

September 7, 2021

Mr. Denver Deck  
Kern Limited  
34759 Lencioni Ave  
Bakersfield, CA 93308

**Re: Notice of Preliminary Decision – Title V Permit Renewal**  
**Facility Number: S-1120**  
**Project Number: S-1200302**

Dear Mr. Deck:

Enclosed for your review and comment is the District's analysis of the application to renew the Federally Mandated Operating Permit for Kern Limited at 12241 Oilfield Rd, Bakersfield, California.

The notice of preliminary decision for this project has been posted on the District's website ([www.valleyair.org](http://www.valleyair.org)). 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. Errol Villegas, Permit Services Manager, at (559) 230-5900.

Sincerely,



Brian Clements  
Director of Permit Services

Enclosures

cc: Courtney Graham, CARB (w/enclosure) via email  
cc: Laura Yannayon, EPA (w/enclosure) via EPS

**Samir Sheikh**  
Executive Director/Air Pollution Control Officer

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**Northern Region**  
4800 Enterprise Way  
Modesto, CA 95356-8718  
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Bakersfield, CA 93308-9725  
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**SAN JOAQUIN VALLEY  
AIR POLLUTION CONTROL DISTRICT**

**Proposed Title V Permit Renewal Evaluation  
Kern Front Limited  
S-1120**

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**TITLE V PERMIT RENEWAL EVALUATION**  
**Cogeneration Power Production Facility**

**Engineer:** Christian Bisher  
**Date:** September 7, 2021

**Facility Number:** S-1120  
**Facility Name:** Kern Front Limited  
**Mailing Address:** 34759 Lencioni Ave  
Bakersfield, CA 93308

**Contact Name:** Denver Deck  
**Phone:** (661) 387-7816

**Responsible Official:** Denver Deck  
**Title:** Plant Manager

**Project # :** S-1200302  
**Deemed Complete:** March 26, 2020

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**I. PROPOSAL**

Kern Front Limited was issued their last renewed Title V permit on October 6, 2016. As required by District Rule 2520, the applicant is requesting a permit renewal. The existing Title V permit shall be reviewed and modified to reflect all applicable District and federal rules updated, removed, or added since the issuance of the initial Title V permit.

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

**II. FACILITY LOCATION**

Kern Front Limited is located at 12241 Oilfield Road in Bakersfield, CA.

### **III. EQUIPMENT LISTING**

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

### **IV. GENERAL PERMIT TEMPLATE USAGE**

The applicant is requesting to use the following model general permit Templates:

#### **A. Template SJV-UM-0-3 Facility Wide Umbrella**

The applicant has requested to utilize template No. SJV-UM-0-3, Facility Wide Umbrella. 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 Renewed Operating Permit are based on model general permit templates that have been previously subject to EPA and public review. The terms and conditions from the model general permit templates are included in the proposed permit and are not subject to further EPA and public review.

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

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

- Conditions 1 through 40 of the requirements for permit unit S-1120-0-5.

### **VI. FEDERALLY ENFORCEABLE REQUIREMENTS**

#### **Rules Addressed by General Permit Template**

##### **A. Rules Updated or Evaluated**

- District Rule 2520, Federally Mandated Operating Permits, (amended June 21, 2001 amended August 15, 2019)

- District Rule 4601, Architectural Coatings (amended December 17, 2009 ⇒ amended April 16, 2020)
- 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners (amended March 24, 2021)
- 40 CFR Part 82, Subpart F, Recycling and Emissions Reduction (amended April 10, 2020)

## **B. Rules Added/Removed**

There are no applicable rules that were added or removed since the last Title V renewal.

## **C. Rules Not Updated**

- District Rule 2010, Permits Required (amended December 17, 1992)
- District Rule 2020, Exemptions (amended December 18, 2014)
- District Rule 2031, Transfer of Permits (amended December 17, 1992)
- District Rule 2070, Standards for Granting Applications, Section 7.0 (amended December 17, 1992)
- District Rule 2080, Conditional Approval (amended December 17, 1992)
- District Rule 4101, Visible Emissions (amended February 17, 2005)
- District Rule 8011, Fugitive Dust General Requirements (amended August 19, 2004)
- District Rule 8021, Construction, Demolition Excavation, Extraction, and Other Earthmoving Activities (amended August 19, 2004)
- District Rule 8031, Bulk Materials (amended August 19, 2004)
- District Rule 8041, Carryout and Trackout (amended August 19, 2004)
- District Rule 8051, Open Areas (amended August 19, 2004)
- District Rule 8061, Paved and Unpaved Roads (amended August 19, 2004)

- District Rule 8071, Unpaved Vehicle/Equipment Traffic Areas (amended September 16, 2004)
- 40 CFR Part 61, Subpart M, National Emission Standards for Asbestos (amended July 20, 2004)

## **Rules Not Addressed by General Permit Template**

### **A. Rules Updated or Evaluated**

- District Rule 2201, New and Modified Stationary Source Review Rule (amended February 18, 2016 ⇒ amended August 15, 2019)
- District Rule 2410, Prevention of Significant Deterioration (effective November 26, 2012)
- District Rule 2520, Federally Mandated Operating Permits (amended June 21, 2001 ⇒ amended August 15, 2019)
- 40 CFR Part 60, Subpart A, General Provisions (amended October 7, 2020)
- 40 CFR Part 60, Appendix F, Quality Assurance Procedures (amended October 7, 2020)
- 40 CFR Part 64, Compliance Assurance Monitoring (amended October 22, 1997)
- 40 CFR Part 68, Chemical Accident Prevention Provisions (amended December 19, 2019)

### **B. Rules Added/Removed**

There are no applicable rules that were added or removed since the last Title V renewal.

### **C. Rules Not Updated**

- District Rule 1070, Inspections (amended December 17, 1992)
- District Rule 1080, Stack Monitoring (amended December 17, 1992)
- District Rule 1081, Source Sampling (amended December 17, 1992)

- District Rule 4201, Particulate Matter Concentration (amended December 17, 1992)
- District Rule 4301, Fuel Burning Equipment (amended December 17, 1992)
- District Rule 4703, Stationary Gas Turbines (amended September 20, 2007)
- 40 CFR Part 60, Subpart GG, Standards of Performance for Stationary Gas Turbines (amended February 27, 2014)
- 40 CFR Part 60, Appendix A-1 through A-8, Test Methods (amended December 23, 1971)
- 40 CFR Part 60, Appendix B, Performance Specifications (amended May 25, 1983)

## 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:

### Rules Addressed by General Permit Template

- District Rule 1100, Equipment Breakdown (amended December 17, 1992)
- District Rule 1160, Emission Statements (amended November 18, 1992)
- District Rule 2040, Applications (amended December 17, 1992)

### Rules Not Addressed by General Permit Template

#### A. Rules Added/Updated

No rules were updated, added, or removed since the last renewal Title V permit was issued for this facility.

## **B. Rules Not Updated**

- District Rule 4102, Nuisance (as amended December 17, 1992)
- District Rule 4801, Sulfur Compounds (amended December 17, 1992)

## **VIII. PERMIT REQUIREMENTS**

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

### **A. District Rule 2201 - New and Modified Stationary Source Review Rule (NSR)**

District Rule 2201 has been amended since this facility's last renewal Title V permit was issued. However, the requirements of this rule are only triggered at the time the source undergoes a modification. All applicable requirements from any NSR permit actions have already been incorporated into the current Title V permit.

### **B. District Rule 2410 – Prevention of Significant Deterioration (PSD)**

The requirements of District Rule 2410 are only triggered at the time the source undergoes a modification. Therefore, all applicable requirements from any PSD permit actions have already been incorporated into the current Title V permit.

### **C. District Rule 2520 - Federally Mandated Operating Permits**

District Rule 2520 has been amended since the last Title V permit renewal was issued for this facility, but the last amended version is not SIP approved. The amendments to this rule were administrative in nature, relating only to the notification procedures for Title V permit modifications that are required to go through a public notice. The amendments to this rule did not have any effect on current permit requirements and will therefore not be addressed further in this evaluation. However, greenhouse gas emissions will be addressed under Rule 2520 during this renewal.

#### Greenhouse Gas Discussion

There are no federally applicable Greenhouse Gas (GHG) requirements for this source. It should be noted that the Mandatory Greenhouse Gas Reporting rule (40 CFR Part 98) is not included in the definition of an applicable requirement



within Title V (per 40 CFR 71.2). Therefore, there will be no further discussion of GHG in this evaluation.

**D. District Rule 4601 - Architectural Coatings**

District Rule 4601 has been amended since the last Title V permit renewal was issued for this facility, but the last amended version is not SIP approved. The amendments to this rule do not have any effect on current permit requirements and will therefore not be addressed in this evaluation.

**E. 40 CFR Part 60, Subpart A – General Provisions**

The purpose of 40 CFR Part 60, Subpart A is to provide general information that is applicable to all Part 60 subparts. Section 60.2 of Subpart A is the definitions section, and Section 60.8 of Subpart A addresses performance tests. No amendments to either section have any effect on current permit conditions and will therefore not be addressed further in this evaluation.

**F. 40 CFR Part 60, Appendix F – Quality Assurance Procedures**

The purpose of 40 CFR Part 60, Appendix F is to provide quality assurance procedures for the control and assessment of the quality of continuous monitoring systems (CEMS) data. The amendments to this appendix do not have any effect on current permit requirements and will therefore not be addressed further in this evaluation.

**G. 40 CFR Part 64 – Compliance Assurance Monitoring (CAM)**

**§64.2 – Applicability**

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

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

<b>Pollutant</b>	<b>Major Source Threshold (lb/year)</b>
VOC	20,000
NO <sub>x</sub>	20,000
CO	200,000
PM <sub>10</sub>	140,000
SO <sub>x</sub>	140,000

- a. S-1120-1 – NOMINALLY RATED 25 MW GENERAL ELECTRIC LM-2500 NATURAL GAS FIRED GAS TURBINE ENGINE COGENERATION SYSTEM WITH STEAM INJECTION

The permit for this cogeneration system contains emission limits for NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, CO, and VOC emissions. However, the cogeneration system is not equipped with any add on control devices for SO<sub>x</sub>, PM<sub>10</sub>, or VOC emissions. Therefore, the CAM requirements of 40 CFR 64 are not applicable for SO<sub>x</sub>, PM<sub>10</sub>, or VOC and no further discussion is required.

This cogeneration system is equipped with combustor steam injections and selective catalytic reduction (SCR) system utilizing ammonia for NO<sub>x</sub> emission control as well as a carbon monoxide (CO) catalytic oxidizer for CO emission control. However, the cogeneration system is also equipped with a continuous emission monitoring system for NO<sub>x</sub>, CO, and O<sub>2</sub> emissions. Therefore, this unit is exempt from the CAM requirements of 40 CFR 64 for NO<sub>x</sub> and CO and no further discussion is required.

- b. S-1120-2 – NOMINALLY RATED 25 MW GENERAL ELECTRIC LM-2500 NATURAL GAS FIRED GAS TURBINE ENGINE COGENERATION SYSTEM WITH STEAM INJECTION

The permit for this cogeneration system contains emission limits for NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, CO, and VOC emissions. However, the cogeneration system is not equipped with any add on control devices for SO<sub>x</sub>, PM<sub>10</sub>, or VOC emissions. Therefore, the CAM requirements of 40 CFR 64 are not applicable for SO<sub>x</sub>, PM<sub>10</sub>, or VOC and no further discussion is required.

This cogeneration system is equipped with combustor steam injections and selective catalytic reduction (SCR) system utilizing ammonia for NO<sub>x</sub> emission control as well as a carbon monoxide (CO) catalytic oxidizer for CO emission control. However, the cogeneration system is also equipped with a continuous emission monitoring system for NO<sub>x</sub>, CO, and O<sub>2</sub> emissions. Therefore, this unit is exempt from the CAM requirements of 40 CFR 64 for NO<sub>x</sub> and CO and no further discussion is required.

**H. 40 CFR Part 68 – Chemical Accident Prevention Provisions**

The purpose of 40 CFR Part 68 is to provide owners and operators of stationary sources with the resources to prevent the accidental release of regulated substances.

40 CFR Part 68 has been amended since the last Title V permit renewal was issued for this facility. However, the actual requirements of 40 CFR Part 68 are not placed on the draft permit. Therefore, the amendments to this subpart do not have any effect on current permit requirements and will therefore not be addressed further in this evaluation.

**I. 40 CFR Part 82, Subpart B - Servicing of Motor Vehicle Air Conditioners**

Per §82.30(a) the purpose of 40 CFR Part 82, Subpart B is to implement section 609 of the Clean Air Act, as amended regarding the servicing of motor vehicle air conditioners (MVACs), and to implement section 608 of the Clean Air Act regarding certain servicing, maintenance, repair and disposal of air conditioners in MVACs and MVAC-like appliances (as that term is defined in 40 CFR 82.152).

Per §82.30(b) these regulations apply to any person performing service on a motor vehicle for consideration when this service involves the refrigerant in the motor vehicle air conditioner.

40 CFR Part 82, Subpart B has been amended since the last Title V permit renewal was issued for this facility. However, the actual requirements of 40 CFR Part 82, Subpart B are not placed on the draft permit. Therefore, the amendments to this subpart do not have any effect on current permit requirements and will therefore not be addressed further in this evaluation.

**J. 40 CFR Part 82, Subpart F - Recycling and Emissions Reductions**

Per §82.150(a) the purpose of 40 CFR Part 82, Subpart F is to reduce emissions of class I and class II refrigerants and their substitutes to the lowest achievable level by maximizing the recapture and recycling of such refrigerants during the service, maintenance, repair, and disposal of appliances and restricting the sale of refrigerants consisting in whole or in part of a class I and class II ODS in accordance with Title VI of the Clean Air Act.

Per §82.150(b) these regulations apply to any person servicing, maintaining, or repairing appliances. This subpart also applies to persons disposing of appliances, including small appliances and motor vehicle air conditioners. In addition, this subpart applies to refrigerant reclaimers, technician certifying programs, appliance owners and operators, manufacturers of appliances,

manufacturers of recycling and recovery equipment, approved recycling and recovery equipment testing organizations, persons selling class I or class II refrigerants or offering class I or class II refrigerants for sale, and persons purchasing class I or class II refrigerants.

40 CFR Part 82, Subpart F has been amended since the last Title V permit renewal was issued for this facility. However, the actual requirements of 40 CFR Part 82, Subpart F are not placed on the draft permit. Therefore, the amendments to this subpart do not have any effect on current permit requirements and will therefore not be addressed further in this evaluation.

## **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**

By submitting Model General Permit Template SJV-UM-0-3 qualification form, the applicant has requested that a permit shield be granted for all the applicable requirements identified by the template. Therefore, the permit shields as granted in Model General Permit Template is included as conditions 39 and 40 of the facility-wide requirements (S-1120-0-5).

### **B. Requirements not Addressed by Model General Permit Templates**

The applicant has not proposed any new permit shields for non-model template requirements. However, the following permit shields, currently included on existing permits S-1120-1-14 and S-1120-2-13, will be carried over onto renewed Title V permits S-1120-1-15 and S-1120-2-14 respectively:

Permit	Condition	Applicability
S-1120-1-15	42	District Rules 1080, 1081, 4201, 4703, and 4801. Federal Regulation 40 CFR Part 60, Subpart GG.
S-1120-2-14	42	District Rules 1080, 1081, 4201, 4703, and 4801. Federal Regulation 40 CFR Part 60, Subpart GG.

**C. Obsolete Permit Shields From Existing Permit Requirements**

There were no obsolete permit shields listed in the existing permit requirements.

**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 Permits.

**ATTACHMENTS**

- A. Draft Renewed Title V Operating Permits
- B. Previous Title V Operating Permits
- C. Detailed Summary List of Facility Permits

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# ATTACHMENT A

Draft Renewed Title V Operating Permits

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# San Joaquin Valley Air Pollution Control District

FACILITY: S-1120-0-5

EXPIRATION DATE: 02/28/2021

## FACILITY-WIDE REQUIREMENTS

1. {4362} The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
2. {4363} The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
3. {4364} The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
4. {4365} Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (12/20/07). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
5. {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
6. {4367} A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit
7. {4368} Every application for a permit required under Rule 2010 (12/17/92) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit
8. {4369} The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit

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: KERN FRONT LIMITED  
Location: HEAVY OIL CENTRAL, KERN FRONT, CA  
S-1120-0-5 : Sep 1 2021 4:20PM -- BISHERC

9. {4370} The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. {4371} The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.5.1] Federally Enforceable Through Title V Permit
11. {4372} Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520 (6/21/01). [District Rules 2520, 9.5.2 and 1100, 7.0] Federally Enforceable Through Title V Permit
12. {4373} If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit. [District Rule 2520, 9.7] Federally Enforceable Through Title V Permit
13. {4374} It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.8.2] Federally Enforceable Through Title V Permit
14. {4375} The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.8.3] Federally Enforceable Through Title V Permit
15. {4376} The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.8.4] Federally Enforceable Through Title V Permit
16. {4377} The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.8.5] Federally Enforceable Through Title V Permit
17. {4378} The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.9] Federally Enforceable Through Title V Permit
18. {4379} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 2520, 9.13.2.1] Federally Enforceable Through Title V Permit
19. {4380} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.13.2.2] Federally Enforceable Through Title V Permit
20. {4381} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.13.2.3] Federally Enforceable Through Title V Permit
21. {4382} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.13.2.4] Federally Enforceable Through Title V Permit

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



22. {4383} No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (02/17/05). If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and County Rules 401 (in all eight counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit
23. {4384} No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating with a VOC content in excess of the corresponding limit specified in Table of Standards 1 effective until 12/30/10 or Table of Standards 2 effective on and after 1/1/11 of District Rule 4601 (12/17/09) for use or sale within the District. [District Rule 4601, 5.1] Federally Enforceable Through Title V Permit
24. {4385} All VOC-containing materials subject to Rule 4601 (12/17/09) shall be stored in closed containers when not in use. [District Rule 4601, 5.4] Federally Enforceable Through Title V Permit
25. {4386} The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.3 (12/17/09). [District Rule 4601, 6.1 and 6.3] Federally Enforceable Through Title V Permit
26. {4387} With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.13.1 and 10.0] Federally Enforceable Through Title V Permit
27. {4388} If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR Part 82, Subpart F. [40 CFR 82 Subpart F] Federally Enforceable Through Title V Permit
28. {4389} If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR Part 82, Subpart B. [40 CFR Part 82, Subpart B] Federally Enforceable Through Title V Permit
29. {4390} Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8021] Federally Enforceable Through Title V Permit
30. {4391} Outdoor handling, storage and transport of any bulk material which emits dust shall comply with the requirements of District Rule 8031, unless specifically exempted under Section 4.0 of Rule 8031 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8031] Federally Enforceable Through Title V Permit
31. {4392} An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8041] Federally Enforceable Through Title V Permit
32. {4393} Whenever open areas are disturbed, or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8051] Federally Enforceable Through Title V Permit
33. {4394} Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8061] 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.

34. {4395} Any unpaved vehicle/equipment area that anticipates more than 50 Average annual daily Trips (AADT) shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 150 vehicle trips per day (VDT) shall comply with the requirements of Section 5.1.2 of District Rule 8071. On each day that 25 or more VDT with 3 or more axles will occur on an unpaved vehicle/equipment traffic area, the owner/operator shall comply with the requirements of Section 5.1.3 of District Rule 8071. On each day when a special event will result in 1,000 or more vehicles that will travel/park on an unpaved area, the owner/operator shall comply with the requirements of Section 5.1.4 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (9/16/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8071] Federally Enforceable Through Title V Permit
35. {4396} Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M] Federally Enforceable Through Title V Permit
36. {4397} The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.16] Federally Enforceable Through Title V Permit
37. {4398} The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2] Federally Enforceable Through Title V Permit
38. {4399} When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permits shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit
39. {4400} Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Rule 401 (Madera, Fresno, Kern, Kings, San Joaquin, Stanislaus, Tulare and Merced), Rule 110 (Fresno, Stanislaus, San Joaquin), Rule 109 (Merced), Rule 113 (Madera), Rule 111 (Kern, Tulare, Kings), and Rule 202 (Fresno, Kern, Tulare, Kings, Madera, Stanislaus, Merced, San Joaquin). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
40. {4401} Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (2/17/05); 4601 (12/17/09); 8021 (8/19/2004); 8031 (8/19/2004); 8041 (8/19/2004); 8051 (8/19/2004); 8061 (8/19/2004); and 8071 (9/16/2004). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
41. 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 Rules 2520, 9.6.2 and 1080, 9.0 & 10.0; 40 CFR 60.334(c)] Federally Enforceable Through Title V Permit
42. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102 and Kern County Rule 419]
43. 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
44. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin January 1 of every year, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days after the end of the reporting period. [District Rule 2520] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1120-1-15

**EXPIRATION DATE:** 02/28/2021

**SECTION:** 02 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

NOMINALLY RATED 25 MW GENERAL ELECTRIC LM-2500 NATURAL GAS FIRED GAS TURBINE ENGINE  
COGENERATION SYSTEM WITH STEAM INJECTION

## PERMIT UNIT REQUIREMENTS

1. Turbine washing operation shall take place only when the turbine is off-line. [District Rule 2201] Federally Enforceable Through Title V Permit
2. VOC emissions from off-line turbine wash operation shall not exceed 5.9 lb per day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Gas-fired turbine shall be equipped with combustor steam injection and a selective catalytic reduction (SCR) system utilizing ammonia as the reducing agent. [District Rules 2201 and 4703, 5.1] Federally Enforceable Through Title V Permit
4. Gas-fired turbine shall be equipped with carbon monoxide (CO) catalytic oxidizer. [District Rules 2201 and 4703, 5.2] Federally Enforceable Through Title V Permit
5. 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 60.2 qualify for this exemption. [40 CFR Part 60, Subpart A] Federally Enforceable Through Title V Permit
6. 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] Federally Enforceable Through Title V Permit
7. 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, 4301, and 4801; 40 CFR 60.333(a) & (b)] Federally Enforceable Through Title V Permit
8. Startup or shutdown and reduced load period of the gas turbine, as defined in this permit, 40 CFR 60.2, and District 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 Rule 4703, 3.23, 3.26, & 3.29; 40 CFR Part 60, Subpart A] Federally Enforceable Through Title V Permit
9. 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 60.8(c)] Federally Enforceable Through Title V Permit
10. All gas turbine exhaust shall flow through both catalyst beds. [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.

11. Total VOC emissions, including those from the gas turbine exhaust and lube oil vents, shall not exceed 3.12 lb/hr and 74.84 lb/day, except during periods of startup and shutdown. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The emission rate from the gas turbine exhaust shall not exceed the following: PM10: 3.12 lb/hr and 74.88 lb/day, NOx (as NO2): 96.96 lb/day, SOx (as SO2): 17.1 lb/day, and CO: 669.19 lb/day. [District Rules 2201 and 4703, 5.1 & 5.2; 40 CFR Part 60.332(a) & 333(b)] Federally Enforceable Through Title V Permit
13. Nitrogen oxides (as NO2) concentration from the gas turbine exhaust stack shall not exceed 4.5 ppmv dry calculated to 15% O2, except during periods of startup and shutdown. [District Rules 2201 and 4703, 5.1; 40 CFR Part 60.332(a)] Federally Enforceable Through Title V Permit
14. Carbon monoxide (CO) concentration from the gas turbine exhaust stack shall not exceed 51 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
15. The total particulate matter (PM) emissions from the gas turbine exhaust shall not exceed 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
16. 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. [District Rules 1081, 2201, and 4703, 6.2; 40 CFR Part 60, Appendix A] Federally Enforceable Through Title V Permit
17. Source testing for VOC (hourly), NOx concentration, and CO concentration shall be conducted annually. Compliance source testing shall be conducted under conditions representative of normal operation. [District Rules 2201 and 4703, 5.1, 5.2, & 6.3; 40 CFR 60.332(a) & (b)] Federally Enforceable Through Title V Permit
18. Nitrogen oxides (NOx) concentrations from each of the gas turbine exhaust 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 alternate test methods may also be used to address the source testing requirement of this permit. [District Rules 1081; 2520, 9.3; 4703, 5.1, 5.2, & 6.4; 40 CFR 60.335(b) & (c)] Federally Enforceable Through Title V Permit
19. 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 and 4703, 6.3] Federally Enforceable Through Title V Permit
20. 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 60.7(c), 60.7(d), and 60.13 or shall meet equivalent specifications established by mutual agreement of the District, ARB, and EPA. [District Rules 1080, 2201, and 4703, 6.2.1 & 6.2.3; 40 CFR Part 60, Subpart GG] Federally Enforceable Through Title V Permit
21. 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 and 4703, 6.2.3; 40 CFR Part 60, Appendix F] Federally Enforceable Through Title V Permit
22. CEM results shall be reduced according to the procedure established in 40 CFR Part 51, Appendix P, 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, ARB, and EPA. [District Rules 1080, 7.2 and 4703 6.2.3; 40 CFR Part 64] Federally Enforceable Through Title V Permit
23. 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; 40 CFR Part 60, Subpart A] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

24. 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 quantity of fuel used. [District Rules 1080 and 4703, 6.2.6 & 7.3; 40 CFR 60.332(a), (b)] Federally Enforceable Through Title V Permit
25. The 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. Certification of the sulfur content by the gas supplier will be an acceptable alternative for verifying compliance. [District Rules 2520, 9.3.2 and 4801; 40 CFR 60.332(a); 60.333(a) & (b); & 60.334(b)(2)] Federally Enforceable Through Title V Permit
26. 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, 6.2.1; 40 CFR 60.334(a)] Federally Enforceable Through Title V Permit
27. 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 and 2520, 9.6.1; 40 CFR 60.7(c)] Federally Enforceable Through Title V Permit
28. 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 Rule 2201] Federally Enforceable Through Title V Permit
29. Audits of monitors shall be conducted quarterly, except during quarters in which RATA testing is being 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
30. Ammonia injection rate shall be controlled to maintain ammonia slip to less than 20 ppmv. [District Rule 4102]
31. Gas turbine and generator lube oil atmospheric vents shall be equipped with mist eliminators. [District Rule 2201] Federally Enforceable Through Title V Permit
32. Liquids collected from lube oil system (including atmospheric vent) shall be stored in closed containers such that VOC emissions do not occur. [District Rule 2201] Federally Enforceable Through Title V Permit
33. Compliance with PM10 (hourly) emission limit shall be demonstrated by sample collection by independent testing laboratory within 60 days upon visible emissions in excess of 5% opacity from turbine exhaust. The District shall be notified prior to any sampling event. [District Rule 2201] Federally Enforceable Through Title V Permit
34. Compliance with 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; Kern County Rule 419]
35. Any lube oil cooler/accumulating vent having visible emissions with an opacity of 5% or greater shall be tested to demonstrate 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

36. The facility 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, 2520, 9.3.2 & 9.4.2, and 4703, 6.2.4] Federally Enforceable Through Title V Permit
37. 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, 2520, 9.3.2 & 9.4.2, and 4703, 6.2.4] Federally Enforceable Through Title V Permit
38. 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 ppmv (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 Part 60, Subpart A] Federally Enforceable Through Title V Permit
39. 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
40. 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] Federally Enforceable Through Title V Permit
41. 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)] Federally Enforceable Through Title V Permit
42. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rules 1080, 4.0, 6.5, 7.2, 7.3, 8.0, 9.0, & 10.0; 1081; 4201; 4703, 5.0, 5.1, 5.2, 6.2.1, 6.2.2, 6.2.3, 6.2.4, 6.2.6, 6.3, & 6.4; 4801; 40 CFR 60.332(a) & (b); 40 CFR 60.333(a), (b), & (c); 40 CFR 60.335(a), (b), (c), & (e). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1120-2-14

**EXPIRATION DATE:** 02/28/2021

**SECTION:** 02 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

NOMINALLY RATED 25 MW GENERAL ELECTRIC LM-2500 NATURAL GAS FIRED GAS TURBINE ENGINE  
COGENERATION SYSTEM WITH STEAM INJECTION

## PERMIT UNIT REQUIREMENTS

1. Turbine washing operation shall take place only when the turbine is off-line. [District Rule 2201] Federally Enforceable Through Title V Permit
2. VOC emissions from off-line turbine wash operation shall not exceed 5.9 lb per day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Gas-fired turbine shall be equipped with combustor steam injection and a selective catalytic reduction (SCR) system utilizing ammonia as the reducing agent. [District Rules 2201 and 4703, 5.1] Federally Enforceable Through Title V Permit
4. Gas-fired turbine shall be equipped with carbon monoxide (CO) catalytic oxidizer. [District Rules 2201 and 4703, 5.2] Federally Enforceable Through Title V Permit
5. 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 60.2 qualify for this exemption. [40 CFR Part 60, Subpart A] Federally Enforceable Through Title V Permit
6. 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] Federally Enforceable Through Title V Permit
7. 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, 4301, and 4801; 40 CFR 60.332(a), 60.333(a) & (b)] Federally Enforceable Through Title V Permit
8. Startup or shutdown and reduced load period of the gas turbine, as defined in this permit, 40 CFR 60.2, and District 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 Rule 4703, 3.23, 3.26, & 3.29; 40 CFR Part 60, Subpart A] Federally Enforceable Through Title V Permit
9. 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 60.8(c)] Federally Enforceable Through Title V Permit
10. All gas turbine exhaust shall flow through both catalyst beds. [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.

11. Total VOC emissions, including those from the gas turbine exhaust and lube oil vents, shall not exceed 3.12 lb/hr and 74.84 lb/day, except during periods of startup and shutdown. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The emission rate from the gas turbine exhaust shall not exceed the following: PM10: 3.12 lb/hr and 74.88 lb/day, NOx (as NO2): 96.96 lb/day, SOx (as SO2): 17.1 lb/day, and CO: 669.19 lb/day. [District Rules 2201 and 4703, 5.1 & 5.2; 40 CFR Part 60.332(a) & 333(b)] Federally Enforceable Through Title V Permit
13. Nitrogen oxides (as NO2) concentration from the gas turbine exhaust stack shall not exceed 4.5 ppmv dry calculated to 15% O2, except during periods of startup and shutdown. [District Rules 2201 and 4703, 5.1; 40 CFR Part 60.332(a)] Federally Enforceable Through Title V Permit
14. Carbon monoxide (CO) concentration from the gas turbine exhaust stack shall not exceed 51 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
15. The total particulate matter (PM) emissions from the gas turbine exhaust shall not exceed 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
16. 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. [District Rules 1081, 2201, and 4703, 6.2; 40 CFR Part 60, Appendix A] Federally Enforceable Through Title V Permit
17. Source testing for VOC (hourly), NOx concentration, and CO concentration shall be conducted annually. Compliance source testing shall be conducted under conditions representative of normal operation. [District Rules 2201 and 4703, 5.1, 5.2, & 6.3; 40 CFR 60.332(a) & (b)] Federally Enforceable Through Title V Permit
18. Nitrogen oxides (NOx) concentrations from each of the gas turbine exhaust 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 alternate test methods may also be used to address the source testing requirement of this permit. [District Rules 1081; 2520, 9.3; 4703, 5.1, 5.2, & 6.4; 40 CFR 60.335(b) & (c)] Federally Enforceable Through Title V Permit
19. 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 and 4703, 6.3] Federally Enforceable Through Title V Permit
20. 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 60.7(c), 60.7(d), and 60.13 or shall meet equivalent specifications established by mutual agreement of the District, ARB, and EPA. [District Rules 1080, 2201, and 4703, 6.2.1 & 6.2.3; 40 CFR Part 60, Subpart GG] Federally Enforceable Through Title V Permit
21. 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 and 4703, 6.2.3; 40 CFR Part 60, Appendix F] Federally Enforceable Through Title V Permit
22. CEM results shall be reduced according to the procedure established in 40 CFR Part 51, Appendix P, 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, ARB, and EPA. [District Rules 1080, 7.2 and 4703 6.2.3; 40 CFR Part 64] Federally Enforceable Through Title V Permit
23. 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; 40 CFR Part 60, Subpart A] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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



24. 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 quantity of fuel used. [District Rules 1080 and 4703, 6.2.6 & 7.3; 40 CFR 60.332(a), (b)] Federally Enforceable Through Title V Permit
25. The 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. Certification of the sulfur content by the gas supplier will be an acceptable alternative for verifying compliance. [District Rules 2520, 9.3.2 and 4801; 40 CFR 60.332(a); 60.333(a) & (b); & 60.334(b)(2)] Federally Enforceable Through Title V Permit
26. 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, 6.2.1; 40 CFR 60.334(a)] Federally Enforceable Through Title V Permit
27. 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 and 2520, 9.6.1; 40 CFR 60.7(c)] Federally Enforceable Through Title V Permit
28. 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 Rule 2201] Federally Enforceable Through Title V Permit
29. Audits of monitors shall be conducted quarterly, except during quarters in which RATA testing is being 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
30. Ammonia injection rate shall be controlled to maintain ammonia slip to less than 20 ppmv. [District Rule 4102]
31. Gas turbine and generator lube oil atmospheric vents shall be equipped with mist eliminators. [District Rule 2201] Federally Enforceable Through Title V Permit
32. Liquids collected from lube oil system (including atmospheric vent) shall be stored in closed containers such that VOC emissions do not occur. [District Rule 2201] Federally Enforceable Through Title V Permit
33. Compliance with PM10 (hourly) emission limit shall be demonstrated by sample collection by independent testing laboratory within 60 days upon visible emissions in excess of 5% opacity from turbine exhaust. The District shall be notified prior to any sampling event. [District Rule 2201] Federally Enforceable Through Title V Permit
34. Compliance with 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; Kern County Rule 419]
35. Any lube oil cooler/accumulating vent having visible emissions with an opacity of 5% or greater shall be tested to demonstrate 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

36. The facility 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, 2520, 9.3.2 & 9.4.2, and 4703, 6.2.4] Federally Enforceable Through Title V Permit
37. 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, 2520, 9.3.2 & 9.4.2, and 4703, 6.2.4] Federally Enforceable Through Title V Permit
38. 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 ppmv (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 Part 60, Subpart A] Federally Enforceable Through Title V Permit
39. 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
40. 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] Federally Enforceable Through Title V Permit
41. 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)] Federally Enforceable Through Title V Permit
42. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rules 1080, 4.0, 6.5, 7.2, 7.3, 8.0, 9.0, & 10.0; 1081; 4201; 4703, 5.0, 5.1, 5.2, 6.2.1, 6.2.2, 6.2.3, 6.2.4, 6.2.6, 6.3, & 6.4; 4801; 40 CFR 60.332(a) & (b); 40 CFR 60.333(a), (b), & (c); 40 CFR 60.335(a), (b), (c), & (e). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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

DRAFT

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# ATTACHMENT B

Previous Title V Operating Permits

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# San Joaquin Valley Air Pollution Control District

**FACILITY:** S-1120-0-4

**EXPIRATION DATE:** 02/28/2021

## FACILITY-WIDE REQUIREMENTS

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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; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
2. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
3. The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
4. Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (12/20/07). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
5. The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.8.1 and 9.13.1] Federally Enforceable Through Title V Permit
6. A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] 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
8. The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit
9. The operator shall retain records of all required monitoring data and support information for a period of at least 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: KERN FRONT LIMITED

Location: HEAVY OIL CENTRAL, KERN FRONT, CA

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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 (02/17/05). If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and County Rules 401 (in all eight counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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

23. No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating with a VOC content in excess of the corresponding limit specified in Table of Standards 1 effective until 12/30/10 or Table of Standards 2 effective on and after 1/1/11 of District Rule 4601 (12/17/09) for use or sale within the District. [District Rule 4601, 5.1] Federally Enforceable Through Title V Permit
24. All VOC-containing materials subject to Rule 4601 (12/17/09) shall be stored in closed containers when not in use. [District Rule 4601, 5.4] Federally Enforceable Through Title V Permit
25. The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.3 (12/17/09). [District Rule 4601, 6.1 and 6.3] Federally Enforceable Through Title V Permit
26. With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.13.1 and 10.0] Federally Enforceable Through Title V Permit
27. If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR Part 82, Subpart F. [40 CFR 82 Subpart F] Federally Enforceable Through Title V Permit
28. If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR Part 82, Subpart B. [40 CFR Part 82, Subpart B] Federally Enforceable Through Title V Permit
29. Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8021] 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 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8031] 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 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8041] 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 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8051] 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 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8061] Federally Enforceable Through Title V Permit
34. Any unpaved vehicle/equipment area that anticipates more than 50 Average annual daily Trips (AADT) shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 150 vehicle trips per day (VDT) shall comply with the requirements of Section 5.1.2 of District Rule 8071. On each day that 25 or more VDT with 3 or more axles will occur on an unpaved vehicle/equipment traffic area, the owner/operator shall comply with the requirements of Section 5.1.3 of District Rule 8071. On each day when a special event will result in 1,000 or more vehicles that will travel/park on an unpaved area, the owner/operator shall comply with the requirements of Section 5.1.4 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (9/16/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8071] 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

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

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 in compliance with the following outdated SIP requirements: Rule 401 (Madera, Fresno, Kern, Kings, San Joaquin, Stanislaus, Tulare and Merced), Rule 110 (Fresno, Stanislaus, San Joaquin), Rule 109 (Merced), Rule 113 (Madera), Rule 111 (Kern, Tulare, Kings), and Rule 202 (Fresno, Kern, Tulare, Kings, Madera, Stanislaus, Merced, San Joaquin). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
40. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (2/17/05); 4601 (12/17/09); 8021 (8/19/2004); 8031 (8/19/2004); 8041 (8/19/2004); 8051 (8/19/2004); 8061 (8/19/2004); and 8071 (9/16/2004). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
41. 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

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

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 begin January 1 of every year, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days after the end of the reporting period. [District Rule 2520] Federally Enforceable Through Title V Permit

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



# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1120-1-14

**EXPIRATION DATE:** 02/28/2021

**SECTION:** 02 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

NOMINALLY RATED 25 MW GENERAL ELECTRIC LM-2500 NATURAL GAS FIRED GAS TURBINE ENGINE  
COGENERATION SYSTEM WITH STEAM INJECTION

## PERMIT UNIT REQUIREMENTS

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1. Except during system breakdowns, repairs and maintenance, calibration checks, and zero and span adjustments, the continuous emission monitoring system shall be in continuous operation. NO<sub>x</sub> emissions in ppmv (corrected to 15% O<sub>2</sub>) and O<sub>2</sub> 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
2. Unfired heat recovery steam generator turbine exhaust for the unit shall be equipped with continuous emissions monitors (CEM) for NO<sub>x</sub>, CO, and O<sub>2</sub>. The continuous NO<sub>x</sub> 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
3. Gas-fired turbine shall be equipped with combustor steam injection and a selective catalytic reduction (SCR) system utilizing ammonia as the reducing agent. [District Rules 2201 and 4703, 5.1] 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, 6.2.1 and 40 CFR 60.334(a)] Federally Enforceable Through Title V Permit
5. 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
6. 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 2520, 9.3.2; 4801; 40 CFR 60.332(a) and 60.333(a) & (b); CFR 60.332(a); Kern County Rule 407] Federally Enforceable Through Title V Permit
7. 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
8. Ammonia injection rate shall be controlled to maintain ammonia slip to less than 20 ppmv. [District Rule 4102]
9. 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 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.

10. 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
11. All gas turbine exhaust shall flow through both catalyst beds. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Gas turbine and generator lube oil atmospheric vents shall be equipped with mist eliminators. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Liquids collected from lube oil system (including atmospheric vent) shall be stored in closed containers such that VOC emissions do not occur. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The emission rate from the gas turbine exhaust shall not exceed the following: PM10: 74.88 lb/day and 3.12 lb/hr, NOx (as NO2): 96.96 lb/day, SOx (as SO2): 17.1 lb/day, and CO: 669.19 lb/day. [District Rules 2201 and 4201; 4703, 5.1, 5.2; 40 CFR Part 60.332(a) and 333(b); and 40CFR Part 64] Federally Enforceable Through Title V Permit
15. Nitrogen oxides (as NO2) concentration from the gas turbine exhaust stack shall not exceed 4.5 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
16. Total VOC emissions, including those from the gas turbine exhaust and lube oil vents shall not exceed 3.12 lb/hr and 74.84 lb/day, except during periods of startup and shutdown. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Carbon monoxide (CO) concentration from the gas turbine exhaust stack shall not exceed 51 ppmv dry calculated to 15% O2, except during periods of startup and shutdown. [District Rules 2201 and 4703, 5.2; and 40CFR Part 64] Federally Enforceable Through Title V Permit
18. Compliance with PM10 (hourly) emission limit shall be demonstrated by sample collection taken by independent testing laboratory within 60 days upon visible emissions in excess of 5% opacity from turbine exhaust. The District shall be notified prior to any sampling event. [District Rule 2201] Federally Enforceable Through Title V Permit
19. 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]
20. 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
21. 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
22. 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 Rule 4703, 3.23, 3.26, 3.29 and 40 CFR Subpart A 60.2] Federally Enforceable Through Title V Permit
23. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

24. 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 NO<sub>x</sub> and SO<sub>2</sub> emission standards under NSPS subpart GG for Stationary Gas Turbines. [40 CFR 60.8(c)] Federally Enforceable Through Title V Permit
25. 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, 6.2.1 and Kern County Rule 108.1] Federally Enforceable Through Title V Permit
26. Source testing, for VOC (hourly), NO<sub>x</sub> concentration and CO concentration shall be conducted annually. Compliance source testing shall be conducted under conditions representative of normal operation [District Rules 2201 and 4703, 5.1, 5.2 & 6.3; 40 CFR 60.332(a) & (b) and 40 CFR Part 64] Federally Enforceable Through Title V Permit
27. Nitrogen oxides (NO<sub>x</sub>) concentrations from each of the gas turbine exhaust shall be determined using EPA Method 7E or 20, and oxygen (O<sub>2</sub>) 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 alternate test methods may also be used to address the source testing requirement of this permit. [District Rules 1081; 2520, 9.3; 4703, 5.1, 5.2 & 6.4 and 40 CFR Subpart GG, 60.335(b), (c)] Federally Enforceable Through Title V Permit
28. 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; 4703, 6.2.3; 40 CFR Part 60 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
29. 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
30. Except for NO<sub>x</sub> 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 NO<sub>x</sub> 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
31. 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
32. 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
33. Gas-fired turbine shall be equipped with carbon monoxide (CO) catalytic oxidizer. [District Rules 2201 and 4703, 5.2 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
34. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

35. 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
36. 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
37. 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. Certification of the sulfur content by the gas supplier will be an acceptable alternative for verifying compliance. [District Rules 2520, 9.3.2; 4801; Kern County Rule 407; 40 CFR 60.332(a); 60.333(a) & (b) and 40 CFR Part 60.334(b)(2)] Federally Enforceable Through Title V Permit
38. 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
39. 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
40. 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

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1120-2-13

**EXPIRATION DATE:** 02/28/2021

**SECTION:** 02 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

NOMINALLY RATED 25 MW GENERAL ELECTRIC LM-2500 NATURAL GAS FIRED GAS TURBINE ENGINE  
COGENERATION SYSTEM WITH STEAM INJECTION

## PERMIT UNIT REQUIREMENTS

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1. Except during system breakdowns, repairs and maintenance, calibration checks, and zero and span adjustments, the continuous emission monitoring system shall be in continuous operation. NO<sub>x</sub> emissions in ppmv (corrected to 15% O<sub>2</sub>) and O<sub>2</sub> 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
2. Unfired heat recovery steam generator turbine exhaust for the unit shall be equipped with continuous emissions monitors (CEM) for NO<sub>x</sub>, CO, and O<sub>2</sub>. The continuous NO<sub>x</sub> 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
3. Gas-fired turbine shall be equipped with combustor steam injection and a selective catalytic reduction (SCR) system utilizing ammonia as the reducing agent. [District Rules 2201 and 4703, 5.1] 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, 6.2.1 and 40 CFR 60.334(a)] Federally Enforceable Through Title V Permit
5. 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
6. 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 2520, 9.3.2; 4801; 40 CFR 60.332(a) and 60.333(a) & (b); CFR 60.332(a); Kern County Rule 407] Federally Enforceable Through Title V Permit
7. 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
8. Ammonia injection rate shall be controlled to maintain ammonia slip to less than 20 ppmv. [District Rule 4102]
9. 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 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.

10. 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
11. All gas turbine exhaust shall flow through both catalyst beds. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Gas turbine and generator lube oil atmospheric vents shall be equipped with mist eliminators. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Liquids collected from lube oil system (including atmospheric vent) shall be stored in closed containers such that VOC emissions do not occur. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The emission rate from the gas turbine exhaust shall not exceed the following: PM10: 74.88 lb/day and 3.12 lb/hr, NOx (as NO2): 96.96 lb/day, SOx (as SO2): 17.1 lb/day, and CO: 669.19 lb/day. [District Rules 2201 and 4201; 4703, 5.1, 5.2; 40 CFR Part 60.332(a) and 333(b); and 40CFR Part 64] Federally Enforceable Through Title V Permit
15. Nitrogen oxides (as NO2) concentration from the gas turbine exhaust stack shall not exceed 4.5 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
16. Total VOC emissions, including those from the gas turbine exhaust and lube oil vents shall not exceed 3.12 lb/hr and 74.84 lb/day, except during periods of startup and shutdown. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Carbon monoxide (CO) concentration from the gas turbine exhaust stack shall not exceed 51 ppmv dry calculated to 15% O2, except during periods of startup and shutdown. [District Rules 2201 and 4703, 5.2; and 40CFR Part 64] Federally Enforceable Through Title V Permit
18. Compliance with PM10 (hourly) emission limit shall be demonstrated by sample collection taken by independent testing laboratory within 60 days upon visible emissions in excess of 5% opacity from turbine exhaust. The District shall be notified prior to any sampling event. [District Rule 2201] Federally Enforceable Through Title V Permit
19. 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]
20. 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
21. 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 4702, 6.2.4 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
22. 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 Rule 4703, 3.19, 3.25, 5.1.2 and 40 CFR Subpart A 60.2] Federally Enforceable Through Title V Permit
23. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

24. 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 NO<sub>x</sub> and SO<sub>2</sub> emission standards under NSPS subpart GG for Stationary Gas Turbines. [40 CFR 60.8(c)] Federally Enforceable Through Title V Permit
25. 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, 6.2.1 and Kern County Rule 108.1] Federally Enforceable Through Title V Permit
26. Source testing, for VOC (hourly), NO<sub>x</sub> concentration and CO concentration shall be conducted annually. Compliance source testing shall be conducted under conditions representative of normal operation [District Rules 2201 and 4703, 5.1, 5.2 & 6.3; 40 CFR 60.332(a) & (b) and 40 CFR Part 64] Federally Enforceable Through Title V Permit
27. Nitrogen oxides (NO<sub>x</sub>) concentrations from each of the gas turbine exhaust shall be determined using EPA Method 7E or 20, and oxygen (O<sub>2</sub>) 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 alternate test methods may also be used to address the source testing requirement of this permit. [District Rules 1081; 2520, 9.3; 4703, 5.1, 5.2 & 6.4 and 40 CFR Subpart GG, 60.335(b), (c)] Federally Enforceable Through Title V Permit
28. 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; 4703, 6.2.3; 40 CFR Part 60 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
29. 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
30. Except for NO<sub>x</sub> 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 NO<sub>x</sub> 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
31. 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
32. 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
33. Gas-fired turbine shall be equipped with carbon monoxide (CO) catalytic oxidizer. [District Rules 2201 and 4703, 5.2 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
34. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

35. 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
36. 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
37. 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. Certification of the sulfur content by the gas supplier will be an acceptable alternative for verifying compliance. [District Rules 2520, 9.3.2; 4801; Kern County Rule 407; 40 CFR 60.332(a); 60.333(a) & (b) and 40 CFR Part 60.334(b)(2)] Federally Enforceable Through Title V Permit
38. 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
39. 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
40. 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

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



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# ATTACHMENT C

## Detailed Summary List of Facility Permits

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### Detailed Facility Report

For Facility=1120

Sorted by Facility Name and Permit Number

<b>KERN FRONT LIMITED</b>	FAC #	<b>S 1120</b>	TYPE:	<b>TitleV</b>	EXPIRE ON:	02/28/2021
<b>HEAVY OIL CENTRAL</b>	STATUS:	<b>A</b>	TOXIC ID:	<b>50127</b>	AREA:	4 /
<b>KERN FRONT, CA</b>	TELEPHONE:	<b>6613936885</b>			INSP. DATE:	03/22

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1120-1-14	25 MW	3020-08A F	1	9,803.00	9,803.00	A	NOMINALLY RATED 25 MW GENERAL ELECTRIC LM-2500 NATURAL GAS FIRED GAS TURBINE ENGINE COGENERATION SYSTEM WITH STEAM INJECTION
S-1120-2-13	25 MW	3020-08A F	1	9,803.00	9,803.00	A	NOMINALLY RATED 25 MW GENERAL ELECTRIC LM-2500 NATURAL GAS FIRED GAS TURBINE ENGINE COGENERATION SYSTEM WITH STEAM INJECTION

Number of Facilities Reported: 1