

November 24, 2021

Mr. Brandon Myers
Elk Hills Power, LLC
PO Box 460
Tupman, CA 93276

Re: Notice of Preliminary Decision – Title V Permit Renewal
Facility Number: S-3523
Project Number: S-1202656

Dear Mr. Myers:

Enclosed for your review and comment is the District's analysis of the application to renew the Federally Mandated Operating Permit for Elk Hills Power, LLC at 4026 Skyline Rd, Tupman, California.

The notice of preliminary decision for this project has been posted on the District's website (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. Leonard Scandura, Permit Services Manager, at (661) 392-5500.

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

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

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

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

**SAN JOAQUIN VALLEY
AIR POLLUTION CONTROL DISTRICT**

**Proposed Title V Permit Renewal Evaluation
Elk Hills Power, LLC
S-3523**

TABLE OF CONTENTS

I.	PROPOSAL.....	2
II.	FACILITY LOCATION	2
III.	EQUIPMENT LISTING	3
IV.	GENERAL PERMIT TEMPLATE USAGE	3
V.	SCOPE OF EPA AND PUBLIC REVIEW	3
VI.	FEDERALLY ENFORCEABLE REQUIREMENTS	3
VII.	REQUIREMENTS NOT FEDERALLY ENFORCEABLE.....	8
VIII.	PERMIT REQUIREMENTS	8
IX.	PERMIT SHIELD	12
X.	CALIFORNIA ENVIRONMENTAL QUALITY ACT	13
XI.	PERMIT CONDITIONS	14
ATTACHMENTS		14
A.	DRAFT RENEWED TITLE V OPERATING PERMIT	
B.	PREVIOUS TITLE V OPERATING PERMIT	
C.	DETAILED SUMMARY LIST OF FACILITY PERMITS	

TITLE V PERMIT RENEWAL EVALUATION
Cogeneration Operation

Engineer: Mohamed Muthana
Date: November 23, 2021

Facility Number: S-3523
Facility Name: Elk Hills Power, LLC
Mailing Address: P.O. Box 80478
Bakersfield, CA 93380-0598

Contact Name: Brandon Myers
Phone: (661) 763-6219

Responsible Official: Brandon Myers
Title: Plant Manager

Project # : S-1202565
Deemed Complete: July 22, 2020

I. PROPOSAL

Elk Hills, LLC (EHP) was last issued a Title V permit renewal on August 3, 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

Elk Hills Power, LLC (EHP) is located at 4026 Skyline Rd in Tupman, 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-3523-0-4.

VI. FEDERALLY ENFORCEABLE REQUIREMENTS

Rules Addressed by General Permit Template

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

- District Rule 2020, Exemptions (amended December 18, 2014)¹
- 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 4601, Architectural Coatings (amended December 17, 2009 ⇒ amended April 16, 2020)²
- 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)

¹ District Rule 2020 was amended on August 18, 2011 and December 18, 2014. However, the amendments to the rule have no impact on the permit condition requirements/content for this source. Therefore, template SJV-UM-0-3 is still valid for this project.

² District Rule 4601 was amended on April 16, 2020. However, as of the date of this analysis, the amended version of Rule 4601 has not been approved in to the State Implementation Plan (SIP) by EPA. Therefore, template SJV-UM-0-3 is still valid for this project.

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 2520, Federally Mandated Operating Permits (amended June 21, 2001 ⇒ amended August 15, 2019)
- District Rule 4702, Internal Combustion Engines (amended November 14, 2013 ⇒ amended August 19, 2021)
- 40 CFR 60 Subpart A, General Provisions (adopted March 8, 1974 ⇒ amended June 23, 2017)
- 40 CFR 60 Subpart Da, Standards of Performance for Electric Utility Steam Generating Units (amended February 27, 2014⇒ amended April 6, 2016)
- 40 CFR 60 Subpart GG, Standards of Performance for Stationary Gas Turbines (amended February 27, 2014⇒ amended March 9, 2020)
- 40 CFR Part 60, Subpart KKKK, Standards of Performance for Stationary Combustion Turbines (amended March 20, 2009 ⇒ amended October 7, 2020)
- 40 CFR Part 63, Subpart YYYY, National Emissions Standards for Hazardous Air Pollutants for Stationary Combustion Turbines (amended April 20, 2008 ⇒ amended March 9, 2020)
- 40 CFR Part 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (amended February 27, 2014 ⇒ December 4, 2020)
- 40 CFR Part 64, Compliance Assurance Monitoring (CAM) (October 22, 1997)
- 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners (amended June 18, 2008 ⇒ amended July 25, 2013)³

³ These subparts were amended since last renewal TV permit was issued. However, the amendments to these subparts do not have any effect on existing permit requirements as addressed by conditions 27 and 28 of permit unit S-3523-0-4 on the draft renewed permit.

- 40 CFR Part 82, Subpart F, Recycling and Emission Reduction (amended June 18, 2008 ⇒ amended November 18, 2016 and December 27, 2017)³

B. Rules Removed

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

C. Rules Added

None

D. 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 16, 1993)
- District Rule 1100, Equipment Breakdown (amended December 17, 1992)
- 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 2040, Applications (amended December 17, 1992)
- District Rule 2070, Standards for Granting Applications (amended December 17, 1992)
- District Rule 2080, Conditional Approval (amended December 17, 1992)
- District Rule 2410, Prevention of Significant Deterioration (adopted June 16, 2011)
- District Rule 4101, Visible Emissions (amended February 17, 2005)
- District Rule 4201, Particulate Matter Concentration (amended December 17, 1992)

- District Rule 4703, Stationary Gas Turbines (amended September 20, 2007)
- District Rule 4801, Sulfur Compounds (amended November 18, 1992)
- District Rule 8011, Fugitive Dust General Requirements (amended August 19, 2004)
- District Rule 8021, Fugitive Dust Requirements for Control of Fine Particulate Matter (PM10) from Construction, Demolition, Excavation, and Extraction Activities (amended August 19, 2004)
- District Rule 8031, Fugitive Dust Requirements for Control of Fine Particulate Matter (PM10) from Handling and Storage of Bulk Materials (Amended August 19, 2004)
- District Rule 8041, Fugitive Dust Requirements for Control of Fine Particulate Matter (PM10) from Carryout and Trackout (amended August 19, 2004)
- District Rule 8051, Fugitive Dust Requirements for Control of Fine Particulate Matter (PM10) from Open Area (amended August 19, 2004)
- District Rule 8061, Fugitive Dust Requirements for Control of Fine Particulate Matter (PM10) from Paved and Unpaved Roads (amended August 19, 2004)
- District Rule 8071, Fugitive Dust Requirements for Control of Fine Particulate Matter (PM10) from Unpaved Vehicle/Equipment Areas (amended September 16, 2004)
- Fresno County Rule 110, Equipment Breakdown
- 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos (amended July 20, 2004)
- 17 CCR 92000, California Code of Regulations Title 17 Subpart 6 Abrasive Blasting (amended August 30, 1984)

VII. REQUIREMENTS NOT FEDERALLY ENFORCEABLE

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

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

A. Rules Added/Updated

None

B. Rules Not Updated

- District Rule 1100, Equipment Breakdown (amended December 17, 1992)
- District Rule 1160 Land Use (amended December 17, 1992)
- District Rule 4102, Nuisance (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.

C. District Rule 2201 - New and Modified Stationary Source Review Rule (NSR)

District Rule 2201 has been amended since this facility's initial 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.

D. District Rule 2520 - Federally Mandated Operating Permits

District Rule 2520 has been amended since this facility's last Title V permit renewal. However, the amendment to this rule applies to the District's noticing policy and does not apply to the facilities existing permits.

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.

E. District Rule 4702, Internal Combustion Engines

This rule was most recently amended on August 19, 2021, but these rule amendments have not been incorporated into the SIP. The amended rule is as stringent as the SIP approved version of the rule that was adopted on November 14, 2013.

a. Diesel-fired emergency engine powering a fire water pump (S-3523-6-5)

The most recent amendments to this rule apply only to non-emergency engines. The sole permitted IC engine at this facility is an emergency engine. Therefore the amendments to this rule do not apply to this unit.

F. 40 CFR 60 Subpart A, General Provisions

This subpart applies to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of publication in this part of any standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility.

The following amendments have been made to this subpart since the last Title V permit renewal:

- Section 60.8, Performance Tests, was amended on August 30, 2016. The revisions included updates to testing provisions, and newly approved alternatives to existing testing regulations. These revisions provide flexibility in the use of approved alternative procedures. The revisions do not impose any new substantive requirements on source owners or operators, therefore none of the changes impact existing conditions or require additional conditions.
- Section 60.17, Incorporations by Reference, was amended several times since the last Title V permit renewal. The various amendments only revised specific incorporated references and do not impact existing conditions.

G. 40 CFR 60 Subpart Da, Standards of Performance for Electric Utility Steam Generating Units

This subpart applies to electric utility steam generators that combust more than 250 MMBtu/hr. The amendments to this subpart include a revised procedure for calculating compliance with NSPS daily average particulate matter (PM) emission limit using PM continuous emission monitoring systems (CEMS). The natural gas-fired turbines at this facility are both exempt from the PM emission limits of this subpart since SO₂ emissions from the turbines are less than 0.06 lb/MMBtu without the use of a post combustion control device for SO₂ or PM. Therefore the amendments to this subpart will not have any effect on the current permit requirements.

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

The provisions of 40 CFR Part 60, Subpart GG are applicable to all stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules (10 million Btu) per hour, based on the lower heating value of the fuel fired, which commences construction, modification, or reconstruction after October 3, 1977, except as provided in paragraphs (e) and (j) of Section 60.332. 40 CFR Part 60, Subpart GG establishes emission standards for nitrogen oxides and sulfur dioxide from stationary gas turbines.

The only amendments to 40 CFR Part 60, Subpart GG since this facility's last Title V Renewal were to Section 60.335 (Test Methods and Procedures). On February 27, 2014, the definitions of terms for the equation in 40 CFR Part 60, Subpart GG, Section 60.335(b)(1) was revised to allow the reference combustor inlet absolute pressure to be measured in millimeters of mercury (mm Hg). The site barometric pressure is allowed as an alternative to the observed combustor inlet absolute pressure for calculating the mean NO_x emission concentration (see: <https://www.gpo.gov/fdsys/pkg/FR-2014-02-27/html/2014-02704.htm>).

The amendments to this subpart allow the reference combustor inlet absolute pressure to be measured in millimeters of mercury (mm Hg). The change does not have any effect on the current permit requirements and therefore will not be addressed further in this evaluation.

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

This subpart applies to stationary combustion turbines with a heat input at peak load equal to or greater than 10.7 gigajoules (10 MMBtu) per hour, based on the higher heating value of the fuel, which commenced construction, modification, or reconstruction after February 18, 2005.

The two turbines at this facility were installed prior to February 18, 2005, and have not been modified, as defined in 40 CFR 60.2, since installation. Therefore, the provisions of this subpart do not apply to these turbines and no further discussion is required.

J. 40 CFR Part 63, Subpart YYYY - National Emissions Standards for Hazardous Air Pollutants for Stationary Combustion Turbines

Subpart YYYY establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emissions from stationary combustion turbines located at major sources of HAP emissions.

Pursuant to information in the facility files, this source is not a major source of HAP. Therefore the requirements are not applicable to the turbines operating at this facility and the amendments do not have any effect on the current permit requirements. No further discussion is required.

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

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

The amendments to this subpart include the streamlining of the existing fuel quality regulations in Section § 63.6604 and revisions to paragraphs (b) and (d) in Section § 63.6645. The amendments did not change the stringency of existing fuel quality standards and do not have any effect on the current permit requirements. Therefore, this subpart will not be addressed further in this evaluation.

L. 40 CFR Part 64 - Compliance Assurance Monitoring (CAM)

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

Pollutant	Major Source Threshold (lb/year)
NO _x	20,000
SO _x	140,000
PM ₁₀	140,000
CO	200,000
VOC	20,000

a. Natural gas-fired turbines (S-3523–1-13 and S-3523-2-13)

These turbines contain emission limits for NO_x, SO_x, PM₁₀, CO, and VOC and are subject to CAM requirements, as stated in the previous title V renewal. Existing conditions 3, 4, 5, 6, 7, and 8 of permits S-3523-1 and S-3523-2 satisfy CAM requirements.

b. Forced draft cooling tower (S-3523-3-5)

There are no add on control devices serving this unit. Therefore this unit is not subject to CAM requirements.

c. Diesel-fired emergency engine powering a fire water pump (S-3523-6-5)

This permit has emission limits for Sox, PM₁₀, and NO_x emissions. There are no add on control devices serving this emergency engine. Therefore this unit is not subject to CAM requirements.

IX. PERMIT SHIELD

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

A. Requirements Addressed by Model General Permit Templates

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

B. Requirements not Addressed by Model General Permit Templates

The applicant has not requested any permit shields other than as discussed above.

C. Obsolete Permit Shields From Existing Permit Requirements

There are no obsolete permit shields from 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 Permit.

ATTACHMENTS

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

ATTACHMENT A

Draft Renewed Title V Operating Permit

San Joaquin Valley

Air Pollution Control District

FACILITY: S-3523-0-4

EXPIRATION DATE: 02/28/2021

FACILITY-WIDE REQUIREMENTS

1. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100; 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; 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] 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 Rules 2010 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, 2080, and 2520] 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. 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] 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] 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: ELK HILLS POWER LLC
Location: 4026 SKYLINE RD, TUPMAN, CA 93276
S-3523-0-4 : Oct 4 2021 8:27AM -- MUTHANAM

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] 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 and 1100] 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] 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] 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] 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] 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] 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] 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] 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] 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] 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] Federally Enforceable Through Title V Permit
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

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] 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] 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] 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] 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. 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 8061 and 8011] 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 8071 and 8011] Federally Enforceable Through Title V Permit
35. {4396} Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation) [40 CFR 61 Subpart M] Federally Enforceable Through Title V Permit

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] 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] 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] 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] 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] Federally Enforceable Through Title V Permit
41. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
42. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin September 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.

DRAFT

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-3523-1-13

EXPIRATION DATE: 02/28/2021

SECTION: NE35 **TOWNSHIP:** 30S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

GE FRAME 7 MODEL PG7241FA NATURAL GAS FIRED COMBINED CYCLE GAS TURBINE ENGINE/ELECTRICAL GENERATOR #1 WITH DRY LOW NOX COMBUSTORS, 250.5 MMBTU/HR NATURAL GAS FIRED DUCT BURNER, HEAT RECOVERY STEAM GENERATOR, SELECTIVE CATALYTIC REDUCTION, OXIDATION CATALYST, AND STEAM TURBINE SHARED WITH S-3523-2 (503 MW TOTAL PLANT NOMINAL RATING)

PERMIT UNIT REQUIREMENTS

1. Combustion turbine generator (CTG) and electrical generator lube oil vents shall be equipped with mist eliminators to maintain visible emissions from lube oil vents no greater than 5% opacity, except for three minutes in any hour. [District Rule 2201] Federally Enforceable Through Title V Permit
2. CTG shall be equipped with continuously recording non resettable fuel gas flowmeter. [District Rule 2201 and SJ-99-02] Federally Enforceable Through Title V Permit
3. CTG exhaust after the SCR unit shall be equipped with continuously recording emissions monitors dedicated to this unit for NO_x, CO, and O₂. Continuous emissions monitors shall meet the requirements of 40 CFR Part 60, Appendices B and F, and 40 CFR Part 75, and shall be capable of monitoring emissions during startups and shutdowns as well as normal operating conditions. If relative accuracy of CEM(s) cannot be demonstrated during startup conditions, CEM results during startup and shutdown events shall be replaced with startup emission rates obtained from source testing to determine compliance with emission limits. [District Rules 1080, 4703 and 2201, 40 CFR 60.334(c), 40 CFR 64.3, 40 CFR 60 Subpart Da, and SJ-99-02] Federally Enforceable Through Title V Permit
4. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 1080 and 40 CFR 64.3] Federally Enforceable Through Title V Permit
5. The monitoring of CO emissions with the CEMS shall serve as a surrogate for monitoring of VOC emissions as required by 40 CFR 64 (Compliance Assurance Monitoring). Operation of the unit with CO concentration within the allowable range shall be indicative of VOC concentrations which are less than the allowed maximum. The relationship between concentration of VOC and concentration of CO shall be demonstrated at each annual source test. [40 CFR 64.3] Federally Enforceable Through Title V Permit
6. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR Part 64.7] Federally Enforceable Through Title V Permit
7. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR Part 64.9] Federally Enforceable Through Title V Permit
8. If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR Part 64.8] 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.

9. CTG shall be equipped with a continuously recording emission monitor preceding the SCR module measuring NO_x concentration for the purposes of calculating ammonia slip. Permittee shall check, record, and quantify the calibration drift (CD) at two concentration values at least once daily (approximately 24 hours). The calibration shall be adjusted whenever the daily zero or high-level CD exceeds 5%. If either the zero or high-level CD exceeds 5% for five consecutive daily periods, the analyzer shall be deemed out-of-control. If either the zero or high-level CD exceeds 10% during any CD check, analyzer shall be deemed out-of-control. If the analyzer is out-of-control, the permittee shall take appropriate corrective action and then repeat the CD check. [District Rules 2201 and 1080] Federally Enforceable Through Title V Permit
10. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080] Federally Enforceable Through Title V Permit
11. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
12. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the monitoring devices required by this rule to ensure that such devices are functioning properly. [District Rule 1080 and SJ-99-02] Federally Enforceable Through Title V Permit
13. Exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with 40 CFR 60.8 (e). [District Rule 1081 and SJ-99-02] Federally Enforceable Through Title V Permit
14. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
15. Ammonia injection grid shall be equipped with operational ammonia flowmeter and injection pressure indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Ammonia shall be injected when the selective catalytic reduction system catalyst temperature exceeds 500 degrees F. Permittee shall monitor and record catalyst temperature during periods of startup. [District Rule 2201 and SJ-99-02] Federally Enforceable Through Title V Permit
17. Permittee shall monitor and record exhaust gas temperature at selective catalytic reduction and oxidation catalyst inlets. [District Rule 2201] Federally Enforceable Through Title V Permit
18. CTG and duct burner shall be fired exclusively on natural gas, consisting primarily of methane and ethane, with a sulfur content no greater than 0.75 grains of sulfur compounds (as S) per 100 dry scf of natural gas. [District Rule 2201, 40 CFR 60 Subpart Da, and SJ-99-02] Federally Enforceable Through Title V Permit
19. The sulfur content of each fuel source shall be: (i) documented in a valid purchase contract, a supplier certification, a tariff sheet or transportation contract or (ii) monitored at least annually using ASTM Methods D4084, D5504, D6228, or Gas Processors Association Standard 2377. [40 CFR 60.334(h)(3); 40 CFR 60.48(g)(1) and District Rule 2520] Federally Enforceable Through Title V Permit
20. Results of the CEM system shall be averaged over the applicable time period, using consecutive 15-minute sampling periods. [District Rule 4703] Federally Enforceable Through Title V Permit
21. Startup is defined as the period beginning with turbine initial firing until the unit meets the lb/hr and ppmv emission limits. An extended startup shall be defined as a startup that occurs after the steam turbine has been shutdown for 72 hours or more. Shutdown is defined the period beginning with initiation of turbine shutdown sequence and ending with cessation of firing of the gas turbine engine. Aborted shutdown is defined the period beginning with initiation of turbine shutdown and ends when the unit has ramped up and is meeting the lb/hr and ppmv emission limits. Startup durations shall not exceed three hours for a regular startup, and 7 hours for an extended startup, per occurrence. Shutdown and aborted shutdown durations shall not exceed one hour, per occurrence. [District Rules 2201, 4001, and 4703 and SJ-99-02] 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.

22. During startup or shutdown of any gas turbine engine(s), combined emissions from both gas turbine engines' heat recovery steam generator exhausts (S-3523-1 and -2) shall not exceed any of the following: NO_x (as NO₂) - 400 lb and CO - 3600 lb in any one hour. If any CTG is in either startup or shutdown during any portion of a clock hour, the facility will be subject to the aforementioned limits during that clock hour. [District Rule 2201] Federally Enforceable Through Title V Permit
23. During an extended startup, the combined emissions from both the CTG and HRSG exhausts shall not exceed either 800 lb NO_x or 3600 lb CO per event. [SJ-99-02] Federally Enforceable Through Title V Permit
24. During shutdown, or aborted shutdown, of CTG, the combined emissions from both the CTG and HRSG exhausts shall not exceed either 102.5 lb NO_x or 222.0 lb CO per event. [SJ-99-02] Federally Enforceable Through Title V Permit
25. Duct burning must not be employed during startup or shutdown events. [SJ-99-02] Federally Enforceable Through Title V Permit
26. Emission rates from CTG/HRSG, except during startup, shut down or aborted shutdown, shall not exceed any of the following: PM₁₀ - 15.0 lb/hr, SO_x (as SO₂) - 3.6 lb/hr, NO_x (as NO₂) - 15.8 lb/hr and 2.5 ppmvd @ 15% O₂, VOC - 4.0 lb/hr and 2.0 ppmvd @ 15% O₂, CO - 12.5 lb/hr and 4 ppmvd @ 15% O₂, ammonia - 10 ppmvd @ 15% O₂. NO_x ppmv and lb/hr limits are a one-hour rolling average. Ammonia emission limit is a twenty-four hour rolling average. All other ppmv and lb/hr limits are three-hour rolling averages. [District Rules 2201, 4001, and 4703, 40 CFR 60 Subpart Da, and SJ-99-02] Federally Enforceable Through Title V Permit
27. Emission rates from CTG/HRSG shall not exceed any of the following: PM₁₀ - 360.0 lb/day, SO_x (as SO₂) - 86.4 lb/day, NO_x (as NO₂) - 752.0 lb/day, VOC - 184.0 lb/day, and CO - 3,948.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
28. Emission rates from both CTG/HRSG S-3523-1 and -2 combined shall not exceed any of the following: PM₁₀ - 720.0 lb/day, SO_x (as SO₂) - 172.8 lb/day, NO_x (as NO₂) - 1,103.0 lb/day, VOC - 269.0 lb/day, and CO - 4,297 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
29. Annual emissions from both CTGs/HRSGs S-3523-1 and -2 combined calculated on a twelve consecutive month rolling basis shall not exceed any of the following: PM₁₀ - 261,960 lb/year, SO_x (as SO₂) - 57,468 lb/year, NO_x (as NO₂) - 335,022 lb/year, VOC - 64,478 lb/year, and CO - 831,008 lb/year. [District Rule 2201 and SJ-99-02] Federally Enforceable Through Title V Permit
30. Each one-hour period will commence on the hour. The three-hour average will be compiled from the three most recent one-hour periods. Each one-hour period in a twenty-four-hour average for ammonia slip will commence on the hour. The twenty-four-hour average will be calculated starting and ending at twelve-midnight. [District Rule 2201] Federally Enforceable Through Title V Permit
31. Daily emissions shall be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each calendar month in a twelve-consecutive-month rolling emissions shall commence at the beginning of the first day of the month. The twelve-consecutive-month rolling emissions total to determine compliance with annual emissions shall be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit
32. Compliance with ammonia slip limit shall be demonstrated by using the following calculation procedure: ammonia slip ppmv @ 15% O₂ = ((a - (b x c/1,000,000)) x 1,000,000 / b) x d, where a = ammonia injection rate(lb/hr)/17(lb/lb. mol), b = dry exhaust gas flow rate (lb/hr)/(29(lb/lb. mol), c = change in measured NO_x concentration ppmv at 15% O₂ across catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip. Alternatively, permittee may utilize a continuous in-stack ammonia monitor, acceptable to the District, to monitor compliance. At least 60 days prior to using a NH₃ CEM, the permittee must submit a monitoring plan for District review and approval. [District Rules 2520, 9.3.2 and 4102] 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.

33. Compliance with the short term emission limits (lb/hr and ppmv @ 15% O₂) shall be demonstrated annually by District witnessed in situ sampling of exhaust gas by a qualified independent source test firm at full load conditions as follows - NO_x: ppmvd @ 15% O₂ and lb/hr, CO: ppmvd @ 15% O₂ and lb/hr, VOC: ppmvd @ 15% O₂ and lb/hr, PM₁₀: lb/hr, and ammonia: ppmvd @ 15% O₂. Sample collection to demonstrate compliance with ammonia emission limit shall be based on three consecutive test runs of thirty minutes each. [District Rule 1081 and SJ-99-02] Federally Enforceable Through Title V Permit
34. Compliance with the startup NO_x, CO, and VOC mass emission limits shall be demonstrated for one of the CTGs (S-3523-1, or -2) at least once every five years by District witnessed in situ sampling of exhaust gases by a qualified independent source test firm. [District Rule 1081] Federally Enforceable Through Title V Permit
35. Any gas turbine with an intermittently operated auxiliary burner shall demonstrate compliance with the auxiliary burner both on and off. [40 CFR 60 Subpart Da, and District Rule 4703] 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 Rule 1081] Federally Enforceable Through Title V Permit
37. The following test methods shall be used EPA Methods 1-4, PM₁₀: EPA Method 5 (front half and back half), NO_x: EPA Method 7E, CO: EPA Method 10, O₂: EPA Method 3, 3A, or 20, VOC: EPA Method 18 or 25, ammonia: BAAQMD ST-1B, and fuel gas sulfur content: ASTM D3246. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081, 4001, and 4703 and SJ-99-02] Federally Enforceable Through Title V Permit
38. The permittee shall maintain hourly records of NO_x, CO, and ammonia emission concentrations (ppmv @ 15% O₂), and hourly, daily, and twelve month rolling average records of NO_x and CO emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
39. The permittee shall maintain records of SO_x lb/hr, lb/day, and lb/twelve month rolling average emission. SO_x emissions shall be based on fuel use records, natural gas sulfur content, and mass balance calculations. [District Rule 2201 and 40 CFR 60.48(g)(1)] Federally Enforceable Through Title V Permit
40. Permittee shall maintain the following records for the CTG: occurrence, duration, and type of any startup, shutdown, or malfunction; emission measurements; total daily and annual hours of operation; and hourly quantity of fuel used. [District Rules 2201 and 4703 and SJ-99-02] Federally Enforceable Through Title V Permit
41. Permittee shall maintain the following records for the continuous emissions monitoring system (CEMS): the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, maintenance, adjustments, any period of non-operation of any continuous emissions monitor and emission measurements. [Districts Rules 2201 and 4703 and 40 CFR 60 60.7(b) and SJ-99-02] Federally Enforceable Through Title V Permit
42. Cylinder gas audits of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and total accuracy 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 quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
43. The permittee shall submit a written report to the APCO for each calendar quarter, within 30 days of the end of the quarter, including: 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 shall correspond to the averaging period for each respective 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 Rule 1080] Federally Enforceable Through Title V Permit
44. All records required to be maintained by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rules 2201 and 2520] 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.

45. The owners and operators of each affected source shall have an Acid Rain permit and operate in compliance with all permit requirements. [40 CFR 72] Federally Enforceable Through Title V Permit
46. The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75. [40 CFR 75] Federally Enforceable Through Title V Permit
47. The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program. [40 CFR 75] Federally Enforceable Through Title V Permit
48. The owners and operators of each source and each affected unit at the source shall: (i) hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and (ii) comply with the applicable Acid Rain emissions limitations for sulfur dioxide. [40 CFR 72] Federally Enforceable Through Title V Permit
49. Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act. [40 CFR 72] Federally Enforceable Through Title V Permit
50. Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program. [40 CFR 72] Federally Enforceable Through Title V Permit
51. An allowance shall not be deducted in order to comply with the requirements under 40 CFR part 73, prior to the calendar year for which the allowance was allocated. [40 CFR 73] Federally Enforceable Through Title V Permit
52. The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR Part 77. [40 CFR 77] Federally Enforceable Through Title V Permit
53. The owners and operators of an affected unit that has excess emissions in any calendar year shall: (i) pay without demand the penalty required, and pay up on demand the interest on that penalty; and (ii) comply with the terms of an approved offset plan, as required by 40 CFR Part 72. [40 CFR 72] Federally Enforceable Through Title V Permit
54. The owners and operators of the each affected unit at the source shall keep on site the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority: (i) The certificate of representation for the designated representative for the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site beyond such five-year period until such documents are superceded because of the submission of a new certificate of representation changing the designated representative. [40 CFR 72] Federally Enforceable Through Title V Permit
55. The owners and operators of each affected unit at the source shall keep on site each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority; (ii) All emissions monitoring information, in accordance with 40 CFR part 75; (iii) Copies of all reports, compliance certifications and other submissions and all records made or required under the Acid Rain Program; (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission that demonstrates compliance with the requirements of the Acid Rain Program. [40 CFR 72 and 40 CFR 75] Federally Enforceable Through Title V Permit
56. The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR 75 Subpart I. [40 CFR 75] Federally Enforceable Through Title V Permit

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

DRAFT

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-3523-2-13

EXPIRATION DATE: 02/28/2021

SECTION: NE35 **TOWNSHIP:** 30S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

GE FRAME 7 MODEL PG7241FA NATURAL GAS FIRED COMBINED CYCLE GAS TURBINE ENGINE/ELECTRICAL GENERATOR #2 WITH DRY LOW NOX COMBUSTORS, 250.5 MMBTU/HR NATURAL GAS FIRED DUCT BURNER, HEAT RECOVERY STEAM GENERATOR, SELECTIVE CATALYTIC REDUCTION, OXIDATION CATALYST, AND STEAM TURBINE SHARED WITH S-3523-1 (503 MW TOTAL PLANT NOMINAL RATING)

PERMIT UNIT REQUIREMENTS

1. Combustion turbine generator (CTG) and electrical generator lube oil vents shall be equipped with mist eliminators to maintain visible emissions from lube oil vents no greater than 5% opacity, except for three minutes in any hour. [District Rule 2201] Federally Enforceable Through Title V Permit
2. CTG shall be equipped with continuously recording non resettable fuel gas flowmeter. [District Rule 2201 and SJ-99-02] Federally Enforceable Through Title V Permit
3. CTG exhaust after the SCR unit shall be equipped with continuously recording emissions monitors dedicated to this unit for NO_x, CO, and O₂. Continuous emissions monitors shall meet the requirements of 40 CFR Part 60, Appendices B and F, and 40 CFR Part 75, and shall be capable of monitoring emissions during startups and shutdowns as well as normal operating conditions. If relative accuracy of CEM(s) cannot be demonstrated during startup conditions, CEM results during startup and shutdown events shall be replaced with startup emission rates obtained from source testing to determine compliance with emission limits. [District Rules 1080, 4703, and 2201, 40 CFR 60.334(c), 40 CFR 64.3, 40 CFR 60 Subpart Da, and SJ-99-02] Federally Enforceable Through Title V Permit
4. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 1080 and 40 CFR 64.3] Federally Enforceable Through Title V Permit
5. The monitoring of CO emissions with the CEMS shall serve as a surrogate for monitoring of VOC emissions as required by 40 CFR 64 (Compliance Assurance Monitoring). Operation of the unit with CO concentration within the allowable range shall be indicative of VOC concentrations which are less than the allowed maximum. The relationship between concentration of VOC and concentration of CO shall be demonstrated at each annual source test. [40 CFR 64.3] Federally Enforceable Through Title V Permit
6. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR Part 64.7] Federally Enforceable Through Title V Permit
7. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR Part 64.9] Federally Enforceable Through Title V Permit
8. If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR Part 64.8] 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.

9. CTG shall be equipped with a continuously recording emission monitor preceding the SCR module measuring NOx concentration for the purposes of calculating ammonia slip. Permittee shall check, record, and quantify the calibration drift (CD) at two concentration values at least once daily (approximately 24 hours). The calibration shall be adjusted whenever the daily zero or high-level CD exceeds 5%. If either the zero or high-level CD exceeds 5% for five consecutive daily periods, the analyzer shall be deemed out-of-control. If either the zero or high-level CD exceeds 10% during any CD check, analyzer shall be deemed out-of-control. If the analyzer is out-of-control, the permittee shall take appropriate corrective action and then repeat the CD check. [District Rules 2201 and 1080] Federally Enforceable Through Title V Permit
10. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080] Federally Enforceable Through Title V Permit
11. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
12. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the monitoring devices required by this rule to ensure that such devices are functioning properly. [District Rule 1080 and SJ-99-02] Federally Enforceable Through Title V Permit
13. Exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with 40 CFR 60.8 (e). [District Rule 1081 and SJ-99-02] Federally Enforceable Through Title V Permit
14. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
15. Ammonia injection grid shall be equipped with operational ammonia flowmeter and injection pressure indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Ammonia shall be injected when the selective catalytic reduction system catalyst temperature exceeds 500 degrees F. Permittee shall monitor and record catalyst temperature during periods of startup. [District Rule 2201 and SJ-99-02] Federally Enforceable Through Title V Permit
17. Permittee shall monitor and record exhaust gas temperature at selective catalytic reduction and oxidation catalyst inlets. [District Rule 2201] Federally Enforceable Through Title V Permit
18. CTG and duct burner shall be fired exclusively on natural gas, consisting primarily of methane and ethane, with a sulfur content no greater than 0.75 grains of sulfur compounds (as S) per 100 dry scf of natural gas. [District Rule 2201, 40 CFR 60 Subpart Da, and SJ-99-02] Federally Enforceable Through Title V Permit
19. The sulfur content of each fuel source shall be: (i) documented in a valid purchase contract, a supplier certification, a tariff sheet or transportation contract or (ii) monitored at least annually using ASTM Methods D4084, D5504, D6228, or Gas Processors Association Standard 2377. [District Rule 2520, 40 CFR 60.334(h)(3);and 40 CFR 60.48(g)(1)] Federally Enforceable Through Title V Permit
20. Results of the CEM system shall be averaged over the applicable time period, using consecutive 15-minute sampling periods. [District Rule 4703] Federally Enforceable Through Title V Permit
21. Startup is defined as the period beginning with turbine initial firing until the unit meets the lb/hr and ppmv emission limits. An extended startup shall be defined as a startup that occurs after the steam turbine has been shutdown for 72 hours or more. Shutdown is defined the period beginning with initiation of turbine shutdown sequence and ending with cessation of firing of the gas turbine engine. Aborted shutdown is defined the period beginning with initiation of turbine shutdown and ends when the unit has ramped up and is meeting the lb/hr and ppmv emission limits. Startup durations shall not exceed three hours for a regular startup, and 7 hours for an extended startup, per occurrence. Shutdown and aborted shutdown durations shall not exceed one hour, per occurrence. [District Rules 2201, 4001, and 4703 and SJ-99-02] 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.

22. During startup or shutdown of any gas turbine engine(s), combined emissions from both gas turbine engines' heat recovery steam generator exhausts (S-3523-1 and -2) shall not exceed any of the following: NO_x (as NO₂) - 400 lb and CO - 3600 lb in any one hour. If any CTG is in either startup or shutdown during any portion of a clock hour, the facility will be subject to the aforementioned limits during that clock hour. [District Rule 2201] Federally Enforceable Through Title V Permit
23. During an extended startup, the combined emissions from both the CTG and HRSG exhausts shall not exceed either 800 lb NO_x or 3600 lb CO per event. [SJ-99-02] Federally Enforceable Through Title V Permit
24. During shutdown, or aborted shutdown, of CTG, the combined emissions from both the CTG and HRSG exhausts shall not exceed either 102.5 lb NO_x or 222.0 lb CO per event. [SJ-99-02] Federally Enforceable Through Title V Permit
25. Duct burning must not be employed during startup or shutdown events. [SJ-99-02] Federally Enforceable Through Title V Permit
26. Emission rates from CTG/HRSG, except during startup, shut down or aborted shutdown, shall not exceed any of the following: PM₁₀ - 15.0 lb/hr, SO_x (as SO₂) - 3.6 lb/hr, NO_x (as NO₂) - 15.8 lb/hr and 2.5 ppmvd @ 15% O₂, VOC - 4.0 lb/hr and 2.0 ppmvd @ 15% O₂, CO - 12.5 lb/hr and 4 ppmvd @ 15% O₂, ammonia - 10 ppmvd @ 15% O₂. NO_x ppmv and lb/hr limits are a one-hour rolling average. Ammonia emission limit is a twenty-four hour rolling average. All other ppmv and lb/hr limits are three-hour rolling averages. [District Rules 2201, 4001, and 4703, 40 CFR 60 Subpart Da, and SJ-99-02] Federally Enforceable Through Title V Permit
27. Emission rates from CTG/HRSG shall not exceed any of the following: PM₁₀ - 360.0 lb/day, SO_x (as SO₂) - 86.4 lb/day, NO_x (as NO₂) - 752.0 lb/day, VOC - 184.0 lb/day, and CO - 3948.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
28. Emission rates from both CTG/HRSG S-3523-1 and -2 combined shall not exceed any of the following: PM₁₀ - 720.0 lb/day, SO_x (as SO₂) - 172.8 lb/day, NO_x (as NO₂) - 1103.0 lb/day, VOC - 269.0 lb/day, and CO - 4,297 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
29. Annual emissions from both CTGs/HRSGs S-3523-1 and -2 combined calculated on a twelve consecutive month rolling basis shall not exceed any of the following: PM₁₀ - 261,960 lb/year, SO_x (as SO₂) - 57,468 lb/year, NO_x (as NO₂) - 335,022 lb/year, VOC - 64,478 lb/year, and CO - 831,008 lb/year. [District Rule 2201 and SJ-99-02] Federally Enforceable Through Title V Permit
30. Each one-hour period will commence on the hour. The three-hour average will be compiled from the three most recent one-hour periods. Each one-hour period in a twenty-four-hour average for ammonia slip will commence on the hour. The twenty-four-hour average will be calculated starting and ending at twelve-midnight. [District Rule 2201] Federally Enforceable Through Title V Permit
31. Daily emissions shall be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each calendar month in a twelve-consecutive-month rolling emissions shall commence at the beginning of the first day of the month. The twelve-consecutive-month rolling emissions total to determine compliance with annual emissions shall be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit
32. Compliance with ammonia slip limit shall be demonstrated by using the following calculation procedure: ammonia slip ppmv @ 15% O₂ = ((a - (b x c/1,000,000)) x 1,000,000 / b) x d, where a = ammonia injection rate(lb/hr)/17(lb/lb. mol), b = dry exhaust gas flow rate (lb/hr)/(29(lb/lb. mol), c = change in measured NO_x concentration ppmv at 15% O₂ across catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip. Alternatively, permittee may utilize a continuous in-stack ammonia monitor, acceptable to the District, to monitor compliance. At least 60 days prior to using a NH₃ CEM, the permittee must submit a monitoring plan for District review and approval. [District Rules 2520 and 4102] 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.

33. Compliance with the short term emission limits (lb/hr and ppmv @ 15% O₂) shall be demonstrated annually by District witnessed in situ sampling of exhaust gas by a qualified independent source test firm at full load conditions as follows - NO_x: ppmvd @ 15% O₂ and lb/hr, CO: ppmvd @ 15% O₂ and lb/hr, VOC: ppmvd @ 15% O₂ and lb/hr, PM₁₀: lb/hr, and ammonia: ppmvd @ 15% O₂. Sample collection to demonstrate compliance with ammonia emission limit shall be based on three consecutive test runs of thirty minutes each. [District Rule 1081 and SJ-99-02] Federally Enforceable Through Title V Permit
34. Compliance with the startup NO_x, CO, and VOC mass emission limits shall be demonstrated for one of the CTGs (S-3523-1, or -2) at least once every five years by District witnessed in situ sampling of exhaust gases by a qualified independent source test firm. [District Rule 1081] Federally Enforceable Through Title V Permit
35. Any gas turbine with an intermittently operated auxiliary burner shall demonstrate compliance with the auxiliary burner both on and off. [District Rule 4703 and 40 CFR 60 Subpart Da] 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 Rule 1081] Federally Enforceable Through Title V Permit
37. The following test methods shall be used EPA Methods 1-4, PM₁₀: EPA Method 5 (front half and back half), NO_x: EPA Method 7E, CO: EPA Method 10, O₂: EPA Method 3, 3A, or 20, VOC: EPA Method 18 or 25, ammonia: BAAQMD ST-1B, and fuel gas sulfur content: ASTM D3246. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081, 4001, and 4703, and SJ-99-02] Federally Enforceable Through Title V Permit
38. The permittee shall maintain hourly records of NO_x, CO, and ammonia emission concentrations (ppmv @ 15% O₂), and hourly, daily, and twelve month rolling average records of NO_x and CO emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
39. The permittee shall maintain records of SO_x lb/hr, lb/day, and lb/twelve month rolling average emission. SO_x emissions shall be based on fuel use records, natural gas sulfur content, and mass balance calculations. [District Rule 2201 and 40 CFR 60.48(g)(1)] Federally Enforceable Through Title V Permit
40. Permittee shall maintain the following records for the CTG: occurrence, duration, and type of any startup, shutdown, or malfunction; emission measurements; total daily and annual hours of operation; and hourly quantity of fuel used. [District Rules 2201 and 4703 and SJ-99-02] Federally Enforceable Through Title V Permit
41. Permittee shall maintain the following records for the continuous emissions monitoring system (CEMS): the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, maintenance, adjustments, any period of non-operation of any continuous emissions monitor and emission measurements. [District Rules 2201, 4703 and 40 CFR 60.7(b) and SJ-99-02] Federally Enforceable Through Title V Permit
42. Cylinder gas audits of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and total accuracy 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 quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
43. The permittee shall submit a written report to the APCO for each calendar quarter, within 30 days of the end of the quarter, including: 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 shall correspond to the averaging period for each respective 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 Rule 1080] Federally Enforceable Through Title V Permit
44. All records required to be maintained by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rule 2201 and 2520] 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.

45. The owners and operators of each affected source shall have an Acid Rain permit and operate in compliance with all permit requirements. [40 CFR 72] Federally Enforceable Through Title V Permit
46. The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75. [40 CFR 75] Federally Enforceable Through Title V Permit
47. The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program. [40 CFR 75] Federally Enforceable Through Title V Permit
48. The owners and operators of each source and each affected unit at the source shall: (i) hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and (ii) comply with the applicable Acid Rain emissions limitations for sulfur dioxide. [40 CFR 72] Federally Enforceable Through Title V Permit
49. Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act. [40 CFR 72] Federally Enforceable Through Title V Permit
50. Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program. [40 CFR 72] Federally Enforceable Through Title V Permit
51. An allowance shall not be deducted in order to comply with the requirements under 40 CFR part 73, prior to the calendar year for which the allowance was allocated. [40 CFR 73] Federally Enforceable Through Title V Permit
52. The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR Part 77. [40 CFR 77] Federally Enforceable Through Title V Permit
53. The owners and operators of an affected unit that has excess emissions in any calendar year shall: (i) pay without demand the penalty required, and pay up on demand the interest on that penalty; and (ii) comply with the terms of an approved offset plan, as required by 40 CFR Part 72. [40 CFR 72] Federally Enforceable Through Title V Permit
54. The owners and operators of the each affected unit at the source shall keep on site the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority: (i) The certificate of representation for the designated representative for the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site beyond such five-year period until such documents are superceded because of the submission of a new certificate of representation changing the designated representative. [40 CFR 72] Federally Enforceable Through Title V Permit
55. The owners and operators of each affected unit at the source shall keep on site each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority; (ii) All emissions monitoring information, in accordance with 40 CFR part 75; (iii) Copies of all reports, compliance certifications and other submissions and all records made or required under the Acid Rain Program; (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission that demonstrates compliance with the requirements of the Acid Rain Program. [40 CFR 72, 40 CFR 75] Federally Enforceable Through Title V Permit
56. The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR 75 Subpart I. [40 CFR 75] Federally Enforceable Through Title V Permit

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

DRAFT

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

PERMIT UNIT: S-3523-3-6

EXPIRATION DATE: 02/28/2021

SECTION: NE35 **TOWNSHIP:** 30S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

FORCED DRAFT COOLING TOWER WITH 6 CELLS AND HIGH EFFICIENCY DRIFT ELIMINATOR

PERMIT UNIT REQUIREMENTS

1. No hexavalent chromium containing compounds shall be added to cooling tower circulating water. [District Rule 7012]
2. Drift eliminator drift rate shall not exceed 0.0005%. [District Rule 2201] Federally Enforceable Through Title V Permit
3. PM10 emission rate shall not exceed 11.7 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. On a weekly basis, the Permittee shall record the circulating water recirculation rate and have an independent laboratory analyze a sample of the blowdown water to determine the total dissolved solids concentration in the blowdown water. [District Rules 1081 and 2520] Federally Enforceable Through Title V Permit
5. Compliance with the PM10 daily emission limit shall be demonstrated as follows: $PM10 \text{ lb/day} = \text{circulating water recirculation rate} * \text{total dissolved solids concentration in the blowdown water} * \text{design drift rate} * \text{correction factor}$. The correction factor shall range from 0.82 for a TDS of 1,000 ppm to 0.3 for a TDS of 5,000 ppm. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Permittee shall maintain records of calculated PM10 emission rate and all data used in the calculations. All records shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rules 2201 and 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-3523-6-5

EXPIRATION DATE: 02/28/2021

EQUIPMENT DESCRIPTION:

240 HP CUMMINS MODEL 6CTA 8.3 F2 DIESEL-FIRED IC ENGINE DRIVING EMERGENCY FIRE WATER PUMP

PERMIT UNIT REQUIREMENTS

1. {1898} The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
2. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 40 CFR 63 Subpart ZZZZ, and 17 CCR 93115] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The permittee shall minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
5. At all times, the engine and any associated air pollution control equipment and monitoring equipment shall be operated in a manner consistent with safety and good air pollution control practices for minimizing emissions. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
6. The PM10 emissions rate shall not exceed 0.25 g/hp-hr based on US EPA certification using ISO 8178 test procedure. [District Rule 2201] Federally Enforceable Through Title V Permit
7. NOx emissions shall not exceed 4.4 g/hp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rule 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
9. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
10. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. For testing purposes, the engine shall only be operated the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 - "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems", 1998 edition. Total hours of operation for all maintenance, testing, and required regulatory purposes shall not exceed 77 hours per calendar year. [District Rule 4702, 40 CFR 63 Subpart ZZZZ, and 17 CCR 93115] Federally Enforceable Through Title V Permit
11. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [County Rule 407 (Kern)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

12. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, and the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.). For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702, 40 CFR 63 Subpart ZZZZ, and 17 CCR 93115] Federally Enforceable Through Title V Permit
13. The permittee shall maintain the following schedule of maintenance and inspection: Change oil and filter every 500 hours of operation or annually, whichever comes first; Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
14. The engine shall be operated and maintained according to the manufacturer's emission-related written instructions (including the after-treatment control device if any). Alternatively, a site-specific maintenance plan may be developed which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
15. Records of the maintenance conducted on the engine shall be maintained which demonstrate that operation and maintenance of the engine and after-treatment control device (if any) is according the facility's maintenance plan. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
16. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit
17. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702, 40 CFR 63 Subpart ZZZZ, and 17 CCR 93115] Federally Enforceable Through Title V Permit

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

DRAFT

ATTACHMENT B

Previous Title V Operating Permit

San Joaquin Valley

Air Pollution Control District

FACILITY: S-3523-0-3

EXPIRATION DATE: 02/28/2021

FACILITY-WIDE REQUIREMENTS

1. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100; 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; 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] 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 Rules 2010 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, 2080, and 2520] 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] 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] 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: ELK HILLS POWER LLC

Location: 4026 SKYLINE RD, TUPMAN, CA 93276

S-3523-0-3 : Oct 1 2021 11:02AM - MUTHANAM

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] 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 and 1100] 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] 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] 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] 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] 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] 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] 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] 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] 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] 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] 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] 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] 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] 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] 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 8061 and 8011] 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 8071 and 8011] Federally Enforceable Through Title V Permit
35. Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M] Federally Enforceable Through Title V Permit

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] 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] 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] 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] 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] Federally Enforceable Through Title V Permit
41. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
42. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin September 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-3523-1-12

EXPIRATION DATE: 02/28/2021

SECTION: NE35 **TOWNSHIP:** 30S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

GE FRAME 7 MODEL PG7241FA NATURAL GAS FIRED COMBINED CYCLE GAS TURBINE ENGINE/ELECTRICAL GENERATOR #1 WITH DRY LOW NOX COMBUSTORS, 250.5 MMBTU/HR NATURAL GAS FIRED DUCT BURNER, HEAT RECOVERY STEAM GENERATOR, SELECTIVE CATALYTIC REDUCTION, OXIDATION CATALYST, AND STEAM TURBINE SHARED WITH S-3523-2 (503 MW TOTAL PLANT NOMINAL RATING)

PERMIT UNIT REQUIREMENTS

1. Combustion turbine generator (CTG) and electrical generator lube oil vents shall be equipped with mist eliminators to maintain visible emissions from lube oil vents no greater than 5% opacity, except for three minutes in any hour. [District Rule 2201] Federally Enforceable Through Title V Permit
2. CTG shall be equipped with continuously recording non resettable fuel gas flowmeter. [District Rule 2201 and SJ-99-02] Federally Enforceable Through Title V Permit
3. CTG exhaust after the SCR unit shall be equipped with continuously recording emissions monitors dedicated to this unit for NO_x, CO, and O₂. Continuous emissions monitors shall meet the requirements of 40 CFR Part 60, Appendices B and F, and 40 CFR Part 75, and shall be capable of monitoring emissions during startups and shutdowns as well as normal operating conditions. If relative accuracy of CEM(s) cannot be demonstrated during startup conditions, CEM results during startup and shutdown events shall be replaced with startup emission rates obtained from source testing to determine compliance with emission limits. [District Rules 1080, 4703 and 2201, 40 CFR 60.334(c), 40 CFR 64.3, 40 CFR 60 Subpart Da, and SJ-99-02] Federally Enforceable Through Title V Permit
4. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 1080 and 40 CFR 64.3] Federally Enforceable Through Title V Permit
5. The monitoring of CO emissions with the CEMS shall serve as a surrogate for monitoring of VOC emissions as required by 40 CFR 64 (Compliance Assurance Monitoring). Operation of the unit with CO concentration within the allowable range shall be indicative of VOC concentrations which are less than the allowed maximum. The relationship between concentration of VOC and concentration of CO shall be demonstrated at each annual source test. [40 CFR 64.3] Federally Enforceable Through Title V Permit
6. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR Part 64.7] Federally Enforceable Through Title V Permit
7. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR Part 64.9] Federally Enforceable Through Title V Permit
8. If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR Part 64.8] 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.

9. CTG shall be equipped with a continuously recording emission monitor preceding the SCR module measuring NOx concentration for the purposes of calculating ammonia slip. Permittee shall check, record, and quantify the calibration drift (CD) at two concentration values at least once daily (approximately 24 hours). The calibration shall be adjusted whenever the daily zero or high-level CD exceeds 5%. If either the zero or high-level CD exceeds 5% for five consecutive daily periods, the analyzer shall be deemed out-of-control. If either the zero or high-level CD exceeds 10% during any CD check, analyzer shall be deemed out-of-control. If the analyzer is out-of-control, the permittee shall take appropriate corrective action and then repeat the CD check. [District Rules 2201 and 1080] Federally Enforceable Through Title V Permit
10. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080] Federally Enforceable Through Title V Permit
11. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
12. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the monitoring devices required by this rule to ensure that such devices are functioning properly. [District Rule 1080 and SJ-99-02] Federally Enforceable Through Title V Permit
13. Exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with 40 CFR 60.8 (e). [District Rule 1081 and SJ-99-02] Federally Enforceable Through Title V Permit
14. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
15. Ammonia injection grid shall be equipped with operational ammonia flowmeter and injection pressure indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Ammonia shall be injected when the selective catalytic reduction system catalyst temperature exceeds 500 degrees F. Permittee shall monitor and record catalyst temperature during periods of startup. [District Rule 2201 and SJ-99-02] Federally Enforceable Through Title V Permit
17. Permittee shall monitor and record exhaust gas temperature at selective catalytic reduction and oxidation catalyst inlets. [District Rule 2201] Federally Enforceable Through Title V Permit
18. CTG and duct burner shall be fired exclusively on natural gas, consisting primarily of methane and ethane, with a sulfur content no greater than 0.75 grains of sulfur compounds (as S) per 100 dry scf of natural gas. [District Rule 2201, 40 CFR 60 Subpart Da, and SJ-99-02] Federally Enforceable Through Title V Permit
19. The sulfur content of each fuel source shall be: (i) documented in a valid purchase contract, a supplier certification, a tariff sheet or transportation contract or (ii) monitored at least annually using ASTM Methods D4084, D5504, D6228, or Gas Processors Association Standard 2377. [40 CFR 60.334(h)(3); 40 CFR 60.48(g)(1) and District Rule 2520] Federally Enforceable Through Title V Permit
20. Results of the CEM system shall be averaged over the applicable time period, using consecutive 15-minute sampling periods. [District Rule 4703] Federally Enforceable Through Title V Permit
21. Startup is defined as the period beginning with turbine initial firing until the unit meets the lb/hr and ppmv emission limits. An extended startup shall be defined as a startup that occurs after the steam turbine has been shutdown for 72 hours or more. Shutdown is defined the period beginning with initiation of turbine shutdown sequence and ending with cessation of firing of the gas turbine engine. Aborted shutdown is defined the period beginning with initiation of turbine shutdown and ends when the unit has ramped up and is meeting the lb/hr and ppmv emission limits. Startup durations shall not exceed three hours for a regular startup, and 7 hours for an extended startup, per occurrence. Shutdown and aborted shutdown durations shall not exceed one hour, per occurrence. [District Rules 2201, 4001, and 4703 and SJ-99-02] 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.

22. During startup or shutdown of any gas turbine engine(s), combined emissions from both gas turbine engines' heat recovery steam generator exhausts (S-3523-1 and -2) shall not exceed any of the following: NO_x (as NO₂) - 400 lb and CO - 3600 lb in any one hour. If any CTG is in either startup or shutdown during any portion of a clock hour, the facility will be subject to the aforementioned limits during that clock hour. [District Rule 2201] Federally Enforceable Through Title V Permit
23. During an extended startup, the combined emissions from both the CTG and HRSG exhausts shall not exceed either 800 lb NO_x or 3600 lb CO per event. [SJ-99-02] Federally Enforceable Through Title V Permit
24. During shutdown, or aborted shutdown, of CTG, the combined emissions from both the CTG and HRSG exhausts shall not exceed either 102.5 lb NO_x or 222.0 lb CO per event. [SJ-99-02] Federally Enforceable Through Title V Permit
25. Duct burning must not be employed during startup or shutdown events. [SJ-99-02] Federally Enforceable Through Title V Permit
26. Emission rates from CTG/HRSG, except during startup, shut down or aborted shutdown, shall not exceed any of the following: PM₁₀ - 15.0 lb/hr, SO_x (as SO₂) - 3.6 lb/hr, NO_x (as NO₂) - 15.8 lb/hr and 2.5 ppmvd @ 15% O₂, VOC - 4.0 lb/hr and 2.0 ppmvd @ 15% O₂, CO - 12.5 lb/hr and 4 ppmvd @ 15% O₂, ammonia - 10 ppmvd @ 15% O₂. NO_x ppmv and lb/hr limits are a one-hour rolling average. Ammonia emission limit is a twenty-four hour rolling average. All other ppmv and lb/hr limits are three-hour rolling averages. [District Rules 2201, 4001, and 4703, 40 CFR 60 Subpart Da, and SJ-99-02] Federally Enforceable Through Title V Permit
27. Emission rates from CTG/HRSG shall not exceed any of the following: PM₁₀ - 360.0 lb/day, SO_x (as SO₂) - 86.4 lb/day, NO_x (as NO₂) - 752.0 lb/day, VOC - 184.0 lb/day, and CO - 3,948.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
28. Emission rates from both CTG/HRSG S-3523-1 and -2 combined shall not exceed any of the following: PM₁₀ - 720.0 lb/day, SO_x (as SO₂) - 172.8 lb/day, NO_x (as NO₂) - 1,103.0 lb/day, VOC - 269.0 lb/day, and CO - 4,297 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
29. Annual emissions from both CTGs/HRSGs S-3523-1 and -2 combined calculated on a twelve consecutive month rolling basis shall not exceed any of the following: PM₁₀ - 261,960 lb/year, SO_x (as SO₂) - 57,468 lb/year, NO_x (as NO₂) - 335,022 lb/year, VOC - 64,478 lb/year, and CO - 831,008 lb/year. [District Rule 2201 and SJ-99-02] Federally Enforceable Through Title V Permit
30. Each one-hour period will commence on the hour. The three-hour average will be compiled from the three most recent one-hour periods. Each one-hour period in a twenty-four-hour average for ammonia slip will commence on the hour. The twenty-four-hour average will be calculated starting and ending at twelve-midnight. [District Rule 2201] Federally Enforceable Through Title V Permit
31. Daily emissions shall be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each calendar month in a twelve-consecutive-month rolling emissions shall commence at the beginning of the first day of the month. The twelve-consecutive-month rolling emissions total to determine compliance with annual emissions shall be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit
32. Compliance with ammonia slip limit shall be demonstrated by using the following calculation procedure: ammonia slip ppmv @ 15% O₂ = ((a - (b x c/1,000,000)) x 1,000,000 / b) x d, where a = ammonia injection rate(lb/hr)/17(lb/lb. mol), b = dry exhaust gas flow rate (lb/hr)/(29(lb/lb. mol), c = change in measured NO_x concentration ppmv at 15% O₂ across catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip. Alternatively, permittee may utilize a continuous in-stack ammonia monitor, acceptable to the District, to monitor compliance. At least 60 days prior to using a NH₃ CEM, the permittee must submit a monitoring plan for District review and approval. [District Rules 2520, 9.3.2 and 4102] 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.

33. Compliance with the short term emission limits (lb/hr and ppmv @ 15% O₂) shall be demonstrated annually by District witnessed in situ sampling of exhaust gas by a qualified independent source test firm at full load conditions as follows - NO_x: ppmvd @ 15% O₂ and lb/hr, CO: ppmvd @ 15% O₂ and lb/hr, VOC: ppmvd @ 15% O₂ and lb/hr, PM₁₀: lb/hr, and ammonia: ppmvd @ 15% O₂. Sample collection to demonstrate compliance with ammonia emission limit shall be based on three consecutive test runs of thirty minutes each. [District Rule 1081 and SJ-99-02] Federally Enforceable Through Title V Permit
34. Compliance with the startup NO_x, CO, and VOC mass emission limits shall be demonstrated for one of the CTGs (S-3523-1, or -2) at least once every five years by District witnessed in situ sampling of exhaust gases by a qualified independent source test firm. [District Rule 1081] Federally Enforceable Through Title V Permit
35. Any gas turbine with an intermittently operated auxiliary burner shall demonstrate compliance with the auxiliary burner both on and off. [40 CFR 60 Subpart Da, and District Rule 4703] 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 Rule 1081] Federally Enforceable Through Title V Permit
37. The following test methods shall be used EPA Methods 1-4, PM₁₀: EPA Method 5 (front half and back half), NO_x: EPA Method 7E, CO: EPA Method 10, O₂: EPA Method 3, 3A, or 20, VOC: EPA Method 18 or 25, ammonia: BAAQMD ST-1B, and fuel gas sulfur content: ASTM D3246. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081, 4001, and 4703 and SJ-99-02] Federally Enforceable Through Title V Permit
38. The permittee shall maintain hourly records of NO_x, CO, and ammonia emission concentrations (ppmv @ 15% O₂), and hourly, daily, and twelve month rolling average records of NO_x and CO emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
39. The permittee shall maintain records of SO_x lb/hr, lb/day, and lb/twelve month rolling average emission. SO_x emissions shall be based on fuel use records, natural gas sulfur content, and mass balance calculations. [District Rule 2201 and 40 CFR 60.48(g)(1)] Federally Enforceable Through Title V Permit
40. Permittee shall maintain the following records for the CTG: occurrence, duration, and type of any startup, shutdown, or malfunction; emission measurements; total daily and annual hours of operation; and hourly quantity of fuel used. [District Rules 2201 and 4703 and SJ-99-02] Federally Enforceable Through Title V Permit
41. Permittee shall maintain the following records for the continuous emissions monitoring system (CEMS): the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, maintenance, adjustments, any period of non-operation of any continuous emissions monitor and emission measurements. [Districts Rules 2201 and 4703 and 40 CFR 60 60.7(b) and SJ-99-02] Federally Enforceable Through Title V Permit
42. Cylinder gas audits of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and total accuracy 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 quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
43. The permittee shall submit a written report to the APCO for each calendar quarter, within 30 days of the end of the quarter, including: 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 shall correspond to the averaging period for each respective 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 Rule 1080] Federally Enforceable Through Title V Permit
44. All records required to be maintained by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rules 2201 and 2520] 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.

45. The owners and operators of each affected source shall have an Acid Rain permit and operate in compliance with all permit requirements. [40 CFR 72] Federally Enforceable Through Title V Permit
46. The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75. [40 CFR 75] Federally Enforceable Through Title V Permit
47. The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program. [40 CFR 75] Federally Enforceable Through Title V Permit
48. The owners and operators of each source and each affected unit at the source shall: (i) hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and (ii) comply with the applicable Acid Rain emissions limitations for sulfur dioxide. [40 CFR 72] Federally Enforceable Through Title V Permit
49. Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act. [40 CFR 72] Federally Enforceable Through Title V Permit
50. Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program. [40 CFR 72] Federally Enforceable Through Title V Permit
51. An allowance shall not be deducted in order to comply with the requirements under 40 CFR part 73, prior to the calendar year for which the allowance was allocated. [40 CFR 73] Federally Enforceable Through Title V Permit
52. The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR Part 77. [40 CFR 77] Federally Enforceable Through Title V Permit
53. The owners and operators of an affected unit that has excess emissions in any calendar year shall: (i) pay without demand the penalty required, and pay up on demand the interest on that penalty; and (ii) comply with the terms of an approved offset plan, as required by 40 CFR Part 72. [40 CFR 72] Federally Enforceable Through Title V Permit
54. The owners and operators of the each affected unit at the source shall keep on site the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority: (i) The certificate of representation for the designated representative for the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site beyond such five-year period until such documents are superceded because of the submission of a new certificate of representation changing the designated representative. [40 CFR 72] Federally Enforceable Through Title V Permit
55. The owners and operators of each affected unit at the source shall keep on site each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority; (ii) All emissions monitoring information, in accordance with 40 CFR part 75; (iii) Copies of all reports, compliance certifications and other submissions and all records made or required under the Acid Rain Program; (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission that demonstrates compliance with the requirements of the Acid Rain Program. [40 CFR 72 and 40 CFR 75] Federally Enforceable Through Title V Permit
56. The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR 75 Subpart I. [40 CFR 75] 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-3523-2-12

EXPIRATION DATE: 02/28/2021

SECTION: NE35 **TOWNSHIP:** 30S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

GE FRAME 7 MODEL PG7241FA NATURAL GAS FIRED COMBINED CYCLE GAS TURBINE ENGINE/ELECTRICAL GENERATOR #2 WITH DRY LOW NOX COMBUSTORS, 250.5 MMBTU/HR NATURAL GAS FIRED DUCT BURNER, HEAT RECOVERY STEAM GENERATOR, SELECTIVE CATALYTIC REDUCTION, OXIDATION CATALYST, AND STEAM TURBINE SHARED WITH S-3523-1 (503 MW TOTAL PLANT NOMINAL RATING)

PERMIT UNIT REQUIREMENTS

1. Combustion turbine generator (CTG) and electrical generator lube oil vents shall be equipped with mist eliminators to maintain visible emissions from lube oil vents no greater than 5% opacity, except for three minutes in any hour. [District Rule 2201] Federally Enforceable Through Title V Permit
2. CTG shall be equipped with continuously recording non resettable fuel gas flowmeter. [District Rule 2201 and SJ-99-02] Federally Enforceable Through Title V Permit
3. CTG exhaust after the SCR unit shall be equipped with continuously recording emissions monitors dedicated to this unit for NO_x, CO, and O₂. Continuous emissions monitors shall meet the requirements of 40 CFR Part 60, Appendices B and F, and 40 CFR Part 75, and shall be capable of monitoring emissions during startups and shutdowns as well as normal operating conditions. If relative accuracy of CEM(s) cannot be demonstrated during startup conditions, CEM results during startup and shutdown events shall be replaced with startup emission rates obtained from source testing to determine compliance with emission limits. [District Rules 1080, 4703, and 2201, 40 CFR 60.334(c), 40 CFR 64.3, 40 CFR 60 Subpart Da, and SJ-99-02] Federally Enforceable Through Title V Permit
4. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 1080 and 40 CFR 64.3] Federally Enforceable Through Title V Permit
5. The monitoring of CO emissions with the CEMS shall serve as a surrogate for monitoring of VOC emissions as required by 40 CFR 64 (Compliance Assurance Monitoring). Operation of the unit with CO concentration within the allowable range shall be indicative of VOC concentrations which are less than the allowed maximum. The relationship between concentration of VOC and concentration of CO shall be demonstrated at each annual source test. [40 CFR 64.3] Federally Enforceable Through Title V Permit
6. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR Part 64.7] Federally Enforceable Through Title V Permit
7. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR Part 64.9] Federally Enforceable Through Title V Permit
8. If the District or EPA determine that a Quality improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR Part 64.8] 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.

9. CTG shall be equipped with a continuously recording emission monitor preceding the SCR module measuring NOx concentration for the purposes of calculating ammonia slip. Permittee shall check, record, and quantify the calibration drift (CD) at two concentration values at least once daily (approximately 24 hours). The calibration shall be adjusted whenever the daily zero or high-level CD exceeds 5%. If either the zero or high-level CD exceeds 5% for five consecutive daily periods, the analyzer shall be deemed out-of-control. If either the zero or high-level CD exceeds 10% during any CD check, analyzer shall be deemed out-of-control. If the analyzer is out-of-control, the permittee shall take appropriate corrective action and then repeat the CD check. [District Rules 2201 and 1080] Federally Enforceable Through Title V Permit
10. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080] Federally Enforceable Through Title V Permit
11. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
12. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the monitoring devices required by this rule to ensure that such devices are functioning properly. [District Rule 1080 and SJ-99-02] Federally Enforceable Through Title V Permit
13. Exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with 40 CFR 60.8 (e). [District Rule 1081 and SJ-99-02] Federally Enforceable Through Title V Permit
14. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
15. Ammonia injection grid shall be equipped with operational ammonia flowmeter and injection pressure indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Ammonia shall be injected when the selective catalytic reduction system catalyst temperature exceeds 500 degrees F. Permittee shall monitor and record catalyst temperature during periods of startup. [District Rule 2201 and SJ-99-02] Federally Enforceable Through Title V Permit
17. Permittee shall monitor and record exhaust gas temperature at selective catalytic reduction and oxidation catalyst inlets. [District Rule 2201] Federally Enforceable Through Title V Permit
18. CTG and duct burner shall be fired exclusively on natural gas, consisting primarily of methane and ethane, with a sulfur content no greater than 0.75 grains of sulfur compounds (as S) per 100 dry scf of natural gas. [District Rule 2201, 40 CFR 60 Subpart Da, and SJ-99-02] Federally Enforceable Through Title V Permit
19. The sulfur content of each fuel source shall be: (i) documented in a valid purchase contract, a supplier certification, a tariff sheet or transportation contract or (ii) monitored at least annually using ASTM Methods D4084, D5504, D6228, or Gas Processors Association Standard 2377. [District Rule 2520, 40 CFR 60.334(h)(3);and 40 CFR 60.48(g)(1)] Federally Enforceable Through Title V Permit
20. Results of the CEM system shall be averaged over the applicable time period, using consecutive 15-minute sampling periods. [District Rule 4703] Federally Enforceable Through Title V Permit
21. Startup is defined as the period beginning with turbine initial firing until the unit meets the lb/hr and ppmv emission limits. An extended startup shall be defined as a startup that occurs after the steam turbine has been shutdown for 72 hours or more. Shutdown is defined the period beginning with initiation of turbine shutdown sequence and ending with cessation of firing of the gas turbine engine. Aborted shutdown is defined the period beginning with initiation of turbine shutdown and ends when the unit has ramped up and is meeting the lb/hr and ppmv emission limits. Startup durations shall not exceed three hours for a regular startup, and 7 hours for an extended startup, per occurrence. Shutdown and aborted shutdown durations shall not exceed one hour, per occurrence. [District Rules 2201, 4001, and 4703 and SJ-99-02] 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.

22. During startup or shutdown of any gas turbine engine(s), combined emissions from both gas turbine engines' heat recovery steam generator exhausts (S-3523-1 and -2) shall not exceed any of the following: NO_x (as NO₂) - 400 lb and CO - 3600 lb in any one hour. If any CTG is in either startup or shutdown during any portion of a clock hour, the facility will be subject to the aforementioned limits during that clock hour. [District Rule 2201] Federally Enforceable Through Title V Permit
23. During an extended startup, the combined emissions from both the CTG and HRSG exhausts shall not exceed either 800 lb NO_x or 3600 lb CO per event. [SJ-99-02] Federally Enforceable Through Title V Permit
24. During shutdown, or aborted shutdown, of CTG, the combined emissions from both the CTG and HRSG exhausts shall not exceed either 102.5 lb NO_x or 222.0 lb CO per event. [SJ-99-02] Federally Enforceable Through Title V Permit
25. Duct burning must not be employed during startup or shutdown events. [SJ-99-02] Federally Enforceable Through Title V Permit
26. Emission rates from CTG/HRSG, except during startup, shut down or aborted shutdown, shall not exceed any of the following: PM₁₀ - 15.0 lb/hr, SO_x (as SO₂) - 3.6 lb/hr, NO_x (as NO₂) - 15.8 lb/hr and 2.5 ppmvd @ 15% O₂, VOC - 4.0 lb/hr and 2.0 ppmvd @ 15% O₂, CO - 12.5 lb/hr and 4 ppmvd @ 15% O₂, ammonia - 10 ppmvd @ 15% O₂. NO_x ppmv and lb/hr limits are a one-hour rolling average. Ammonia emission limit is a twenty-four hour rolling average. All other ppmv and lb/hr limits are three-hour rolling averages. [District Rules 2201, 4001, and 4703, 40 CFR 60 Subpart Da, and SJ-99-02] Federally Enforceable Through Title V Permit
27. Emission rates from CTG/HRSG shall not exceed any of the following: PM₁₀ - 360.0 lb/day, SO_x (as SO₂) - 86.4 lb/day, NO_x (as NO₂) - 752.0 lb/day, VOC - 184.0 lb/day, and CO - 3948.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
28. Emission rates from both CTG/HRSG S-3523-1 and -2 combined shall not exceed any of the following: PM₁₀ - 720.0 lb/day, SO_x (as SO₂) - 172.8 lb/day, NO_x (as NO₂) - 1103.0 lb/day, VOC - 269.0 lb/day, and CO - 4,297 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
29. Annual emissions from both CTGs/HRSGs S-3523-1 and -2 combined calculated on a twelve consecutive month rolling basis shall not exceed any of the following: PM₁₀ - 261,960 lb/year, SO_x (as SO₂) - 57,468 lb/year, NO_x (as NO₂) - 335,022 lb/year, VOC - 64,478 lb/year, and CO - 831,008 lb/year. [District Rule 2201 and SJ-99-02] Federally Enforceable Through Title V Permit
30. Each one-hour period will commence on the hour. The three-hour average will be compiled from the three most recent one-hour periods. Each one-hour period in a twenty-four-hour average for ammonia slip will commence on the hour. The twenty-four-hour average will be calculated starting and ending at twelve-midnight. [District Rule 2201] Federally Enforceable Through Title V Permit
31. Daily emissions shall be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each calendar month in a twelve-consecutive-month rolling emissions shall commence at the beginning of the first day of the month. The twelve-consecutive-month rolling emissions total to determine compliance with annual emissions shall be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit
32. Compliance with ammonia slip limit shall be demonstrated by using the following calculation procedure: ammonia slip ppmv @ 15% O₂ = ((a - (b x c/1,000,000)) x 1,000,000 / b) x d, where a = ammonia injection rate(lb/hr)/17(lb/lb. mol), b = dry exhaust gas flow rate (lb/hr)/(29(lb/lb. mol), c = change in measured NO_x concentration ppmv at 15% O₂ across catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip. Alternatively, permittee may utilize a continuous in-stack ammonia monitor, acceptable to the District, to monitor compliance. At least 60 days prior to using a NH₃ CEM, the permittee must submit a monitoring plan for District review and approval. [District Rules 2520 and 4102] 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.

33. Compliance with the short term emission limits (lb/hr and ppmv @ 15% O₂) shall be demonstrated annually by District witnessed in situ sampling of exhaust gas by a qualified independent source test firm at full load conditions as follows - NO_x: ppmvd @ 15% O₂ and lb/hr, CO: ppmvd @ 15% O₂ and lb/hr, VOC: ppmvd @ 15% O₂ and lb/hr, PM₁₀: lb/hr, and ammonia: ppmvd @ 15% O₂. Sample collection to demonstrate compliance with ammonia emission limit shall be based on three consecutive test runs of thirty minutes each. [District Rule 1081 and SJ-99-02] Federally Enforceable Through Title V Permit
34. Compliance with the startup NO_x, CO, and VOC mass emission limits shall be demonstrated for one of the CTGs (S-3523-1, or -2) at least once every five years by District witnessed in situ sampling of exhaust gases by a qualified independent source test firm. [District Rule 1081] Federally Enforceable Through Title V Permit
35. Any gas turbine with an intermittently operated auxiliary burner shall demonstrate compliance with the auxiliary burner both on and off. [District Rule 4703 and 40 CFR 60 Subpart Da] 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 Rule 1081] Federally Enforceable Through Title V Permit
37. The following test methods shall be used EPA Methods 1-4, PM₁₀: EPA Method 5 (front half and back half), NO_x: EPA Method 7E, CO: EPA Method 10, O₂: EPA Method 3, 3A, or 20, VOC: EPA Method 18 or 25, ammonia: BAAQMD ST-1B, and fuel gas sulfur content: ASTM D3246. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081, 4001, and 4703, and SJ-99-02] Federally Enforceable Through Title V Permit
38. The permittee shall maintain hourly records of NO_x, CO, and ammonia emission concentrations (ppmv @ 15% O₂), and hourly, daily, and twelve month rolling average records of NO_x and CO emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
39. The permittee shall maintain records of SO_x lb/hr, lb/day, and lb/twelve month rolling average emission. SO_x emissions shall be based on fuel use records, natural gas sulfur content, and mass balance calculations. [District Rule 2201 and 40 CFR 60.48(g)(1)] Federally Enforceable Through Title V Permit
40. Permittee shall maintain the following records for the CTG: occurrence, duration, and type of any startup, shutdown, or malfunction; emission measurements; total daily and annual hours of operation; and hourly quantity of fuel used. [District Rules 2201 and 4703 and SJ-99-02] Federally Enforceable Through Title V Permit
41. Permittee shall maintain the following records for the continuous emissions monitoring system (CEMS): the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, maintenance, adjustments, any period of non-operation of any continuous emissions monitor and emission measurements. [District Rules 2201, 4703 and 40 CFR 60 60.7(b) and SJ-99-02] Federally Enforceable Through Title V Permit
42. Cylinder gas audits of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and total accuracy 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 quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
43. The permittee shall submit a written report to the APCO for each calendar quarter, within 30 days of the end of the quarter, including: 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 shall correspond to the averaging period for each respective 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 Rule 1080] Federally Enforceable Through Title V Permit
44. All records required to be maintained by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rule 2201 and 2520] 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.

45. The owners and operators of each affected source shall have an Acid Rain permit and operate in compliance with all permit requirements. [40 CFR 72] Federally Enforceable Through Title V Permit
46. The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75. [40 CFR 75] Federally Enforceable Through Title V Permit
47. The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program. [40 CFR 75] Federally Enforceable Through Title V Permit
48. The owners and operators of each source and each affected unit at the source shall: (i) hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and (ii) comply with the applicable Acid Rain emissions limitations for sulfur dioxide. [40 CFR 72] Federally Enforceable Through Title V Permit
49. Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act. [40 CFR 72] Federally Enforceable Through Title V Permit
50. Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program. [40 CFR 72] Federally Enforceable Through Title V Permit
51. An allowance shall not be deducted in order to comply with the requirements under 40 CFR part 73, prior to the calendar year for which the allowance was allocated. [40 CFR 73] Federally Enforceable Through Title V Permit
52. The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR Part 77. [40 CFR 77] Federally Enforceable Through Title V Permit
53. The owners and operators of an affected unit that has excess emissions in any calendar year shall: (i) pay without demand the penalty required, and pay up on demand the interest on that penalty; and (ii) comply with the terms of an approved offset plan, as required by 40 CFR Part 72. [40 CFR 72] Federally Enforceable Through Title V Permit
54. The owners and operators of the each affected unit at the source shall keep on site the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority: (i) The certificate of representation for the designated representative for the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site beyond such five-year period until such documents are superceded because of the submission of a new certificate of representation changing the designated representative. [40 CFR 72] Federally Enforceable Through Title V Permit
55. The owners and operators of each affected unit at the source shall keep on site each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority; (ii) All emissions monitoring information, in accordance with 40 CFR part 75; (iii) Copies of all reports, compliance certifications and other submissions and all records made or required under the Acid Rain Program; (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission that demonstrates compliance with the requirements of the Acid Rain Program. [40 CFR 72, 40 CFR 75] Federally Enforceable Through Title V Permit
56. The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR 75 Subpart I. [40 CFR 75] 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-3523-3-5

EXPIRATION DATE: 02/28/2021

SECTION: NE35 **TOWNSHIP:** 30S **RANGE:** 23E

EQUIPMENT DESCRIPTION:

FORCED DRAFT COOLING TOWER WITH 6 CELLS AND HIGH EFFICIENCY DRIFT ELIMINATOR

PERMIT UNIT REQUIREMENTS

1. No hexavalent chromium containing compounds shall be added to cooling tower circulating water. [District Rule 7012]
2. Drift eliminator drift rate shall not exceed 0.0005%. [District Rule 2201] Federally Enforceable Through Title V Permit
3. PM10 emission rate shall not exceed 11.7 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. On a weekly basis, the Permittee shall record the circulating water recirculation rate and have an independent laboratory analyze a sample of the blowdown water to determine the total dissolved solids concentration in the blowdown water. [District Rules 1081 and 2520] Federally Enforceable Through Title V Permit
5. Compliance with the PM10 daily emission limit shall be demonstrated as follows: $PM10 \text{ lb/day} = \text{circulating water recirculation rate} * \text{total dissolved solids concentration in the blowdown water} * \text{design drift rate} * \text{correction factor}$. The correction factor shall range from 0.82 for a TDS of 1,000 ppm to 0.3 for a TDS of 5,000 ppm. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Permittee shall maintain records of calculated PM10 emission rate and all data used in the calculations. All records shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rules 2201 and 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-3523-6-4

EXPIRATION DATE: 02/28/2021

EQUIPMENT DESCRIPTION:

240 HP CUMMINS MODEL 6CTA 8.3 F2 DIESEL-FIRED IC ENGINE DRIVING EMERGENCY FIRE WATER PUMP

PERMIT UNIT REQUIREMENTS

1. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
2. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 40 CFR 63 Subpart ZZZZ, and 17 CCR 93115] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The permittee shall minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
5. At all times, the engine and any associated air pollution control equipment and monitoring equipment shall be operated in a manner consistent with safety and good air pollution control practices for minimizing emissions. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
6. The PM10 emissions rate shall not exceed 0.25 g/hp-hr based on US EPA certification using ISO 8178 test procedure. [District Rule 2201] Federally Enforceable Through Title V Permit
7. NOx emissions shall not exceed 4.4 g/hp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rule 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
9. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
10. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. For testing purposes, the engine shall only be operated the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 - "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems", 1998 edition. Total hours of operation for all maintenance, testing, and required regulatory purposes shall not exceed 77 hours per calendar year. [District Rule 4702, 40 CFR 63 Subpart ZZZZ, and 17 CCR 93115] Federally Enforceable Through Title V Permit
11. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [County Rule 407 (Kern)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

12. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, and the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.). For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702, 40 CFR 63 Subpart ZZZZ, and 17 CCR 93115] Federally Enforceable Through Title V Permit
13. The permittee shall maintain the following schedule of maintenance and inspection: Change oil and filter every 500 hours of operation or annually, whichever comes first; Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
14. The engine shall be operated and maintained according to the manufacturer's emission-related written instructions (including the after-treatment control device if any). Alternatively, a site-specific maintenance plan may be developed which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
15. Records of the maintenance conducted on the engine shall be maintained which demonstrate that operation and maintenance of the engine and after-treatment control device (if any) is according the facility's maintenance plan. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
16. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit
17. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702, 40 CFR 63 Subpart ZZZZ, and 17 CCR 93115] Federally Enforceable Through Title V Permit

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

ATTACHMENT C

Detailed Summary List of Facility Permits

Detailed Facility Report

For Facility=3523

Sorted by Facility Name and Permit Number

ELK HILLS POWER LLC 4026 SKYLINE RD TUPMAN, CA 93276	FAC # STATUS: TELEPHONE:	S 3523 A 6617632700	TYPE: TOXIC ID:	TitleV 60305	EXPIRE ON: AREA: INSP. DATE:	02/28/2021 6 / 06/22
---	--------------------------------	--	--------------------	-------------------------------	------------------------------------	----------------------------

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-3523-1-12	251.5 MW electrical generation	3020-08B H	1	15,843.00	15,843.00	A	GE FRAME 7 MODEL PG7241FA NATURAL GAS FIRED COMBINED CYCLE GAS TURBINE ENGINE/ELECTRICAL GENERATOR #1 WITH DRY LOW NOX COMBUSTORS, 250.5 MMBTU/HR NATURAL GAS FIRED DUCT BURNER, HEAT RECOVERY STEAM GENERATOR, SELECTIVE CATALYTIC REDUCTION, OXIDATION CATALYST, AND STEAM TURBINE SHARED WITH S-3523-2 (503 MW TOTAL PLANT NOMINAL RATING)
S-3523-2-12	251.5 MW electrical generation	3020-08B H	1	15,843.00	15,843.00	A	GE FRAME 7 MODEL PG7241FA NATURAL GAS FIRED COMBINED CYCLE GAS TURBINE ENGINE/ELECTRICAL GENERATOR #2 WITH DRY LOW NOX COMBUSTORS, 250.5 MMBTU/HR NATURAL GAS FIRED DUCT BURNER, HEAT RECOVERY STEAM GENERATOR, SELECTIVE CATALYTIC REDUCTION, OXIDATION CATALYST, AND STEAM TURBINE SHARED WITH S-3523-1 (503 MW TOTAL PLANT NOMINAL RATING)
S-3523-3-5	part of electrical generation unit	999-99	1	0.00	0.00	A	FORCED DRAFT COOLING TOWER WITH 6 CELLS AND HIGH EFFICIENCY DRIFT ELIMINATOR
S-3523-6-4	240 BHP diesel-fired IC engine	3020-10 C	1	290.00	290.00	A	240 HP CUMMINS MODEL 6CTA 8.3 F2 DIESEL-FIRED IC ENGINE DRIVING EMERGENCY FIRE WATER PUMP

Number of Facilities Reported: 1