permits Required) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit
8. The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit
9. The operator shall retain records of all required monitoring data and support information for a period of at least five years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate. Any amendments to these Facility-wide Requirements that affect specific Permit Units may constitute modification of those Permit Units.

Facility Name: OILDALE ENERGY LLC
Location: 1134 MANOR ST & NORRIS RD, OILDALE, CA 93308
S-73-0-3 : Sep 14 2015 7:30AM - TORID

10. The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.5.1] Federally Enforceable Through Title V Permit
11. Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520. [District Rules 2520, 9.5.2 and Kern County Rule 111] Federally Enforceable Through Title V Permit
12. If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit. [District Rule 2520, 9.7 and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
13. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.8.2] Federally Enforceable Through Title V Permit
14. The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.8.3] Federally Enforceable Through Title V Permit
15. The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.8.4] Federally Enforceable Through Title V Permit
16. The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.8.5] Federally Enforceable Through Title V Permit
17. The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.9] Federally Enforceable Through Title V Permit
18. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District, the ARB, or EPA 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 and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
19. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District, the ARB, or EPA 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 and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
20. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District, the ARB, or EPA to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.13.2.3 and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
21. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District, the ARB, or EPA 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 and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit

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

22. No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (02/17/05). If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and County Rules 401 (in all eight counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit
23. No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating with a VOC content in excess of the corresponding limit specified in Table of Standards 1 effective until 12/30/10 or Table of Standards 2 effective on and after 1/1/11 of District Rule 4601 (12/17/09) for use or sale within the District. [District Rule 4601, 5.1] Federally Enforceable Through Title V Permit
24. All VOC-containing materials subject to Rule 4601 (12/17/09) shall be stored in closed containers when not in use. [District Rule 4601, 5.4] Federally Enforceable Through Title V Permit
25. The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.3 (12/17/09). [District Rule 4601, 6.1 and 6.3] Federally Enforceable Through Title V Permit
26. With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.13.1 and 10.0] Federally Enforceable Through Title V Permit
27. If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR Part 82, Subpart F. [40 CFR 82 Subpart F] Federally Enforceable Through Title V Permit
28. If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR Part 82, Subpart B. [40 CFR Part 82, Subpart B] Federally Enforceable Through Title V Permit
29. Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8021 and 8011] Federally Enforceable Through Title V Permit
30. Outdoor handling, storage and transport of any bulk material which emits dust shall comply with the requirements of District Rule 8031, unless specifically exempted under Section 4.0 of Rule 8031 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8031 and 8011] Federally Enforceable Through Title V Permit
31. An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8041 and 8011] Federally Enforceable Through Title V Permit
32. Whenever open areas are disturbed or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8051 and 8011] Federally Enforceable Through Title V Permit
33. Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8061 and Rule 8011] Federally Enforceable Through Title V Permit
34. 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

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

35. Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M] Federally Enforceable Through Title V Permit
36. The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.16] Federally Enforceable Through Title V Permit
37. The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2] Federally Enforceable Through Title V Permit
38. When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permit shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit
39. Equipment covered by this permit shall at all times be maintained in good working order and be operated as efficiently as possible so to minimize air pollutant emissions. [PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
40. In the event of changes in control or ownership, this Operating Permit shall be binding on new owners and operators. The applicant shall notify successor of the existence of this Operating Permit and its conditions in writing and forward a copy to the District, California Air Resources Board, and EPA. [PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
41. The applicant shall construct and operate the facility in compliance with all other applicable provisions of 40 CFR Parts 52, 60 and 61 and all other applicable Federal, State and District air quality regulations. [PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
42. At all times, including periods of startup, shutdown, and malfunction, the emissions units and associated air pollution control equipment shall be operated in a manner consistent with good air pollution control practice for minimizing emissions. [PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
43. Operation of rental units during periods of startup, shutdown, or malfunction of equipment covered by this permit shall be reported to EPA in the quarterly excess emissions report. Reports shall include the date and time of startup of all rental units, the date and time of shutdown of all rental units, and any excess emissions associated with the operation of the rental units. [PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
44. All conditions contained within this permit are applicable to the operation of any rental units. [PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
45. Variances issued by the APCO or the ARB do not relieve the permittee from compliance with any of the terms or conditions imposed by the PSD permit. [PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
46. All correspondence as required by this Operating Permit shall be forwarded to: the District; Director, Air Div. (Attn: Air-3-3), EPA Region 9, 75 Hawthorne St. San Francisco, CA 94105; and Director, Stationary Source Div., CARB, Box 2815, Sacramento, CA 95812. [PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
47. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
48. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin September 23 of each 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

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-73-2-25

EXPIRATION DATE: 08/31/2015

SECTION: 07 TOWNSHIP: 29S RANGE: 28E

EQUIPMENT DESCRIPTION:

COGENERATION SYSTEM WITH GENERAL ELECTRIC LM6000 GAS TURBINE ENGINE (GTE) WITH STEAM INJECTION, OXIDATION CATALYST, WASTE HEAT RECOVERY SYSTEM, EMERGENCY BYPASS STACK, AND DORMANT DUCT BURNER

PERMIT UNIT REQUIREMENTS

1. When the duct burner is not operated, the fuel line to the duct burner shall be physically disconnected. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
2. When duct burner is dormant, monitoring, source testing and other operational requirements shall be waived for the duct burner. Upon recommencing operation of the duct burner, permittee shall adhere to all monitoring, source testing and operational requirements as set forth on this permit. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
3. A source test to demonstrate compliance with the NOx and CO emission limits for the gas turbine engine and duct burner shall be performed within 60 days of recommencing operation of the duct burner. [District Rule 4703] Federally Enforceable Through Title V Permit
4. Permittee shall notify the District at least seven (7) calendar days prior to recommencing operation of the duct burner. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
5. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102] Federally Enforceable Through Title V Permit
6. Waste heat recovery system shall include: heat transfer fluid (HTF) system; high pressure steam generator with economizer, evaporator, superheater, and Coen Low-NOx auxiliary duct burner upstream of heat recovery steam generator; oxidation catalyst bed; low pressure steam generator system with economizer and evaporator, and feedwater heater supplying high pressure steam generator; main exhaust stack downstream of waste heat recover unit; and emergency bypass exhaust stack positioned before waste heat recovery unit. [District NSR Rule and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
7. Gas turbine engine and duct burner shall be equipped with operational recording fuel flowmeters. [District NSR Rule; District Rule 2080; and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
8. Selective catalytic reduction system shall be equipped with continuously recording ammonia injection flowmeter and continuously recording inlet temperature indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Steam injection system shall be equipped with continuously recording flowmeter. [District NSR Rule; District Rule 2080; and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
10. Electrical generator shall be equipped with recording power output meter. [District NSR Rule and District Rule 2080] Federally Enforceable Through Title V Permit
11. GTE shall be equipped with NOx monitor upstream of SCR unit and NOx and CO CEM after SCR unit. [District Rule 1080] Federally Enforceable Through Title V Permit

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

12. Heat transfer fluid (HTF) shall not contain any volatile organic compounds as defined in District Rule 1020 (amended December 18, 1997). [District NSR Rule] Federally Enforceable Through Title V Permit
13. There shall be no visible emissions from coalescer exhaust stack. [District NSR Rule] Federally Enforceable Through Title V Permit
14. Gas turbine engine and duct burner shall be fired only on PUC quality natural gas. [District NSR Rule; 40 CFR 60.333(a) & (b); 60.332(a); Kern County Rule 407; and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
15. Gas turbine engine may operate concurrently with heaters listed in any single permit S-44-1, -2, -3, -4, or -6 provided the cumulative concurrent operation of gas turbine engine with any heaters listed in any of permit units S-44-1, -2, -3, -4, and -6 does not exceed 360 hours per year. [District NSR Rule] Federally Enforceable Through Title V Permit
16. Gas turbine engine may operate when boiler S-44-13 is operating, provided boiler S-44-13 is operating only at low fire. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The gas turbine engine and duct burner shall only operate as a cogeneration facility. [District Rule 2080] Federally Enforceable Through Title V Permit
18. Heat recovered in HTF system shall be used only at facility S-44. [District Rule 2080] 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. Startup and shutdown shall not exceed a time period of two hours and two hours, respectively, per occurrence. [District Rules 2080 and 4703, 3.23, 3.26 & 3.29] Federally Enforceable Through Title V Permit
20. Steam injection and SCR systems for NO_x control shall be utilized at all times, except during startup/shutdown, to achieve compliance with NO_x mass emission and concentration limits. [District NSR Rule] Federally Enforceable Through Title V Permit
21. Ammonia shall be injected whenever the selective catalytic reduction system catalyst temperature exceeds the minimum ammonia injection temperature recommended by the manufacturer. [District NSR Rule] Federally Enforceable Through Title V Permit
22. Compliance with ammonia slip limit shall be demonstrated by using the following calculation procedure: ammonia slip ppmv @ 15% O₂ = ((a-(bxc/1,000,000)) x 1,000,000 / b) x d, where a = ammonia injection rate(lb/hr)/17(lb/lb. mol), b = dry exhaust gas flow rate (lb/hr)/(29(lb/lb. mol), c = change in measured NO_x concentration ppmv at 15% O₂ across catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip. [District Rule 4102]
23. Ammonia emission rate shall not exceed 10 ppmvd @ 15% O₂ on a twenty four hour rolling average. [District Rule 4102]
24. The emissions control system shall be in operation and emissions shall be minimized insofar as technologically feasible during startup, shutdown or reduced load period. [District Rule 4703, 5.3] Federally Enforceable Through Title V Permit
25. Emission rate from GTE and duct burner shall not exceed PM₁₀: 142.0 lb/day, SO_x (as SO₂): 12.8 lb/day, NO_x (as NO₂): 930.4 lb/day nor 175,581 lb/yr, VOC: 115.7 lb/day, and CO: 446.6 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
26. Except during periods of startup/shutdown, GTE and duct burner emission rates (three-hour rolling average) shall not exceed PM₁₀: 5.92 lb/hr, SO_x as SO₂: 0.54 lb/hr, NO_x as NO₂: 6.07 lb/hr, VOC: 4.82 lb/hr, and CO: 18.61 lb/hr. [District NSR Rule] Federally Enforceable Through Title V Permit
27. Except during startup, shutdown, and reduced load periods as defined in Rule 4703, emissions shall not exceed : NO_x (as NO₂): 3 ppmv, and CO: 18.3 ppmv, dry @ 15% O₂, (three-hour rolling average). [District NSR Rule, District Rule 4703, 5.1 and 5.2, and 40 CFR 60.332(a)(1)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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28. On days of GTE startup/shutdown, permittee shall demonstrate compliance with NOx and CO daily emission limitations by records of calculations using CEM data, fuel rate data, and daily hours of operation. [District NSR Rule] Federally Enforceable Through Title V Permit
29. HHV and LHV of the fuel shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945. [District Rule 4703, 6.4] Federally Enforceable Through Title V Permit
30. 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
31. NOx, ammonia, and CO emissions shall be determined by District-witnessed sample collection by independent testing laboratory not less than once every 12 months and at such other times as may be specified by EPA. [District NSR Rule and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
32. The District must be notified 30 days prior to any compliance source testing and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081, 7.1] Federally Enforceable Through Title V Permit
33. At least 30 days prior to actual testing, operator shall submit to EPA Region IX a written test plan detailing methods and procedures to be used and a written quality assurance project plan that conforms to EPA guidelines for developing project plans, QAMS 0505/80. [PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
34. Compliance source testing shall be conducted at fuel use rates and load conditions which represent maximum rated output (depending on ambient conditions) of the gas turbine engine. [District NSR Rule and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
35. Operator shall perform source testing for the NOx, CO, and O2 concentrations using following methods: EPA Method 7E or 20 for NOx; EPA Method 10 or 10B for CO; and EPA Method 3, 3A, or 20 for O2; or equivalent methods may be used with prior written approval from EPA. Ammonia testing methods will be those approved by either the District or CARB. [40 CFR 60.335(a)(b)(e) and District Rule 4703, 6.4] Federally Enforceable Through Title V Permit
36. The operator shall provide source test information on the SCR system annually. [District Rule 4703, 5.0] Federally Enforceable Through Title V Permit
37. Compliance source testing shall be conducted on the gas turbine operating alone, and on both the gas turbine and duct burner operating together. These tests shall be conducted at the outlet stack of the heat recovery unit. [40 CFR 60.335(b); District Rule 4703, 6.3; and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
38. The main exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples using approved EPA test methods. The facility shall comply with this and all applicable compliance testing procedures described in District Rule 1081 (amended December 17, 1992). [District Rule 4703; District Rule 1081; Kern County Rule 108.1; and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
39. The results of each source test shall be submitted to the District, the ARB, and EPA, postmarked no later than 30 days following completion of the testing. [District Rule 1081 and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
40. The owner or operator shall install, certify, maintain in calibration, operate and quality-assure a Continuous Emission Monitoring System (CEMS) which continuously measures and records control system operating parameters; elapsed time of operation; and exhaust gas NOx, CO, and O2 concentrations. [District NSR Rule, District Rule 1080, 4.0 & 5.1; District Rule 4703, 6.2; 40 CFR 60.334(a)(b) & 60.335(c); PSD ATC SJ 83-07; and 40 CFR 64] Federally Enforceable Through Title V Permit
41. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 1080, 6.5; 40 CFR 60.334(b); 40 CFR 64 and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
42. 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); 40 CFR 64; District Rule 4703, 5.1; and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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43. 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, 7.2; and 40 CFR 64] Federally Enforceable Through Title V Permit
44. The owner or operator shall maintain CEMS records that contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance, duration of any periods during which a continuous monitoring system or monitoring device is inoperative, and emission measurements. [District Rule 1080, 7.3; 40 CFR 60.7 (b); 40 CFR 64 and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
45. The owner or operator shall submit a written report of CEM operations 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 the following: Time intervals, data and magnitude of excess NOx emissions, nature and the cause of excess (if known), corrective actions taken and preventive measures adopted; 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; Applicable time and date of each period during which the CEM was inoperative (monitor downtime), except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080, 8.0; 40 CFR 60.7 (b); 40 CFR 64 and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
46. Excess emissions shall be defined as any operating hour in which 3-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). [District NSR Rule and 40 CFR 60.334(J)(1)(iii)] Federally Enforceable Through Title V Permit
47. The 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
48. 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. [District Rule 4703, 6.2] Federally Enforceable Through Title V Permit
49. Testing methods contained in 40 CFR 60, Appendix A, and CEMs monitoring data may be used to determine compliance with the emission limits for NOx and CO contained within this permit. [PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
50. Permittee shall maintain records of gas turbine engine and duct burner fuel use, electrical power output, and gas turbine engine steam injection to fuel ratio on a mass basis. Records shall be retained for a period of at least five years and shall be made available for District inspection upon request. [District NSR Rule, District Rule 4703, 6.2 and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
51. Total combined natural gas usage for the gas turbine engine, the duct burner, and the HTF heater shall not exceed 4.74 billion cubic feet per year. [PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
52. 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, 9.4.2 and District Rule 4703, 6.2] Federally Enforceable Through Title V Permit
53. The permittee may operate the gas turbine at loads less than 100% of rated capacity provided that the turbine comply with all applicable District, State, and Federal regulations and meet all other permit conditions. [PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
54. The cogeneration facility shall comply with all portions of 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines. [PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit

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

55. Sulfur content of the natural gas being fired shall be tested weekly using ASTM method D 1072, D 4084 or D 3246 except that if compliance with the daily SOx limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2 and 40 CFR 60.334(h)(1)] Federally Enforceable Through Title V Permit
56. The owner or operator shall demonstrate and maintain compliance with the Tier 2 NOx emission limit of 3.0 ppmvd @ 15% O2 (enhanced option), by the earlier of: April 30, 2008; or within 90 days following the next major overhaul that occurs after April 30, 2004. [District Rule 4703, 7.2] Federally Enforceable Through Title V Permit

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-73-3-8

EXPIRATION DATE: 08/31/2015

SECTION: 07 TOWNSHIP: 29S RANGE: 28E

EQUIPMENT DESCRIPTION:

DORMANT 93 MMBTU/HR NATURAL GAS FIRED VERTICAL HEAT TRANSFER FLUID (HTF) HEATER WITH CALLIDUS MODEL LE-CGS-W BURNER, FLUE GAS RECIRCULATION (FGR), AND OXYGEN MONITOR/CONTROLLER

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit
2. Permittee shall institute dormant emissions unit status by physically disconnecting the fuel supply line from this unit or by enacting other APCO approved method(s) to ensure that this unit is not operated. [District Rules 2201, 4305 and 4306] Federally Enforceable Through Title V Permit
3. During dormant emissions unit status, monitoring, source testing and other operational requirements shall be waived. Upon recommencing operation of this unit, permittee shall adhere to all monitoring, source testing and operational requirements as set forth on this permit. [District Rules 2201, 4305 and 4306] Federally Enforceable Through Title V Permit
4. A source test to demonstrate compliance with the indicated NO_x and CO emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4305 and 4306] Federally Enforceable Through Title V Permit
5. Permittee shall notify the District at least seven (7) calendar days prior to recommencing operation of this unit, at which time this permit will be administratively modified to remove all references to dormant emissions unit status. [District Rule 2201, 4305 and 4306] Federally Enforceable Through Title V Permit
6. HTF heater shall be fired only on PUC quality natural gas. [District NSR Rule and PSD ATC SJ83-07] Federally Enforceable Through Title V Permit
7. Emission rates shall not exceed any of the following PM₁₀: 0.92 lb/hr, SO_x (as SO₂): 0.05 lb/hr, NO_x (as NO₂): 25 ppmvd @ 3% O₂ or 0.031 lb/MMBtu, VOC: 1.00 lb/hr, and CO: 3.71 lb/hr and 400 ppmv @ 3% O₂. [District NSR Rule, District Rules 4305, 4306, 5.1; and 4351] Federally Enforceable Through Title V Permit
8. When the heater is fired more than 220 MSCFD (hot standby) the permittee shall measure and record exhaust gas NO_x (as NO₂), CO, and O₂ concentration on a monthly basis. Measurement shall be performed using a District-approved portable analyzer. The portable analyzer shall be calibrated prior to each use with two point calibration method (zero and span) using protocol 1 gases. [District NSR Rule; District Rules 4305, 4306, 5.4; & 4351; and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. If the NO_x or CO concentrations, as measured by the portable analyzer, exceed the allowable emission rate, the permittee shall promptly notify the District and take corrective action. If the portable analyzer readings continue to exceed the allowable emissions rate, the permittee shall conduct an emissions test within 60 days, utilizing District-approved test methods. [District NSR Rule and District Rules 4305, 4306, 5.4; & 4351] Federally Enforceable Through Title V Permit

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

10. Source testing for NO_x and CO emissions shall be conducted not less than once every 12 months. Gaseous fired units shall test not less than once every 36 months, if compliance is shown for two consecutive years. If a test shows noncompliance with NO_x requirements, the source shall return to annual source testing until compliance is again shown for two consecutive years. [District Rules 4305, 6.3.1; 4306, 6.3; and 4351, 6.3; and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
11. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081, 7.2] Federally Enforceable Through Title V Permit
12. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 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, 7.1] Federally Enforceable Through Title V Permit
13. NO_x emissions (ppmv) shall be determined by EPA Method 7E (or ARB Method 100), CO emissions (ppmv) by EPA Method 10 (or ARB Method 100), stack gas oxygen by EPA Method 3 or 3A (or ARB Method 100), NO_x emission rate (heat input basis) by EPA Method 19, stack gas velocities by EPA Method 2, and stack gas moisture content by EPA Method 4 or equivalent methods may be used with prior written approval from EPA. [District Rules 4305, 6.2; 4306, 6.2; and 4351, 6.2; and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
14. When the heater is fired more than 220 MSCFD (hot standby) the permittee shall keep records of the NO_x and CO concentrations corrected to 3% O₂, and the O₂ concentration on a monthly basis. The records shall include a description of any corrected action taken to maintain the emissions within the acceptable range. [District NSR Rule, District Rules 2520, 9.4.2, 4305, and 4306; and PSD ATC 83-07] Federally Enforceable Through Title V Permit
15. Source testing shall be conducted at fuel use rate and load conditions which represent maximum rated output (depending on ambient conditions) of the HTF heater. These tests shall be conducted at the HTF heater outlet stack. [PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
16. At least 30 days prior to actual testing, operator shall submit to EPA Region IX a written test plan detailing methods and procedures to be used and a written quality assurance project plan that conforms to EPA guidelines for developing project plans, QAMS 0505/80. [PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
17. The main exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples using approved EPA test methods. The facility shall comply with this and all applicable compliance testing procedures described in District Rule 1081 (amended December 17, 1992). [District Rule 1081; and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
18. The owner or operator shall ensure that all required source testing conforms to the compliance testing procedures described in District Rule 1081. [District Rule 1081, 6.0] Federally Enforceable Through Title V Permit
19. The results of each source test shall be submitted to the District, the ARB, and EPA, postmarked no later than 30 days following completion of the testing. [District Rule 2520, 9.3.2; and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
20. Particulate matter emissions shall not exceed 0.1 grain/dscf at operating conditions, nor 0.1 grain/dscf calculated to 12% CO₂, nor 10 lb/hr. [District Rules 4201, and 4301, 5.1 & 5.2.3] Federally Enforceable Through Title V Permit
21. Fuel hhv shall be certified by third party fuel supplier or determined by: ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rules 2520, 9.3.2; 4305, 6.2.1.2, 4306; and 4351, 6.2] Federally Enforceable Through Title V Permit
22. Records of fuel heating value and daily consumption shall be maintained for at least five years and shall be made available for District inspection upon request. [District Rule 2520, 9.3.2, 9.4.2; and PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
23. Total combined natural gas usage for the gas turbine engine, the duct burner, and the HTF heater shall not exceed 4.74 billion cubic feet per year. [PSD ATC SJ 83-07] Federally Enforceable Through Title V Permit
24. The owner or operator shall maintain all records for at least five years and conform to the recordkeeping requirements described in District Rule 2520. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

25. Sulfur content of the natural gas being fired shall be tested weekly using ASTM method D 1072, D 4084, or D 3246 except that if compliance with the hourly SO_x limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
26. 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 4306. [District Rules 4305 and 4306, 5.5] 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 Rules 4305 and 4306, 5.5] Federally Enforceable Through Title V Permit
28. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305 and 4306, 5.5] Federally Enforceable Through Title V Permit

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

ATTACHMENT C

Detailed Facility List

Detailed Facility Report
For Facility=73 and excluding Deleted Permits
Sorted by Facility Name and Permit Number

OILDALE ENERGY LLC 1134 MANOR ST & NORRIS RD OILDALE, CA 93308	FAC # STATUS TELEPHONE	S 73 A	TYPE: TOXIC ID:	TitleV 50185	EXPIRE ON: AREA: INSP. DATE:	08/31/2015 47 07/16
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PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-73-2-25	40,000 kW	3020-08A G	1	10,706.00	10,706.00	A	COGENERATION SYSTEM WITH GENERAL ELECTRIC LM6000 GAS TURBINE ENGINE (GTE) WITH STEAM INJECTION, OXIDATION CATALYST, WASTE HEAT RECOVERY SYSTEM, EMERGENCY BYPASS STACK, AND DORMANT DUCT BURNER
S-73-3-8	93,000 KBTU/HR HEATER	3020-02 H	1	1,080.00	1,080.00	A	DORMANT 93 MMBTU/HR NATURAL GAS FIRED VERTICAL HEAT TRANSFER FLUID (HTF) HEATER WITH CALLIDUS MODEL LE-CGS-W BURNER, FLUE GAS RECIRCULATION (FGR), AND OXYGEN MONITOR/CONTROLLER

Number of Facilities Reported: 1