



APR 0 3 2017

Mr. Ronald Cook Live Oak Limited 34759 Lencioni Avenue, Bakersfield, CA 93308

Re: Notice of Preliminary Decision - Title V Permit Renewal District Facility # S-172

Project # S-1153890

Dear Mr. Cook:

Enclosed for your review and comment is the District's analysis of the application to renew the Federally Mandated Operating Permit for Live Oak Limited at 7001 Granite Road, 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 Mariollet

Director of Permit Services

Enclosures

CC:

Tung Le, CARB (w/enclosure) via email

CC:

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

Seved Sadredin Executive Director/Air Pollution Control Officer

Northern Region

4800 Enterprise Way Modesto, CA 95356-8718 Tel: (209) 557-6400 FAX: (209) 557-6475 Central Region (Main Office)

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SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT

Proposed Title V Permit Renewal Evaluation Live Oak Limited S-172

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TITLE V PERMIT RENEWAL EVALUATION

Cogeneration Power Plant

Engineer: Robert Rinaldi

Date: March 9, 2017

Facility Number: S-172

Facility Name: Live Oak Limited

Mailing Address: 34759 Lencioni Avenue,

Bakersfield, CA 93308

Contact Name: Adam Rogge, Director of Regulatory Compliance

Phone: (661) 387-7802

Responsible Official: Ronald Cook

Title: Plant Manger

Project #: S-1153890

Deemed Complete: November 30, 2015

I. PROPOSAL

Live Oak Limited was issued a Title V permit on May 1, 1998. 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 renewed Title V permit.

The purpose of this evaluation is to provide the legal and factual basis for all updated applicable requirements and to determine if the facility will comply with these updated requirements. It also specifically identifies all additions, deletions, and/or changes made to permit conditions or equipment descriptions. The last Title V permit renewal was issued on May 3, 2011. This review will span from May 3, 2011 to the present.

II. FACILITY LOCATION

Live Oak Limited is located at 7001 Granite Road, within Kern County's Heavy Oil Central stationary source. USGS NW/4 Section 18, Township 28S, Range 28E, MDB&M.

III. EQUIPMENT LISTING

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

IV. GENERAL PERMIT TEMPLATE USAGE

The applicant has requested to use the facility-wide umbrella general permit template (SJV-UM-03). Based on the information submitted in the Template Qualification Form, the applicant qualifies for the use of this template.

V. SCOPE OF EPA AND PUBLIC REVIEW

Certain segments of the proposed 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.

• Conditions 1 through 41 of permit unit S-172-0-3, including their underlying applicable requirements, originate from the model general permit template and are not subject to further EPA and Public review.

VI. FEDERALLY ENFORCEABLE REQUIREMENTS

A. Rules Updated during this current renewal review interval (5/3/2011 to present)

- District Rule 2020, <u>Exemptions</u>
 (amended December 20, 2007 ⇒ amended December 18, 2014)
- District Rule 2201, New and Modified Stationary Source Review Rule (amended December 18, 2008 ⇒ amended February 18, 2016)
- District Rule 2410, <u>Prevention of Significant Deterioration</u> (became effective on November 26, 2012)
- 40 CFR Part 60, Subpart GG, New Source Performance Standards;
 Standard of Performance for Stationary Gas Turbines (amended February 27, 2014)
- 40 CFR Part 82, Subpart B, <u>Stratospheric Ozone</u> (amended June 25, 2013)
- 40 CFR Part 82, Subpart F, <u>Stratospheric Ozone</u> (amended June 25, 2013)

B. Rules Removed during this current renewal review interval (5/3/2011 to present)

- None.
- C. Rules Added during this current renewal review interval (5/3/2011 to present)
 - District Rule 2410, <u>Prevention of Significant Deterioration</u> (adopted June 16, 2011, effective November 26, 2012)
- D. Rules Not Updated during this current renewal review interval (5/3/2011 to present)
 - District Rule 1070, <u>Inspections</u> (amended December 17,1992)
 - District Rule 1080, <u>Stack Monitoring</u> (amended December 17,1992)

- District Rule 1081, <u>Source Sampling</u> (amended December 16,1993)
- District Rule 1100, <u>Equipment Breakdown</u> (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, <u>Transfer of Permits</u> (amended December 17, 1992)
- District Rule 2040, Applications (amended December 17, 1992)
- District Rule 2070, <u>Standards for Granting Applications</u> (amended December 17, 1992)
- District Rule 2080, <u>Conditional Approval</u> (amended December 17, 1992)
- District Rule 2520, <u>Federally Mandated Operating Permits</u> (amended June 21, 2001)
- District Rule 4101, <u>Visible Emissions</u> (amended February 17, 2005)
- District Rule 4102, Nuisance (amended December 17, 1992)
- District Rule 4201, <u>Particulate Matter Concentration</u> (amended December 17, 1992)
- District Rule 4202, <u>Particulate Matter Emission Rate</u> (amended December 17, 1992)
- District Rule 4301, Fuel Burning Equipment (amended December 17, 1992)
- District Rule 4601, <u>Architectural Coatings</u> (amended December 17, 2009)
- District Rule 4663, Organic Solvent Cleaning, Storage, and Disposal (amended September 20, 2007)
- District Rule 4703, <u>Stationary Gas Turbines</u> (amended September 20, 2007)
- District Rule 4801, <u>Sulfur Compounds</u> (amended December 17, 1992)
- District Rule 8011 General Requirements (amended August 19, 2004)

- District Rule 8021 <u>Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities</u> (amended August 19, 2004)
- District Rule 8031 <u>Bulk Materials</u> (amended August 19, 2004)
- District Rule 8041 <u>Carryout and Trackout</u> (amended August 19, 2004)
- District Rule 8051 Open Areas (amended August 19, 2004)
- District Rule 8061 <u>Paved and Unpaved Roads</u> (amended August 19, 2004)
- District Rule 8071 <u>Unpaved Vehicle/Equipment Traffic Area</u> (amended September 16, 2004)
- 40 CFR Part 60, Subpart KKKK, <u>Standards of Performance for Stationary</u> <u>Combustion Turbines</u> (amended July 6, 2006)
- 40 CFR Part 61, Subpart M, <u>National Emission Standard for Asbestos</u> (amended September 18, 2003)
- 40 CFR Part 63 Subpart YYYY—<u>National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines</u> (amended March 5, 2004)
- 40 CFR Part 64, <u>Compliance Assurance Monitoring (CAM)</u> (amended October 10, 1997)
- 40 CFR Part 68, <u>Chemical Accident Prevention Provisions</u> (amended April 9, 2004)
- 40 CFR Part 72, Acid Rain Program (amended March 28, 2011)
- 40 CFR Part 73, <u>Sulfur Dioxide Allowance System</u> (amended April 28, 2006)
- 40 CFR Part 77, Excess Emissions (amended July 21, 2010)

VII. REQUIREMENTS NOT FEDERALLY ENFORCEABLE

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

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

A. Rules Added

There are no new rules that are not federally enforceable being added at this time.

B. Rules Not Updated

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

For this facility, condition #42 of the facility wide requirements S-172-0-3 is based on District Rule 4102 listed above and is not Federally Enforceable through Title V.

Title 17, California Code of Regulations, Section 92000 through 92540

No changes were made to these rules since the renewed Title V permit was issued, therefore, they will not be discussed any further.

C. Rules Updated

There are no new rules that are not federally enforceable being updated at this time.

VIII. FEDERALLY ENFORCEABLE PERMIT REQUIREMENTS

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

A. District Rule 2020 - Exemptions

District Rule 2020 lists equipment which is specifically exempt from obtaining permits and specifies recordkeeping requirements to verify such exemptions. The amendments to this rule do not have any affect 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.

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 GG - <u>Standard of Performance for Stationary</u> <u>Gas Turbines</u>

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% O_2 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, § 80.332, 60.333 and 60.334	Proposed Requirement
Emissions Limit	Section 5.1.2 - for > 10 MW, 5 ppmv @ 15% O ₂ . (Tier II Standard 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.	3.6 ppmv @ 15% O₂.
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).	The gas turbine shall be fired exclusively with PUC regulated or FERC regulated natural gas, with fuel gas sulfur content not to exceed 1 grain S/100 scf. [District Rules 2201 and 4801; 40 CFR Part 60.332(a) and 60.333(a) & (b); and Kern County Rule 407] Y

Jenitoring (6.2.1) Except for units subject to Section (6.3.34(a)) The corner or operator of any control devices, the owner or operator of any that either install, operate, and maintain continuous emissions monitoring and the control of the contr			r	S-172, 1153690
\$2.3, for turbines with exhaust gas NO. per partor in all elither install, operate, and maintain commissions measures monitoring and elither install, operate, and maintain of general continuous emissions monitoring in the control No. emissions of Monitoring), or install and maintain (APCO-approved elternate monitoring of the control No. emissions). The turbine of the turbine (3.334(b) install, certify, maintain, operate, and quality-searce acontinuous emissions monitoring system for NO. (5.334(f)) install, certify, maintain, operate, and quality-searce acontinuous emissions monitoring system for NO. (5.334(f)) install certify and quality-searce acontinuous emissions monitoring system for NO. (5.334(f)) install, certify, maintain, operate, and quality-searce of the level field in excellent of the control of activities of the control of activities of the control of activities of the control of the control of gas does not exceed 0.25 grif00 scf. At a minimum, the amount of the sampling data specified in section 2.3.1.4 or 2.3.2.4 of Appendix D of 40 GFR part of 15 is required. OFF part of 15 is required of the control of the control of the control of gas does not exceed 0.25 grif00 scf. At a minimum, the amount of the sampling data specified in section 2.3.1.4 or 2.3.2.4 of Appendix D of 40 GFR part of 15 is required of the control of t	Type of Requirement	District Rule 4703	Subpart GG, § 60.332, 60.333 and 60.334	Proposed Requirement
	Monitoring	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	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 NOx 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	stack (after SCR unit) shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and equipped with flow stralghteners, if necessary, to minimize turbulence. The facility shall comply with this and all applicable compliance testing procedures described in District Rule 1081 (Amended December 16, 1993). [District Rules 2201 and 1081; 4703, 6.2; Kern County Rule 108.1 and 40 CFR Part 60] Y CEM data can be used in addition to stack testing to determine compliance with the NOx and CO concentrations and daily emission rates. [District Rule 2201 and 40 CFR Part 64] Y Unfired heat recovery steam generator turbine exhaust for the unit shall be equipped with continuous emissions monitors (CEM) for NOx, CO, and O2. The continuous NOx monitoring system shall meet the performance specification requirements in 40 CFR, Part 60, Appendix P, 40 CFR Part 51, Appendix P, and 40 CFR Part 60.7(c), 60.7(d) and 60.13 or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rules 2201 and 1080; 4703, 6.2.1, 6.2.3; Kern County Rule 108; 40 CFR Part 60 and 40 CFR Part 64] Y The gas turbine shall be fired exclusively with PUC regulated or FERC regulated natural gas, with fuel gas sulfur content not to exceed 1 grain S/100 scf. [District Rules 2201 and 4801; 40 CFR Part 60.332(a) and 60.333(a) & (b); and Kern County Rule 407] Y Facility shall maintain on file copies of all natural gas fuel involces, natural gas bills, gas purchase contracts, supplier certifications, and test results used to determine compliance with the requirements of this permit unit. Compliance with fuel gas sulfur limit shall be demonstrated by fuel gas sample analysis by independent testing laboratory taken at time of annual stack gas sample analysis by independent testing laboratory taken at time of annual stack gas sample of the sulfur content by the gas supplier is an acceptable alternative for verifying compliance.

Type of Requirement	District Rule 4703	Subpart GG, § 60.332, 60.333 and	Proposed Requirement
Type of Requirement	District Kale 4700	60.334	Proposed Requirement
	(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	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.	CEM that have been installed pursuant to District Rule 1080; emission measurements, and dally actual local startup and stop time, length and reason for reduced load periods, total hours of operation and daily quantity of fuel used. [District Rules 1080; 4703, 6.2.6, 7.3; Kern County Rule 108; 40 CFR 60.332(a), (b); and 40 CFR Part 64] Y Operators of CEMS shall submit a written report for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include: time intervals, data and magnitude of excess 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; and a negative declaration when no excess emissions occurred. [District Rules 1080, 8.0; 2520, 9.6.1; Rule Kern County Rule 108; 40 CFR 50.7(c) and 40 CFR Part 64] Y
	Annual Testing for nitrogen oxides (NOx) concentrations using EPA Method 20 or 7E and oxygen (O ₂) using Method 3, 3A, or 20.	EPA method 20 or 7E and EPA method 3, 3A for O₂.	The concentration of nitrogen oxides (NOx) from the gas turbine streams shall be determined using EPA Method 7E or 20, and oxygen (O2) concentration shall be determined using EPA Method 3, 3A, or 20. Carbon monoxide (CO) emissions shall be determined using EPA Test Methods 10 or 10B. Source test results will be provided to the District annually. EPA approved alternative test methods may also be used to address the source testing requirements of this permit. [District Rule 1081; District Rule 2520, 9.3; District Rule 4703, 5.1, 5.2 & 6.4; 40 CFR Subpart GG 60.335(b) and (c); 40 CFR Subpart A 60.8 and 40 CFR 60.332(a) & (b)) Y

The District Rule 4703 requirement to limit NOx concentration to 5 ppmv @ 15% O2 is clearly more stringent than the Subpart GG emissions limit of 75 ppmv as discussed below. The draft PTO assures compliance with this requirement.

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

The PTO requires:

This unit shall be fired exclusively on PUC-quality natural gas which has a total sulfur content of less than or equal to 1 gr/100 scf.

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.

$$\%S(lb/lbNG) = \left(\frac{1 \text{ gr}}{100 \text{ scf}}\right) \left(\frac{1 \text{ lb}}{7000 \text{ gr}}\right) \left(\frac{24.5 \text{ L}}{\text{mol NG}}\right) \left(\frac{1 \text{ mol}}{16 \text{ g}}\right) \left(\frac{454 \text{ g}}{1 \text{ lb}}\right) \left(\frac{0.035 \text{ scf}}{1 \text{ L}}\right) (100)$$
= 0.0035% sulfur by weight

lb SO_2/scf gas = $(0.000035)(1 lb/23.8 scf gas)(64 lb <math>SO_2/32 lb S)$ = $3.0 E-6 lb SO_2/scf gas$

Ib $SO_2/V_{exhaust}$ = (Ib SO_2/scf gas) \div (F factor) (Btu content of natural gas)

$$\left(\frac{\text{lb SO}_2}{\text{V}_{\text{exhaust}}}\right) = \frac{\left(3.0\,\text{E} - 6\,\frac{\text{lb SO}_2}{\text{scf gas}}\right)\!\left(\frac{10^6\,\text{Btu}}{\text{MMBtu}}\right)}{\left(8710\,\frac{\text{dscf}}{\text{MMBtu}}\right)\!\left(1000\,\frac{\text{Btu}}{\text{scf}}\right)} = 3.57\,\text{E} - 7\,\frac{\text{lb SO}_2}{\text{dscf exhaust}}$$

 $V_{SO2}/V_{exhaust} = nRT/P$

where,

n = moles SO_2 = (3.35 E-7 lb SO_2 /dscf exhaust)/(64 lb SO_2 / lb-mol) R = universal gas constant = 10.73 psi-ft³/lb-mol- R

T = standard temperature = 60 °F = 520 °R

P = standard pressure = 14.7 psi

Therefore,
$$\left(\frac{V_{SO_2}}{V_{exhaust}} \right) = \frac{\left(\frac{3.57\,\text{E} - 6\,\text{lb}\,\text{SO}_2}{\text{dscf}\,_{exhaust}} \right) \left(\frac{10.73\,\text{psi} - \text{ft}^3}{\text{lb} - \text{mole} - ^{\circ}\text{R}} \right) \! (520\,^{\circ}\text{R})}{\left(\frac{64\,\text{lb}\,\text{SO}_2}{\text{lb} - \text{mol}} \right) \! (14.7\,\text{psi})} = 2.1\,\text{E} - 6\,\frac{\text{dscf}}{\text{dscf}\,_{exhaust}}$$

= 2.1 ppmv dry

Diluting it to 15% O₂

ppmv @15% O2 = ppmv dry
$$X\left(\frac{20.9 - 15}{20.9}\right) = 0.6 \text{ ppmv}$$

0.6 ppmv << 150 ppmv.

Compliance with 150 ppmv SO_x at 15% excess O_2 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 5 of the turbine permits ensures compliance with this rule and condition.

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

Natural gas with fuel sulfur content of 0.3 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):

$$\%S(lb/lbNG) = \left(\frac{1 \text{ gr}}{100 \text{ scf}}\right) \left(\frac{1 \text{ lb}}{7000 \text{ gr}}\right) \left(\frac{24.5 \text{ L}}{\text{mol NG}}\right) \left(\frac{1 \text{ mol}}{16 \text{ g}}\right) \left(\frac{454 \text{ g}}{1 \text{ lb}}\right) \left(\frac{0.035 \text{ scf}}{1 \text{ L}}\right) (100)$$
= 0.0035% sulfur by weight

Thus natural gas with fuel sulfur content of 1 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).

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

The USEPA 40 CFR Part 64 requirements apply to any pollutant specific emission unit (PSEU) at a major source that is required to obtain a Part 70 permit if the unit satisfies all of the following criteria:

- The unit is subject to an emission limitation or standard for an applicable regulated air pollutant;
- The unit uses a control device to achieve compliance with any such emission limitation or standard; and
- The unit has a pre-control device potential to emit (uncontrolled emissions) of the applicable regulated air pollutant equal to or greater than:
 - o 10 tons per year of VOC
 - o 10 tons per year of NOx
 - o 70 tons per year of PM₁₀
 - o 70 tons per year of SOx
 - o 100 tons per year of CO

A PSEU refers to an emission unit treated separately for each regulated air pollutant. In determining the pre-control device potential to emit from a PSEU.

limits on hours of operation, throughput, or fuel consumption may be used provided that the limit is contained in a Part 70 permit condition.

Part 64 also contains a number of exemptions. The following are some examples of emission limitations or standards explicitly exempt from CAM requirements:

- Ones proposed by EPA after November 15, 1990, including NSPS and MACTstandards;
- Ones for which a Part 70 permit already specifies a continuous compliance determination method, as defined in 40 CFR Part 64.1:
- An emission cap that meets the requirements specified in 40 CFR Part 70.4(b)(12); and
- Acid Rain Program requirements of Title IV.

In addition, control devices equipped with continuous emissions monitors are exempt from CAM under the continuous compliance determination method exemption.

There have been no changes to the facility's Title V permits and no changes to 40 CFR Part 64 since the initial Title V review occurred on this facility on 5/3/2011. Therefor a new CAM applicability review is not necessary.

G. 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 condition 28 of S-172-0-3 assure compliance with the requirements.

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 has requested to use the facility-wide umbrella general permit template (SJV-UM-03). Based on the information submitted in the Template Qualification Form, the applicant qualifies for the use of this template.

B. Requirements not Addressed by Model General Permit Templates

Live Oak Limited is not requesting any new permit shields within this Title V renewal project. In addition, Live Oak Limited is not requesting any changes to the existing permit shields already included in their Title V operating permits. Therefore, all of the existing permit shields will be maintained on the revised permits for this renewal project.

C. Obsolete Permit Shields From Existing Permit Requirements

There are no obsolete permit shield conditions to be removed from the permits.

X. CALIFORNIA ENVIRONMENTAL QUALITY ACT

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

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

XI. **PERMIT CONDITIONS**

See Attachment A - Draft Renewed Title V Operating Permit.

XII. ATTACHMENTS

- Draft Renewed Title V Operating Permit Previous Title V Operating Permit Detailed Facility List A,
- B.
- C.

ATTACHMENT A

Draft Renewed Title V Operating Permit

San Joaquin Valley Air Pollution Control District

FACILITY: S-172-0-3

EXPIRATION

FACILITY-WIDE REQUIREMENTS

- The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; Kern County Rule 111] Federally Enforceable Through Title V Permit
- The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0 and Kern County Rule 111] Federally Enforceable Through Title V Permit
- {2287} 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
- 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 Rules 2010, 3.0 and 4.0; 2020 and Kern County Rule 201] Federally Enforceable Through Title V Permit
- {2289} 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
- {2290} 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
- {2291} Every application for a permit required under Rule 2010 (12/17/92) shall be filed in a manner and form 7. prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit
- {2292} 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
- {2293} 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] 4.2] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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

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- 10. {2294} 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. {2295} 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. {2296} 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. {2297} 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. {2298} 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. {2299} 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. {2300} 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. {2301} 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. {2302} 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. {2303} 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. {2304} 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. {2305} 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
- 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 (2/17/05). 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 Kern County Rules 401] Federally Enforceable Through Title V Permit FACILITY WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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

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- 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 the Table of Standards 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 for architectural coatings 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. {2310} 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. {2311} If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR 82, Subpart F. [40 CFR 82 Subpart F] Federally Enforceable Through Title V Permit
- 28. {2312} If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR 82, Subpart B. [40 CFR 82, Subpart B] Federally Enforceable Through Title V Permit
- 29. Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 (8/19/04) or Rule 8011 (8/19/04), [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 (8/19/04) or Rule 8011 (8/19/04). [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 (8/19/04) or Rule 8011 (8/19/04). [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 (8/19/04) or Rule 8011 (8/19/04). [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 (8/19/04) or Rule 8011 (8/19/04). [District Rule 8061 and Rule 8011] Federally Enforceable Through Title V Permit
- 34. Any unpaved vehicle/equipment area that anticipates more than 50 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 150 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 (8/19/04) or Rule 8011 (8/19/04). [District Rule 8071 and Rule 8011] Federally Enforceable Through Title V Permit
- 35. {2319} Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M] Federally Enforceable Through Title V Permit

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- 36. {2320} 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. {2321} 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. {2322} When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permits shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit
- 39. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following outdated SIP requirements: Kern County Rule 401, Kern County Rule 111, Kern County Rules 201, 202, 203, 204, 208, and 209, Kern County Rule 410.1, and Kern County Rule 423. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 40. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (11/15/01); 4601, sections 5.1, 5.2, 5.3, 5.8 and 8.0 (12/17/09); 8021 (8/19/04); 8031 (8/19/04); 8041 (8/19/04); 8051 (8/19/04); 8061 (8/19/04); and 8071 (8/19/04). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 41. Facility shall notify the APCO of a violation of any emission standards indicated by the CEMs within 96 hours of occurrence. The APCO shall be notified within 8 hours after detection of a breakdown in monitoring equipment and 24 hours prior to a planned shut down of monitoring equipment. [District Rule 2520, 9.6.2; Rule 1080, 9.0 and 10.0; Kern County Rule 108; 40 CFR 60.334(c) and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 42. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 43. An owner or operator shall not use organic solvents for cleaning operations that exceed the VOC content limits specified as follows: A) Product cleaning during manufacturing process or surface preparation for adhesive application; 1) general, 25 g/l (0.21 lb/gal) and 2) electrical apparatus components and electronic components, 100 g/l (0.84 lb/gal); B) repair and maintenance cleaning, 1) 25 g/l (0.21 lb/gal) and 2) electrical apparatus components and electronic components 100 g/l (0.84 lb/gal); C) cleaning of coating or adhesive application equipment, 25 g/l (0.21 lb/gal) [District Rule 4663, 5.1] Federally Enforceable Through Title V Permit
- 44. Cleaning activities that use solvents with a VOC content greater than 25 g/l (0.21 lb/gallon) shall be performed by one or more of the following methods: 1) wipe cleaning; 2) application of solvent from hand-held spray bottles from which solvents are dispensed without a propellant-induced force; 3) non-atomized solvent flow method in which the cleaning solvent is collected in a container or a collection system which is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container, or; 4) solvent flushing method in which the cleaning solvent is discharged into a container that is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container. The discharged solvent from the equipment must be collected into containers without atomizing into the open air. The solvent may be flushed through the system by air or hydraulic pressure, or by pumping. [District Rule 4663, 5.2.5] Federally Enforceable Through Title V Permit
- 45. Solvent shall not be atomized into the open air unless it is vented to a VOC emission control system. This provision shall not apply to the cleaning of nozzle tips of automated spray equipment systems, except for robotic systems, and cleaning with spray bottles or containers described elsewhere in this permit. [District Rule 4663, 5.2.6] Federally Enforceable Through Title V Permit

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

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- 46. An owner or operator shall not use VOC-containing materials to clean spray equipment used for the application of coatings, adhesives, or ink, unless an enclosed system or equipment that is proven to be equally effective at controlling emissions is used for cleaning. If an enclosed system is used, it must totally enclose spray guns, cups, nozzles, bowls, and other parts during washing, rinsing and draining procedures, and it must be used according to the manufacturer's recommendations and must be closed when not in use. [District Rule 4663, 5.2.7] Federally Enforceable Through Title V Permit
- 47. All fresh or spent solvents, waste solvent cleaning materials such as cloth, paper, etc., coatings, adhesives, catalysts and thinners shall be stored in closed, non-absorbent and non-leaking containers. [District Rule 4663, 5.4] Federally Enforceable Through Title V Permit
- 48. In lieu of complying with the requirements in Table 1, an owner or operator may comply with this rule by using a VOC emission collection and control system in association with the solvent cleaning operation as provided in District Rule 4663, 5.2 (Adopted September 20, 2007). [District Rule 4663, 5.3] Federally Enforceable Through Title V Permit
- 49. An owner or operator shall maintain the records required by District Rule 4663, Sections 6.2.2 through 6.2.6 (Amended September 20, 2007) at the stationary source for a period of five years. The records shall be made available to the APCO upon request. [District Rules 1070 and 4663, 6.2.1] Federally Enforceable Through Title V Permit
- 50. The VOC content of solvents and organic materials shall be determined by using United States Environmental Protection Agency (EPA) Test Method 24 or 24A, or South Coast Air Quality Management District (SCAQMD) Method 304 (Determination of Volatile Organic compounds in Various Materials), or by using the manufacturer's product formulation data and the formula for "Grams of VOC per liter of Material" in Section 3.0. [District Rule 4663, 6.3.1.1] Federally Enforceable Through Title V Permit
- 51. The content of exempt halogenated VOCs shall be determined by using the California Air Resources Board (ARB) Test Method 432 or SCAQMD Test Method 303 (Determination of Exempt Compounds). [District Rule 4663, 6.3.1.2] Federally Enforceable Through Title V Permit
- 52. The facility shall comply with all applicable requirements regarding preparation and implementation of a Risk Management Plan and shall abide by all applicable sections of 40 CFR Part 68. [40 CFR Part 68] Federally Enforceable Through Title V Permit
- 53. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begins January 1 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

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Location: HEAVY OIL CENTRAL,7001 GRANITE RD, 8-172-0-3: Mar 14 2017 11:03AM - RINALDIR

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-172-1-15

SECTION: NW18 TOWNSHIP: 28S RANGE: 28E

EQUIPMENT DESCRIPTION:

NOMINALLY RATED 48 MW G.T.E. COGENERATION SYSTEM WITH SCR INCLUDING STEWART & STEVENSON GE LM-5000 GAS TURBINE GENERATOR, HEAT RECOVERY STEAM GENERATOR, AND INLET AIR ABSORPTION CHILLER AND HEAT EXCHANGER

PERMIT UNIT REQUIREMENTS

- 1. Gas-fired turbine shall be equipped with combustor steam injection and a selective catalytic reduction (SCR) system utilizing ammonia as the reducing agent for NOx controls. [District Rules 2201 and 4703, 5.1] Federally Enforceable Through Title V Permit
- 2. Gas-fired turbine shall be equipped with carbon monoxide (CO) catalytic oxidizer of sufficient catalyst volume to meet CO and VOC emissions limits. [District Rules 2201 and 4703, 5.2] Federally Enforceable Through Title V Permit
- 3. The gas turbine steam injection rate shall be maintained at a steam to fuel ratio which results in compliance with emissions limits, except during periods of startup, shutdown, and malfunction as defined in this permit. Only malfunctions as defined in 40 CFR 60 qualify for this exemption. [40 CFR Part 60, Subpart A and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 4. Gas turbine combustor steam injection system shall be equipped with continuously recording steam and fuel injection rate monitoring system, accurate to within +/- 5%. [District Rules 2201 and 4703, 6.2; 40 CFR 60.334(a) and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 5. The gas turbine shall be fired exclusively with PUC regulated or FERC regulated natural gas, with fuel gas sulfur content not to exceed 1 grain S/100 scf. [District Rules 2201 and 4801; 40 CFR Part 60.332(a) and 60.333(a) & (b); and Kern County Rule 407] Federally Enforceable Through Title V Permit
- 6. Startup and shutdown and reduced load period of the gas turbine, as defined in this permit, in 40 CFR Subpart A 60.2, and in Rule 4703 shall not exceed a time period of two hours and one hour, respectively, per occurrence. Emission concentrations subsequent to this startup period shall not exceed the limits specified in this permit, except during shutdown. [District Rules 2201 and 4703, 3.23, 3.26, 3.29 and 40 CFR Subpart A 60.2] Federally Enforceable Through Title V Permit
- 7. Operations during periods of startup and shutdown shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the emission limit shown in this permit during periods of startup and shutdown be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. This requirement only applies to the subsumed NOx and SO2 emission standards under NSPS subpart GG for Stationary Gas Turbines. [40 CFR Part 60.8(c)] Federally Enforceable Through Title V Permit
- 8. The maximum VOC emission concentration at turbine exhaust shall not exceed 0.6 ppmv dry at 15% O2, except during periods of startup and shutdown, and as defined in 40 CFR 60, Subpart A [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. Total VOC emissions, including those from the gas turbine exhaust and lube oil vents shall not exceed 0.58 lb/hr and 14.0 lb/day, except during periods of startup and shutdown [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
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- 10. The emission rate from the gas turbine exhaust shall not exceed the following: PM10: 66.3 lb/day, NOx (as NO2): 138.7 lb/day, SOx (as SO2): 31.1 lb/day, and CO: 261.6 lb/day. [District Rules 2201 and 4201; 4703, 5.1, 5.2 and 40 CFR Part 60.332(a) and 333(b)] Federally Enforceable Through Title V Permit
- 11. Nitrogen oxides (as NO2) concentration from the gas turbine exhaust stack shall not exceed 3.6 ppmv dry calculated to 15% O2, except during periods of startup and shutdown. [District Rules 2201 and 4703, 5.1 and 40 CFR Part 60.332(a)] Federally Enforceable Through Title V Permit
- 12. Carbon monoxide (CO) concentration from the gas turbine exhaust stack shall not exceed 11 ppmv dry calculated to 15% O2, except during periods of startup and shutdown. [District Rules 2201 and 4703, 5.2] Federally Enforceable Through Title V Permit
- 13. The total particulate matter (PM) emissions from the gas turbine exhaust shall not exceed 0.1 gr/dscf, [District Rule 4201; Kern County Rule 404] Federally Enforceable Through Title V Permit
- 14. The circular cross section exhaust stack (after SCR unit) shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and equipped with flow straighteners, if necessary, to minimize turbulence. The facility shall comply with this and all applicable compliance testing procedures described in District Rule 1081 (Amended December 16, 1993). [District Rules 2201 and 1081; 4703, 6.2; Kern County Rule 108.1 and 40 CFR Part 60] Federally Enforceable Through Title V Permit
- 15. CEM data can be used in addition to stack testing to determine compliance with the NOx and CO concentrations and daily emission rates. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 16. Unfired heat recovery steam generator turbine exhaust for the unit shall be equipped with continuous emissions monitors (CEM) for NOx, CO, and O2. The continuous NOx monitoring system shall meet the performance specification requirements in 40 CFR, Part 60, Appendix B, Spec 2, 40 CFR Part 60, Appendix F, 40 CFR Part 51, Appendix P, and 40 CFR Part 60.7(c), 60.7(d) and 60.13 or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rules 2201 and 1080; 4703, 6.2.1, 6.2.3; Kern County Rule 108; 40 CFR Part 60 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 17. The facility shall comply with the applicable requirements for quality assurance testing and maintenance of the CEM equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rules 1080, 6.0; 4703, 6.2.3; 40 CFR Part 60 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 18. CEM results shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rules 1080, 7.2; 4703, 6.2.3; Kern County Rule 108 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 19. Except for NOx and CO emission data obtained for compliance demonstration purposes, CEM data shall be averaged in accordance with the requirements specified under 40 CFR Part 60.13. Compliance results for NOx and CO shall be averaged over a three hour period. [District Rule 4703, 5.0, 6.2.3 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 20. Facility shall maintain on file copies of all natural gas fuel invoices, natural gas bills, gas purchase contracts, supplier certifications, and test results used to determine compliance with the requirements of this permit unit. [District Rule 2520, 9.3.2 and 40 CFR Part 60.334(b)2 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 21. Operators of CEMS shall submit a written report for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include: time intervals, data and magnitude of excess 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; and a negative declaration when no excess emissions occurred. [District Rules 1080, 8.0; 2520, 9.6.1; Rule Kern County Rule 108; 40 CFR 60.7(c) and 40 CFR Part 64] Federally Enforceable Through Title V Permit

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

Facility Name: LIVE OAK LIMITED

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- 22. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rules 1080, sections 4.0, 6.5, 7.2, 7.3, 8.0, 9.0, and 10.0 (Amended December 17, 1992); 1081 (Amended December 16, 1993); 4201 (Amended December 17, 1992); 4703 sections 5.0, 5.1, 5.2, 6.2.1, 6.2.2, 6.2.4, 6.3, and 6.4 (Amended September 20, 2007); 4801 (Amended December 17, 1992); 40 CFR 60.332(a),(b); 60.333(a),(b),(c); 60.334(a),(c); and 60.335(b),(c); and 40 CFR 64. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 23. The requirements of 40 CFR 72.6(b) (Acid Rain Provisions) do not apply to this source because it is a cogeneration facility that meets the exemption definition of 40 CFR Part 72.6 (b)(4) and (b)(5). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 24. All permits issued to facilities S-172, S-1118, S-1119, S-1120 and S-2049 are included in the same heavy oil central stationary source. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. Unfired heat recovery steam generator shall not be designed for supplementary firing. [District Rule 2201] Federally Enforceable Through Title V Permit
- 26. Gas turbine and generator lube oil atmospheric vents shall be equipped with mist eliminators. [District Rule 2201] Federally Enforceable Through Title V Permit
- 27. Gas temperature at SCR catalyst section inlet shall be monitored by operational temperature indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
- 28. Ammonia injection grid shall be equipped with operational ammonia flowmeter and injection pressure indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
- 29. Ammonia slip shall not exceed 20 ppmv and daily compliance with ammonia slip shall be demonstrated by means of the calculation procedure set forth as follows: Ammonia slip shall be calculated as: slip = (a-(bxc/1,000,00)) x 1,000,000/b, where a = ammonia injection rate (lb/hr)/17(lb/lb.mol), and b= dry exhaust gas flow rate (lb/hr)/29(lb/lb.mol), and c = change in measured NOx concentration ppmv at stack O2. The "daily compliance" requirement can be met with a daily average ammonia slip value, as calculated pursuant to this condition. [District Rule 4102]
- 30. Inlet gas temperature to catalyst bed shall be maintained within range recommended by catalyst manufacturer except during periods of startup and shutdown as defined herein. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 31. All gas turbine exhaust shall flow through catalyst bed. [District Rule 2201] Federally Enforceable Through Title V Permit
- 32. The operator shall monitor and record exhaust gas temperature at oxidation catalyst inlet, and if average temperature exceeds 800 deg. F., shall establish that VOC control satisfies BACT requirement. [District Rule 2201] Federally Enforceable Through Title V Permit
- 33. Compliance with fuel gas sulfur limit shall be demonstrated by fuel gas sample analysis by independent testing laboratory taken at time of annual stack gas sampling. Official test results and field data collected to comply with this condition and shall be submitted to the District within 60 days of testing. Certification of the sulfur content by the gas supplier is an acceptable alternative for verifying compliance. [District Rules 2201 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 34. Facilities shall demonstrate compliance with NOx and CO daily emissions limits by use of CEM data, fuel rate data, and daily hours of operation data. A written record of the required compliance demonstrations shall be maintained and made available for District inspection for a period of five years. [District Rules 2201 and 2520, 9.3.2 and 9.4.2 and 4703, 6.2.4 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 35. Any lube oil cooler/accumulating vent having visible emissions with an opacity of 5% or greater shall be tested to demonstrated compliance with lube oil cooler/accumulating vent VOC hourly emissions limit. Official test results and field data collected shall be submitted within 60 days of testing. [District Rule 2201] Federally Enforceable Through Title V Permit

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

Facility Name: LIVE OAK LIMITED
Location: HEAVY OIL CENTRAL,7001 GRANITE RD, CA 3308
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- 36. All CEMS data required to comply with the conditions in this permit shall be rounded to the same number of significant digits as the specified limits, but not less than two significant digits. [40 CFR 60.13(h) and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 37. Records shall be maintained and shall contain: the occurrence and duration of any startup, shutdown, or malfunction; performance testing, evaluations, calibrations, checks, adjustments, any period during which a continuous monitoring system or monitoring device was inoperative, maintenance of any CEM that have been installed pursuant to District Rule 1080; emission measurements, and daily actual local startup and stop time, length and reason for reduced load periods, total hours of operation and daily quantity of fuel used. [District Rules 1080; 4703, 6.2.6, 7.3; Kern County Rule 108; 40 CFR 60.332(a), (b); and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 38. The concentration of nitrogen oxides (NOx) from the gas turbine streams shall be determined using EPA Method 7E or 20, and oxygen (O2) concentration shall be determined using EPA Method 3, 3A, or 20. Carbon monoxide (CO) emissions shall be determined using EPA Test Methods 10 or 10B. Source test results will be provided to the District annually. EPA approved alternative test methods may also be used to address the source testing requirements of this permit. [District Rule 1081; District Rule 2520, 9.3; District Rule 4703, 5.1, 5.2 & 6.4; 40 CFR Subpart GG 60.335(b) and (c); 40 CFR Subpart A 60.8 and 40 CFR 60.332(a) & (b)] Federally Enforceable Through Title V Permit
- 39. A written record of the compliance demonstration with NOx and CO daily emissions limits during gas turbine engine startup/shutdown shall be maintained and made available for District inspection for a period of five years. [District Rules 2201 and 2520, 9.4.2 and 4703, 6.2.4] Federally Enforceable Through Title V Permit
- 40. Audits of monitors shall be conducted quarterly, except during quarters in which RATA testing is performed in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with the quarterly compliance reports to the District. [District Rule 2201] Federally Enforceable Through Title V Permit
- 41. Compliance with the VOC (hourly) emission limit shall be demonstrated by sample collection taken by independent testing laboratory annually within 60 days prior to permit anniversary date. The District shall be notified prior to the completion of any sampling event. [District Rule 2201] Federally Enforceable Through Title V Permit
- 42. 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. Official test results and field data collected by source tests required by conditions on this permit shall be submitted to the District within 60 days of testing. [District Rules 1081, 7.0; 4703, 6.3 and Kern County Rule 108.1] Federally Enforceable Through Title V Permit
- 43. Compliance with the ammonia slip (ppmv) emission limits shall be demonstrated by sample collection taken by independent testing laboratory annually within 60 days prior to permit anniversary date. The District shall be notified prior to the completion of any sampling event. Official test results and field data collection shall be submitted to the District within 60 days of testing. [District Rule 4102]
- 44. Except during system breakdowns, repairs and maintenance, calibration checks, and zero and span adjustments, the continuous emission monitoring system shall be in continuous operation. NOx emissions in ppmy (corrected to 15% O2) and O2 concentrations must be recorded continuously (except as noted before) and data shall be reduced to 15 minute averages per 40 CFR Part 60.13(e)(2). [District Rule 2201; 40 CFR 60.486 paragraph b, c and d and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 45. Gas turbine engine shall not be operated unless steam injection system, selective catalytic reduction system, and oxidation catalyst system are operating, except during periods of startup and shutdown as defined herein. [District Rules 2080, 4703, 5.1, 5.2 and 40 CFR Part 60] Federally Enforceable Through Title V Permit

These terms and conditions the Facility-wide Permit to Operate,

Facility Name: LIVE OAK LIMITED Location: HEAVY OIL CENTRAL, 7001 GRANITE RD, CA 9830 8-172-1-15: Mar 14 2017 1:03AM - RINALDIR

ATTACHMENT B

Previous Title V Operating Permit





Permit to Operate

FACILITY: S-172

EXPIRATION DATE: 04/30/2016

LEGAL OWNER OR OPERATOR:

MAILING ADDRESS:

LIVE OAK LIMITED

34759 LENCIONI AVE STE A

BAKERSFIELD, CA 93308

FACILITY LOCATION:

HEAVY OIL CENTRAL

7001 GRANITE RD, CA 93308

FACILITY DESCRIPTION:

OIL & GAS PRODUCTION

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

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

Seyed Sadredin

Arnaud Marjollet
Director of Permit Services

San Joaquin Valley Air Pollution Control District

FACILITY: S-172-0-2

EXPIRATION DATE: 04/30/2016

FACILITY-WIDE REQUIREMENTS

- 1. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; Kern County Rule 111] Federally Enforceable Through Title V Permit
- The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0 and Kern County Rule 111] 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
- 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 Rules 2010, 3.0 and 4.0; 2020 and Kern County Rule 201] Federally Enforceable Through Title V Permit
- The permittee must comply with all conditions of the permit including permit revisions originated by the District. All 5. 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
- A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit
- 7. Every application for a permit required under Rule 2010 (12/17/92) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit
- The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or 8. 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
- 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: LIVE OAK LIMITED

Location: HEAVY OIL CENTRAL,7001 GRANITE RD, CA 93308 S-172-0-2: Mar 9 2017 2:38PM - RINALDIR

- 10. The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.5.1] Federally Enforceable Through Title V Permit
- 11. Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520 (6/21/01). [District Rules 2520, 9.5.2 and 1100, 7.0] Federally Enforceable Through Title V Permit
- 12. If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit. [District Rule 2520, 9.7] Federally Enforceable Through Title V Permit
- 13. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.8.2] Federally Enforceable Through Title V Permit
- 14. The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.8.3] Federally Enforceable Through Title V Permit
- 15. The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.8.4] Federally Enforceable Through Title V Permit
- 16. The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.8.5] Federally Enforceable Through Title V Permit
- 17. The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.9] Federally Enforceable Through Title V Permit
- 18. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 2520, 9.13.2.1] Federally Enforceable Through Title V Permit
- 19. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.13.2.2] Federally Enforceable Through Title V Permit
- 20. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.13.2.3] Federally Enforceable Through Title V Permit
- 21. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.13.2.4] Federally Enforceable Through Title V Permit
- 22. No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (2/17/05). 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 Kern County Rules 401] 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 the Table of Standards 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 for architectural coatings 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 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 82, Subpart B. [40 CFR 82, Subpart B] Federally Enforceable Through Title V Permit
- 29. Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 (8/19/04) or Rule 8011 (8/19/04). [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 (8/19/04) or Rule 8011 (8/19/04). [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 (8/19/04) or Rule 8011 (8/19/04). [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 (8/19/04) or Rule 8011 (8/19/04), [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 (8/19/04) or Rule 8011 (8/19/04). [District Rule 8061 and Rule 8011] Federally Enforceable Through Title V Permit
- 34. Any unpaved vehicle/equipment area that anticipates more than 50 vehicle trips per day shall comply with the requirements of Section 5.1,1 of District Rule 8071. Any unpayed vehicle/equipment area that anticipates more than 150 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 (8/19/04) or Rule 8011 (8/19/04). [District Rule 8071 and Rule 8011] Federally Enforceable Through Title V Permit
- 35. Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M] Federally Enforceable Through Title V Permit

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- 36. The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9,16] Federally Enforceable Through Title V Permit
- 37. The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2] Federally Enforceable Through Title V Permit
- 38. When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permits shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit
- 39. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following outdated SIP requirements: Kern County Rule 401, Kern County Rule 111, Kern County Rules 201, 202, 203, 204, 208, and 209, Kern County Rule 410.1, and Kern County Rule 423. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 40. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (11/15/01); 4601, sections 5.1, 5.2, 5.3, 5.8 and 8.0 (12/17/09); 8021 (8/19/04); 8031 (8/19/04); 8041 (8/19/04); 8051 (8/19/04); 8061 (8/19/04); and 8071 (8/19/04). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 41. Facility shall notify the APCO of a violation of any emission standards indicated by the CEMs within 96 hours of occurrence. The APCO shall be notified within 8 hours after detection of a breakdown in monitoring equipment and 24 hours prior to a planned shut down of monitoring equipment. [District Rule 2520, 9.6.2; Rule 1080, 9.0 and 10.0; Kern County Rule 108; 40 CFR 60.334(c) and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 42. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 43. An owner or operator shall not use organic solvents for cleaning operations that exceed the VOC content limits specified as follows: A) Product cleaning during manufacturing process or surface preparation for adhesive application; 1) general, 25 g/l (0.21 lb/gal) and 2) electrical apparatus components and electronic components, 100 g/l (0.84 lb/gal); B) repair and maintenance cleaning, 1) 25 g/l (0.21 lb/gal) and 2) electrical apparatus components and electronic components 100 g/l (0.84 lb/gal); C) cleaning of coating or adhesive application equipment, 25 g/l (0.21 lb/gal) [District Rule 4663, 5.1] Federally Enforceable Through Title V Permit
- 44. Cleaning activities that use solvents with a VOC content greater than 25 g/l (0.21 lb/gallon) shall be performed by one or more of the following methods: 1) wipe cleaning; 2) application of solvent from hand-held spray bottles from which solvents are dispensed without a propellant-induced force; 3) non-atomized solvent flow method in which the cleaning solvent is collected in a container or a collection system which is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container, or; 4) solvent flushing method in which the cleaning solvent is discharged into a container that is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container. The discharged solvent from the equipment must be collected into containers without atomizing into the open air. The solvent may be flushed through the system by air or hydraulic pressure, or by pumping. [District Rule 4663, 5.2.5] Federally Enforceable Through Title V Permit
- 45. Solvent shall not be atomized into the open air unless it is vented to a VOC emission control system. This provision shall not apply to the cleaning of nozzle tips of automated spray equipment systems, except for robotic systems, and cleaning with spray bottles or containers described elsewhere in this permit. [District Rule 4663, 5.2.6] Federally Enforceable Through Title V Permit

- 46. An owner or operator shall not use VOC-containing materials to clean spray equipment used for the application of coatings, adhesives, or ink, unless an enclosed system or equipment that is proven to be equally effective at controlling emissions is used for cleaning. If an enclosed system is used, it must totally enclose spray guns, cups, nozzles, bowls, and other parts during washing, rinsing and draining procedures, and it must be used according to the manufacturer's recommendations and must be closed when not in use, [District Rule 4663, 5.2.7] Federally Enforceable Through Title V Permit
- 47. All fresh or spent solvents, waste solvent cleaning materials such as cloth, paper, etc., coatings, adhesives, catalysts and thinners shall be stored in closed, non-absorbent and non-leaking containers. [District Rule 4663, 5.4] Federally Enforceable Through Title V Permit
- 48. In lieu of complying with the requirements in Table 1, an owner or operator may comply with this rule by using a VOC emission collection and control system in association with the solvent cleaning operation as provided in District Rule 4663, 5.2 (Adopted September 20, 2007). [District Rule 4663, 5.3] Federally Enforceable Through Title V Permit
- 49. An owner or operator shall maintain the records required by District Rule 4663, Sections 6.2.2 through 6.2.6 (Amended September 20, 2007) at the stationary source for a period of five years. The records shall be made available to the APCO upon request. [District Rules 1070 and 4663, 6.2.1] Federally Enforceable Through Title V Permit
- 50. The VOC content of solvents and organic materials shall be determined by using United States Environmental Protection Agency (EPA) Test Method 24 or 24A, or South Coast Air Quality Management District (SCAQMD) Method 304 (Determination of Volatile Organic compounds in Various Materials), or by using the manufacturer's product formulation data and the formula for "Grams of VOC per liter of Material" in Section 3.0. [District Rule 4663, 6.3.1.1] Federally Enforceable Through Title V Permit
- 51. The content of exempt halogenated VOCs shall be determined by using the California Air Resources Board (ARB) Test Method 432 or SCAQMD Test Method 303 (Determination of Exempt Compounds). [District Rule 4663, 6.3.1.2] Federally Enforceable Through Title V Permit
- 52. The facility shall comply with all applicable requirements regarding preparation and implementation of a Risk Management Plan and shall abide by all applicable sections of 40 CFR Part 68, [40 CFR Part 68] Federally Enforceable Through Title V Permit
- 53. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begins January 1 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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-172-1-14

EXPIRATION DATE: 04/30/2016

SECTION: NW18 TOWNSHIP: 28S RANGE: 28E

EQUIPMENT DESCRIPTION:

NOMINALLY RATED 48 MW G.T.E. COGENERATION SYSTEM WITH SCR INCLUDING STEWART & STEVENSON GE LM-5000 GAS TURBINE GENERATOR, HEAT RECOVERY STEAM GENERATOR, AND INLET AIR ABSORPTION CHILLER AND HEAT EXCHANGER

PERMIT UNIT REQUIREMENTS

- 1. Gas-fired turbine shall be equipped with combustor steam injection and a selective catalytic reduction (SCR) system utilizing ammonia as the reducing agent for NOx controls. [District Rules 2201 and 4703, 5.1] Federally Enforceable Through Title V Permit
- 2. Gas-fired turbine shall be equipped with carbon monoxide (CO) catalytic oxidizer of sufficient catalyst volume to meet CO and VOC emissions limits. [District Rules 2201 and 4703, 5.2] Federally Enforceable Through Title V Permit
- 3. The gas turbine steam injection rate shall be maintained at a steam to fuel ratio which results in compliance with emissions limits, except during periods of startup, shutdown, and malfunction as defined in this permit. Only malfunctions as defined in 40 CFR 60 qualify for this exemption. [40 CFR Part 60, Subpart A and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 4. Gas turbine combustor steam injection system shall be equipped with continuously recording steam and fuel injection rate monitoring system, accurate to within +/- 5%. [District Rules 2201 and 4703, 6.2; 40 CFR 60.334(a) and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 5. The gas turbine shall be fired exclusively with PUC regulated or FERC regulated natural gas, with fuel gas sulfur content not to exceed 1 grain S/100 scf. [District Rules 2201 and 4801; 40 CFR Part 60.332(a) and 60.333(a) & (b); and Kern County Rule 407] Federally Enforceable Through Title V Permit
- 6. Startup and shutdown and reduced load period of the gas turbine, as defined in this permit, in 40 CFR Subpart A 60.2, and in Rule 4703 shall not exceed a time period of two hours and one hour, respectively, per occurrence. Emission concentrations subsequent to this startup period shall not exceed the limits specified in this permit, except during shutdown. [District Rules 2201 and 4703, 3.23, 3.26, 3.29 and 40 CFR Subpart A 60.2] Federally Enforceable Through Title V Permit
- 7. Operations during periods of startup and shutdown shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the emission limit shown in this permit during periods of startup and shutdown be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. This requirement only applies to the subsumed NOx and SO2 emission standards under NSPS subpart GG for Stationary Gas Turbines. [40 CFR Part 60.8(c)] Federally Enforceable Through Title V Permit
- 8. The maximum VOC emission concentration at turbine exhaust shall not exceed 0.6 ppmv dry at 15% O2, except during periods of startup and shutdown, and as defined in 40 CFR 60, Subpart A [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. Total VOC emissions, including those from the gas turbine exhaust and lube oil vents shall not exceed 0.58 lb/hr and 14.0 lb/day, except during periods of startup and shutdown. [District Rule 2201] Federally Enforceable Through Title V Permit

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

Facility Name: LIVE OAK LIMITED
Location: HEAVY OIL CENTRAL,7001 GRANITE RD, CA 93308
8-172-1-14: Mer 9 2017 2:39PM - RINALDIR

- 10. The emission rate from the gas turbine exhaust shall not exceed the following: PM10: 66.3 lb/day, NOx (as NO2): 138.7 lb/day, SOx (as SO2): 31.1 lb/day, and CO: 261.6 lb/day. [District Rules 2201 and 4201; 4703, 5.1, 5.2 and 40 CFR Part 60.332(a) and 333(b)] Federally Enforceable Through Title V Permit
 - Nitrogen oxides (as NO2) concentration from the gas turbine exhaust stack shall not exceed 3.6 ppmv dry calculated to 15% O2, except during periods of startup and shutdown. [District Rules 2201 and 4703, 5.1 and 40 CFR Part 60.332(a)] Federally Enforceable Through Title V Permit
- 12. Carbon monoxide (CO) concentration from the gas turbine exhaust stack shall not exceed 11 ppmv dry calculated to 15% O2, except during periods of startup and shutdown. [District Rules 2201 and 4703, 5.2] Federally Enforceable Through Title V Permit
- 13. The total particulate matter (PM) emissions from the gas turbine exhaust shall not exceed 0.1 gr/dscf. [District Rule 4201; Kern County Rule 404] Federally Enforceable Through Title V Permit
- 14. The circular cross section exhaust stack (after SCR unit) shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and equipped with flow straighteners, if necessary, to minimize turbulence. The facility shall comply with this and all applicable compliance testing procedures described in District Rule 1081 (Amended December 16, 1993). [District Rules 2201 and 1081; 4703, 6.2; Kern County Rule 108.1 and 40 CFR Part 60] Federally Enforceable Through Title V Permit
- 15. CEM data can be used in addition to stack testing to determine compliance with the NOx and CO concentrations and daily emission rates. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 16. Unfired heat recovery steam generator turbine exhaust for the unit shall be equipped with continuous emissions monitors (CEM) for NOx, CO, and O2. The continuous NOx monitoring system shall meet the performance specification requirements in 40 CFR, Part 60, Appendix B, Spec 2, 40 CFR Part 60, Appendix F, 40 CFR Part 51, Appendix P, and 40 CFR Part 60.7(c), 60.7(d) and 60.13 or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rules 2201 and 1080; 4703, 6.2.1, 6.2.3; Kern County Rule 108; 40 CFR Part 60 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 17. The facility shall comply with the applicable requirements for quality assurance testing and maintenance of the CEM equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rules 1080, 6.0; 4703, 6.2.3; 40 CFR Part 60 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 18. CEM results shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rules 1080, 7.2; 4703, 6.2.3; Kern County Rule 108 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 19. Except for NOx and CO emission data obtained for compliance demonstration purposes, CEM data shall be averaged in accordance with the requirements specified under 40 CFR Part 60.13. Compliance results for NOx and CO shall be averaged over a three hour period. [District Rule 4703, 5.0, 6.2.3 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 20. Facility shall maintain on file copies of all natural gas fuel invoices, natural gas bills, gas purchase contracts, supplier certifications, and test results used to determine compliance with the requirements of this permit unit. [District Rule 2520, 9.3.2 and 40 CFR Part 60.334(b)2 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 21. Operators of CEMS shall submit a written report for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include: time intervals, data and magnitude of excess 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; and a negative declaration when no excess emissions occurred. [District Rules 1080, 8.0; 2520, 9.6.1; Rule Kern County Rule 108; 40 CFR 60.7(c) and 40 CFR Part 64] Federally Enforceable Through Title V Permit

- 22. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rules 1080, sections 4.0, 6.5, 7.2, 7.3, 8.0, 9.0, and 10.0 (Amended December 17, 1992); 1081 (Amended December 16, 1993); 4201 (Amended December 17, 1992); 4703 sections 5.0, 5.1, 5.2, 6.2.1, 6.2.2, 6.2.4, 6.3, and 6.4 (Amended September 20, 2007); 4801 (Amended December 17, 1992); 40 CFR 60.332(a),(b); 60.333(a),(b),(c); 60.334(a),(c); and 60.335(b),(c); and 40 CFR 64. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 23. The requirements of 40 CFR 72.6(b) (Acid Rain Provisions) do not apply to this source because it is a cogeneration facility that meets the exemption definition of 40CFR Part 72.6 (b)(4) and (b)(5). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 24. All permits issued to facilities S-172, S-1118, S-1119, S-1120 and S-2049 are included in the same heavy oil central stationary source. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. Unfired heat recovery steam generator shall not be designed for supplementary firing. [District Rule 2201] Federally Enforceable Through Title V Permit
- 26. Gas turbine and generator lube oil atmospheric vents shall be equipped with mist eliminators. [District Rule 2201] Federally Enforceable Through Title V Permit
- 27. Gas temperature at SCR catalyst section inlet shall be monitored by operational temperature indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
- 28. Ammonia injection grid shall be equipped with operational ammonia flowmeter and injection pressure indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
- 29. Ammonia slip shall not exceed 20 ppmv and daily compliance with ammonia slip shall be demonstrated by means of the calculation procedure set forth as follows: Ammonia slip shall be calculated as: slip = (a-(bxc/1,000,00)) x1,000,000/b, where a = ammonia injection rate (lb/hr)/17(lb/lb.mol), and b= dry exhaust gas flow rate (lb/hr)/29(lb/lb.mol), and c = change in measured NOx concentration ppmv at stack O2. The "daily compliance" requirement can be met with a daily average ammonia slip value, as calculated pursuant to this condition. [District Rule 4102]
- 30. Inlet gas temperature to catalyst bed shall be maintained within range recommended by catalyst manufacturer except during periods of startup and shutdown as defined herein. [District Rule 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 31. All gas turbine exhaust shall flow through catalyst bed. [District Rule 2201] Federally Enforceable Through Title V
- 32. The operator shall monitor and record exhaust gas temperature at oxidation catalyst inlet, and if average temperature exceeds 800 deg. F., shall establish that VOC control satisfies BACT requirement. [District Rule 2201] Federally Enforceable Through Title V Permit
- 33. Compliance with fuel gas sulfur limit shall be demonstrated by fuel gas sample analysis by independent testing laboratory taken at time of annual stack gas sampling. Official test results and field data collected to comply with this condition and shall be submitted to the District within 60 days of testing. Certification of the sulfur content by the gas supplier is an acceptable alternative for verifying compliance. [District Rules 2201 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 34. Facilities shall demonstrate compliance with NOx and CO daily emissions limits by use of CEM data, fuel rate data, and daily hours of operation data. A written record of the required compliance demonstrations shall be maintained and made available for District inspection for a period of five years. [District Rules 2201 and 2520, 9.3.2 and 9.4.2 and 4703, 6.2.4 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 35. Any lube oil cooler/accumulating vent having visible emissions with an opacity of 5% or greater shall be tested to demonstrated compliance with lube oil cooler/accumulating vent VOC hourly emissions limit. Official test results and field data collected shall be submitted within 60 days of testing, [District Rule 2201] Federally Enforceable Through Title V Permit

- 36. All CEMS data required to comply with the conditions in this permit shall be rounded to the same number of significant digits as the specified limits, but not less than two significant digits. [40 CFR 60.13(h) and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 37. Records shall be maintained and shall contain: the occurrence and duration of any startup, shutdown, or malfunction; performance testing, evaluations, calibrations, checks, adjustments, any period during which a continuous monitoring system or monitoring device was inoperative, maintenance of any CEM that have been installed pursuant to District Rule 1080; emission measurements, and daily actual local startup and stop time, length and reason for reduced load periods, total hours of operation and daily quantity of fuel used. [District Rules 1080; 4703, 6.2.6, 7.3; Kern County Rule 108; 40 CFR 60.332(a), (b); and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 38. The concentration of nitrogen oxides (NOx) from the gas turbine streams shall be determined using EPA Method 7E or 20, and oxygen (O2) concentration shall be determined using EPA Method 3, 3A, or 20. Carbon monoxide (CO) emissions shall be determined using EPA Test Methods 10 or 10B. Source test results will be provided to the District annually. EPA approved alternative test methods may also be used to address the source testing requirements of this permit. [District Rule 1081; District Rule 2520, 9.3; District Rule 4703, 5.1, 5.2 & 6.4; 40 CFR Subpart GG 60.335(b) and (c); 40 CFR Subpart A 60.8 and 40 CFR 60.332(a) & (b)] Federally Enforceable Through Title V Permit
- 39. A written record of the compliance demonstration with NOx and CO daily emissions limits during gas turbine engine startup/shutdown shall be maintained and made available for District inspection for a period of five years. [District Rules 2201 and 2520, 9.4.2 and 4703, 6.2.4] Federally Enforceable Through Title V Permit
- 40. Audits of monitors shall be conducted quarterly, except during quarters in which RATA testing is performed in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with the quarterly compliance reports to the District. [District Rule 2201] Federally Enforceable Through Title V Permit
- 41. Compliance with the VOC (hourly) emission limit shall be demonstrated by sample collection taken by independent testing laboratory annually within 60 days prior to permit anniversary date. The District shall be notified prior to the completion of any sampling event. [District Rule 2201] Federally Enforceable Through Title V Permit
- 42. 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. Official test results and field data collected by source tests required by conditions on this permit shall be submitted to the District within 60 days of testing. [District Rules 1081, 7.0; 4703, 6.3 and Kern County Rule 108.1] Federally Enforceable Through Title V Permit
- 43. Compliance with the ammonia slip (ppmv) emission limits shall be demonstrated by sample collection taken by independent testing laboratory annually within 60 days prior to permit anniversary date. The District shall be notified prior to the completion of any sampling event. Official test results and field data collection shall be submitted to the District within 60 days of testing. [District Rule 4102]
- 44. Except during system breakdowns, repairs and maintenance, calibration checks, and zero and span adjustments, the continuous emission monitoring system shall be in continuous operation. NOx emissions in ppmy (corrected to 15% O2) and O2 concentrations must be recorded continuously (except as noted before) and data shall be reduced to 15 minute averages per 40 CFR Part 60.13(e)(2). [District Rule 2201; 40 CFR 60.486 paragraph b, c and d and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 45. Gas turbine engine shall not be operated unless steam injection system, selective catalytic reduction system, and oxidation catalyst system are operating, except during periods of startup and shutdown as defined herein. [District Rules 2080, 4703, 5.1, 5.2 and 40 CFR Part 60] Federally Enforceable Through Title V Permit

ATTACHMENT C

Detailed Facility List

CD	ERN
SJVUAF	SOUTH

Detailed Facility Report

For Facility=0172

1:37 pm 3/14/17

Sorted by Facility Name and Permit Number

NOMINALLY RATED 48 MW G.T.E. COGENERATION SYSTEM WITH SCR INCLUDING STEWART & STEVENSON GE LM-5000 GAS TURBINE GENERATOR, HEAT RECOVERY STEAM GENERATOR, AND INLET AIR ABSORPTION CHILLER AND HEAT EXCHANGER 04/30/2016 22.1 EXPIRE ON: INSP. DATE: AREA: TitleV TOXIC ID: 50138 **EQUIPMENT DESCRIPTION** TYPE PERMIT STATUS st) A 8053261112 FEE TOTAL 11,178,00 \$ 172 FEE 11,178.00 STATUS: TELEPHONE: FAC# QT 7 3010-024 G FEE RULE **FEE DESCRIPTION** HEAVY OIL CENTRAL 7001 GRANITE RD, CA 93308 43 MW LIVE OAK LIMITED S-172-1-14 NUMBER PERMIT

Number of Facilities Reported: 1