

May 14, 2021

Mr. Richard Smith
Modesto Irrigation District
PO Box 4060
Modesto, CA 95352

Re: Notice of Preliminary Decision – Title V Permit Renewal
Facility Number: N-4940
Project Number: N-1201887

Dear Mr. Smith:

Enclosed for your review and comment is the District's analysis of the application to renew the Federally Mandated Operating Permit for Modesto Irrigation District at 1015 S Stockton Ave, Ripon, 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. Errol Villegas, Permit Services Manager, at (559) 230-5900.

Sincerely,



Brian Clements
Director of Permit Services

Enclosures

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

Samir Sheikh
Executive Director/Air Pollution Control Officer

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
Modesto Irrigation District
N-4940

TABLE OF CONTENTS

I.	PROPOSAL.....	1
II.	FACILITY LOCATION	1
III.	EQUIPMENT LISTING	2
IV.	GENERAL PERMIT TEMPLATE USAGE	2
V.	SCOPE OF EPA AND PUBLIC REVIEW	2
VI.	FEDERALLY ENFORCEABLE REQUIREMENTS	3
VII.	REQUIREMENTS NOT FEDERALLY ENFORCEABLE	6
VIII.	PERMIT REQUIREMENTS	6
IX.	PERMIT SHIELD	17
X.	CALIFORNIA ENVIRONMENTAL QUALITY ACT.....	18
XI.	PERMIT CONDITIONS	18
	ATTACHMENTS	18
	A - DRAFT RENEWED TITLE V OPERATING PERMIT	
	B - PREVIOUS TITLE V OPERATING PERMIT	
	C - DETAILED FACILITY REPORT	
	D - HAP MAJOR SOURCE CALCULATIONS	

TITLE V PERMIT RENEWAL EVALUATION

Power Generation Facility

Engineer: Gurpreet Brar
Date: May 14, 2021

Facility Number: N-4940
Facility Name: Modesto Irrigation District
Mailing Address: PO Box 4060
Modesto, CA 95352

Contact Name: Richard Smith
Phone: (209) 526-7616

Responsible Official: Richard Smith
Title: Generation Manager

Project #: N-1201887
Deemed Complete: June 22, 2020

I. PROPOSAL

Modesto Irrigation District was issued their initial Title V permit in 2011. The permit was previously renewed in 2016. As required by District Rule 2520, the applicant is requesting a permit renewal. The existing Title V permit has been reviewed and modified to reflect all applicable District and federal rules updated, removed, or added since the issuance of the previously renewed Title V permit.

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

II. FACILITY LOCATION

Modesto Irrigation District is located at 1015 S Stockton Ave in Ripon, 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 units N-4940-0-3.

VI. FEDERALLY ENFORCEABLE REQUIREMENTS

Rules Addressed by General Permit Template

A. Rules Updated or Evaluated

- District Rule 2520, Federally Mandated Operating Permits (amended June 21, 2001 ⇒ amended August 15, 2019)
- District Rule 4601, Architectural Coatings (amended December 17, 2009 ⇒ amended April 16, 2020)
- 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners (amended August 23, 2019)
- 40 CFR Part 82, Subpart F, Recycling and Emissions Reduction (amended April 10, 2020)

B. Rules Not Updated

- District Rule 1100, Equipment Breakdown (amended December 17, 1992)
- District Rule 1160, Emission Statements (adopted November 18, 1992)
- District Rule 2010, Permits Required (adopted 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 (adopted 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 4101, Visible Emissions (amended February 17, 2005)
- District Rule 8021, Construction, Demolition Excavation, Extraction, and Other Earthmoving Activities (amended August 19, 2004)

- District Rule 8031, Bulk Materials (amended August 19, 2004)
- District Rule 8041, Carryout and Trackout (amended August 19, 2004)
- District Rule 8051, Open Areas (amended August 19, 2004)
- District Rule 8061, Paved and Unpaved Roads (amended August 19, 2004)
- District Rule 8071, Unpaved Vehicle/Equipment Traffic Areas (amended September 16, 2004)
- 40 CFR Part 61, Subpart M, National Emission Standards for Asbestos (amended July 20, 2004)

Rules Not Addressed by General Permit Template

A. Rules Updated or Evaluated

- District Rule 2201, New and Modified Stationary Source Review Rule (amended April 21, 2011 ⇒ amended August 15, 2019)
- 40 CFR Part 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (amended December 4, 2020)
- 40 CFR Part 60 Subpart KKKK, Standards of Performance for Stationary Combustion Turbines (amended October 7, 2020)
- 40 CFR Part 63, Subpart YYYY, National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines (amended November 19, 2020)
- 40 CFR Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (amended December 4, 2020)
- 40 CFR Part 64, Compliance Assurance Monitoring (adopted October 22, 1997)
- 40 CFR Part 75, Continuous Emission Monitoring (amended April 22, 2020)

B. Rules Removed

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

C. Rules Added

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

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 2410, Prevention of Significant Deterioration, (adopted June 16, 2011)
- District Rule 4201, Particulate Matter Concentration (amended December 17, 1992)
- District Rule 4701, Internal Combustion Engines – Phase 1 (amended August 21, 2003)
- District Rule 4702, Internal Combustion Engines (amended November 14, 2013)
- District Rule 4703, Stationary Gas Turbines (amended September 20, 2007)
- District Rule 4801, Sulfur Compounds (amended December 17, 1992)
- 40 CFR Part 60 Subpart GG, Standards of Performance for Stationary Gas Turbines (amended February 27, 2014)
- 40 CFR Part 72, Subpart A, Acid Rain Program General Provisions (amended March 28, 2011)
- 40 CFR Part 73, Sulfur Dioxide Allowance System (amended April 28, 2006)
- 40 CFR Part 77, Excess Emissions (amended May 12, 2005)

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 Updated

No rules were updated.

B. Rules Added

No rules were added.

C. Rules Not Updated

- District Rule 4102, Nuisance (amended December 17, 1992)
- Title 17 California Code of Regulations (CCR) Section 93115, Airborne Toxic Control Measure for Stationary Compression Ignition Engines (adopted February 26, 2004)

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 adopted since the issuance of the last renewed Title V permit.

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

District Rule 2201 has been amended since this Title V permit was last renewed. 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. The updated requirements of this rule are therefore not applicable at this time.

2. District Rule 2520 – Federally Mandated Operating Permits

There are no federally applicable Greenhouse Gas (GHG) requirements for this source. It should be noted that the Mandatory Greenhouse Gas Reporting rule (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.

3. District Rule 4601 – Architectural Coatings

District Rule 4601 was amended on April 16, 2020. However, the amended rule is not SIP-approved by EPA. The previous version of this rule (amended December 17, 2009) is SIP-approved and is addressed by the District's facility-wide umbrella template. Therefore, template SJV-UM-0-3 is still valid for this project.

4. 40 CFR 60 Subpart III, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

§60.4200 - Applicability

This subpart is applicable to owners and operators of stationary compression ignited internal combustion engines that commence construction after July 11, 2005, where the engines are:

- 1) Manufactured after April 1, 2006, if not a fire pump engine.
- 2) Manufactured as a National Fire Protection Association (NFPA) fire pump engine after July 1, 2006.

Since the engine under permit unit N-4940-4 was installed after July 11, 2005 and manufactured after April 1, 2006, this subpart applies.

Sections 60.4201 through 60.4203 apply to engine manufacturers. Therefore, these sections will not be discussed unless they are referenced later by another section of this subpart.

§60.4205 – Emission Standards for Owners or Operators of Stationary Emergency IC Engines

Section 60.4205(b) states that owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in Section 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.

Section 60.4202(a) states that Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (a)(1) through (2) of this section.

Section (a)(1) is not applicable as it applies to engines with a maximum engine power less than 37 KW (50 HP).

Section (a)(2) states for engines with a maximum engine power greater than or equal to 37 KW (50 HP), the certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants beginning in model year 2007.

The applicable standards from 40 CFR 89.112 are NMHC + NO_x = 6.4 g/kw-hr, CO = 3.5 g/kw-hr, and PM = 0.20 g/kw-hr. The following conditions on draft permit N-4940-4-2 will ensure compliance with this requirement:

- Emissions from this IC engine shall not exceed any of the following limits: 2.66 g-NO_x/bhp-hr, 0.7 g-CO/bhp-hr, or 0.14 g-VOC/bhp-hr. [District Rule 2201, 17 CCR 93115, and 40 CFR Part 60 Subpart IIII]
- Emissions from this IC engine shall not exceed 0.12 g-PM₁₀/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102, 17 CCR 93115, and 40 CFR Part 60 Subpart IIII]

The smoke emission standard in 40 CFR 89.113 applies to compression-ignition non-road engines. An emergency-standby IC engine is not a non-road engine as defined in 40 CFR 89 Subpart A; therefore, section 40 CFR 89.113 does not apply.

Section 60.4206 states that owners or operators of CI engines must meet the applicable emission standards for the entire life of said engines. The Tier 3 level emissions for the proposed engine will be listed on the permit as emission factors, ensuring that the emission standards are met over the entire life of the engine.

Section 60.4207(b) states that beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 1090.305 for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted. Section 40 CFR 1090.305 for ultra low-sulfur diesel (ULSD) fuel states that the maximum sulfur content of diesel fuel shall not exceed 15 ppm. The following condition on draft permit N-4940-4-2 will ensure the use of CARB certified diesel fuel, which meets all of the fuel requirements listed in Subpart IIII.

- Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801, 17 CCR 93115 and 40 CFR Part 60 Subpart IIII]

Section 60.4208 lists deadline dates for importing or installing stationary CI engines produced in the previous model year. None of the deadline dates affect the engine under permit unit N-4940-4. Therefore, this section does not apply.

Section 60.4209(a) applies to an owner or operator of an emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine. The following condition on draft permit N-4940-4-2 will ensure compliance with this section:

- This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rules 4701 and 4702, 17 CCR 93115, and 40 CFR Part 60 Subpart IIII]

Section 60.4210 applies only to engine manufacturers. Therefore, this section will not be discussed unless it is referenced later by another section of this subpart.

Section 60.4211(a) states that owners or operators who comply with the emission standards specified in this subpart must operate and maintain the stationary CI engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. The following condition on draft permit N-4940-4-2 will ensure compliance with this section:

- This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702 and 40 CFR Part 60 Subpart IIII]

Section 60.4211(b) applies to pre-2007 model year engines. The engine under permit unit N-4940-4 was installed in 2014; therefore, this section does not apply.

Section 60.4211(c) states that if you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in Section 60.4204(b) or Section 60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to this subpart and must comply with the emission standards specified in Section 60.4205(c), you must comply by purchasing an engine certified to the emission standards in Section 60.4204(b), or Section 60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's specifications. The engine under permit unit N-4940-4 is a Tier 3 emissions level engine that complies with the emission standards in Section 60.4205(b) and was installed according to the manufacturer's specifications. Therefore, this section is satisfied.

Section 60.4211(d) applies to owners or operators who must comply with the emission standards specified in Section 60.4204(c) or Section 60.4205(d). The engine under permit unit N-4940-4 is not subject to the emission standards specified in Sections 60.4204(c) or 60.4205(d). Therefore, this section does not apply.

Section 60.4211(e) applies to owners or operators of modified or reconstructed stationary CI internal combustion engines. As discussed, the engine under permit unit N-4940-4 was never modified or reconstructed; therefore, this section does not apply.

Section 60.4211(f) applies to owners or operators of an emergency stationary ICE. This section states you must operate the emergency stationary ICE according to the requirements in paragraphs (f)(1) through (3). In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (3) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (3) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines. The following condition on draft permit N-4940-4-2 will ensure compliance:

- This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rule 4702, 17 CCR 93115 and 40 CFR Part 60 Subpart IIII]

Section 60.4212 applies to owners or operators of a stationary CI engine with a displacement of less than 30 liters per cylinder and required to conduct performance tests pursuant to Section 60.4211(b). Section 60.4211(b) does not apply to this engine; therefore, performance tests are not required and this section does not apply.

Section 60.4213 applies to owners or operators of CI engines with a displacement of greater than or equal to 30 liters per cylinder. The displacement is less than 30 liters per cylinder for this engine in this project, therefore, this section does not apply.

Section 60.4214(a) states owners and operators of non-emergency stationary CI engines that are greater than 3,000 hp, or have a displacement of greater than or equal to 10 liters per cylinder, or are pre-2007 model year engines that are greater than 175 hp and not certified, must meet the requirements of paragraphs (a)(1) and (2) of this section. The engine under permit unit N-4940-4 is a post-2007 model year emergency engine rated less than 3,000 hp and has a displacement less than 10 liters per cylinder. Therefore, this section does not apply.

Section 60.4214(b) states that if the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to this subpart, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time. The following condition on draft permit N-4940-4-2 will ensure compliance with this section:

- The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702, 17 CCR 93115 and 40 CFR Part 60 Subpart IIII]

Section 60.4214(c) applies to stationary CI engines equipped with a diesel particulate filter. Therefore, this section does not apply.

Sections 60.4215 and 60.4216 apply to engines operated outside the continental United States. Therefore, these sections do not apply.

Section 60.4217 applies to engines that use special fuels and cannot meet the emission limits that the engine was originally certified to. Since the engine under permit unit N-4940-4 is a diesel-fired and meets the emission limits that the engine was originally certified to, this section does not apply.

As demonstrated above, the engine under draft permit unit N-4940-4-2 meets the requirements of this subpart.

5. 40 CFR Part 60 Subpart KKKK, Standards of Performance for Stationary Combustion Turbines

Section 60.4305(a) states that stationary combustion turbines with a heat input at peak load equal to or greater than 10 MMBtu/hour, based on the higher heating value of the fuel, which commenced construction, modification, or reconstruction after February 18, 2005, are subject to this Subpart. The turbines operated under permit units N-3233-1 and N-3233-4 were constructed prior to this date, and have not been modified or reconstructed after February 18, 2005. Therefore, Subpart KKKK is not applicable to these turbines. No further analysis is necessary.

6. 40 CFR Part 63, Subpart YYYY, National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines

This subpart establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emissions from stationary combustion turbines located at major sources of HAP emissions, and requirements to demonstrate initial and continuous compliance with the emission and operating limitations.

Section 63.6085(b) states, "A major source of HAP emissions is a contiguous site under common control that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year, except that for oil and gas production facilities, a major source of HAP emissions is determined for each surface site."

7. 40 CFR Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

This national emission standard for hazardous air pollutants (NESHAP) is intended to regulate emissions of HAP from stationary reciprocating IC engines. This facility was determined to be an Area Source of HAP emissions in the previous Title V Renewal. Pursuant to 40 CFR 63.6590(1), a new or reconstructed stationary reciprocating internal combustion engine (RICE) located at an area source must meet the requirements of 40 CFR 63 Subpart ZZZZ by complying with 40 CFR 60 Subpart IIII if the engine is a new compression-ignited. The engine under permit unit N-4940-4 was installed after June 12, 2006, and was determined to be in compliance with 40 CFR 60 Subpart IIII requirements. Therefore, it is not subject to the requirements of 40 CFR 63 Subpart ZZZZ. Conditions 4 and 5 on the current permit N-4940-4-1 will be corrected to remove the reference to 40 CFR 63 Subpart ZZZZ as the engine is in compliance with the requirements of 40 CFR 60 Subpart IIII.

8. CFR Part 64 – Compliance Assurance Monitoring

40 CFR Part 64 requires Compliance Assurance Monitoring (CAM) for units that meet the following three criteria:

- 1) The unit must have an emission limit for the pollutant;
- 2) The unit must have add-on controls for the pollutant; these are devices such as flue gas recirculation (FGR), baghouses, and catalytic oxidizers; and

- 3) The unit must have a pre-control potential to emit of greater than the major source thresholds.

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

40 CFR Part 64 defines a control device as equipment, other than inherent process equipment, that is used to destroy or remove air pollutants prior to discharge to the atmosphere.

- a. **N-4940-1-5 and -2-5: 47.5 MW NOMINALLY RATED SIMPLE-CYCLE PEAK-DEMAND POWER GENERATING SYSTEMS CONSISTING OF A 500 MMBTU/HR GENERAL ELECTRIC, MODEL LM6000 SPRINT, NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR WITH A WATER SPRAY PREMIXED COMBUSTION SYSTEM, SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION AND AN OXIDATION CATALYST**

SO_x or PM₁₀:

This permit unit has emission limits for NO_x, SO_x, PM₁₀, CO, and VOC. However, the turbines are not equipped with any add-on control equipment for SO_x or PM₁₀ emissions. Therefore, CAM is not required for these pollutants.

NO_x and CO:

These units are equipped with CEMS to monitor NO_x and CO emissions. Therefore, CAM is not required for NO_x and CO emissions.

VOC:

Each permit unit limits the VOC emissions to 2.0 ppmvd @ 15% O₂, 1.26 lb/hr and a total of 11,038 lb/year.

Each unit is equipped with an oxidation catalyst, which is primarily designed to reduce CO emissions. However, the catalyst has a secondary effect in reducing the VOC emissions. Per project N-1133664, VOC control efficiency for the oxidation catalyst is about 30%.

Each unit's pre-control potential to emit is calculated as follows:

$$\begin{aligned}\text{Uncontrolled VOC lb/year} &= 11,038 \text{ lb-VOC/year}/(1-0.30) \\ &= 15,769 \text{ lb-VOC/year}\end{aligned}$$

As calculated above, the pre-control potential to emit for VOC emissions is below the Major Source threshold of 20,000 lb-VOC/yr. Therefore, these units are not subject to CAM for VOC emissions.

b. N-4940-4-2: 198 BHP GENERAC POWER SYSTEMS MODEL SD100 TIER 3 CERTIFIED DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

This permit unit has emission limits for NO_x, SO_x, PM₁₀, CO, and VOC. However, the engine is not equipped with any add-on control equipment and is not subject to CAM requirements.

9. 40 CFR Part 68 – Chemical Accident Prevention Provisions

When the facility is subject to the requirements of 40 CFR Part 68, it should submit to the proper authority a Risk Management Plan per Subpart G when mandated by the regulation as stated in condition 43 on draft renewed facility-wide permit. Since the actual requirements of 40 CFR Part 68 were not placed on the facility-wide permit, the amendment to this subpart does not have any effect on the current permit requirements and therefore will not be addressed in this evaluation.

10.40 CFR Part 75 – Continuous Emission Monitoring

The purpose of 40 CFR Part 75 is to establish requirements for the monitoring, recordkeeping, and reporting of SO₂, NO_x, and CO₂ emissions, volumetric flow, and opacity data from affected units under the Acid Rain Program pursuant to sections 412 and 821 of the Clean Air Act. In addition, this part sets forth provisions for the monitoring, recordkeeping, and reporting of NO_x mass emissions with which EPA, individual States, or groups of States may require sources to comply in order to demonstrate compliance with a NO_x mass emission reduction program, to the extent these provisions are adopted as requirements under such a program.

These regulations apply to each affected unit subject to Acid Rain emission limitations or reduction requirements for SO₂ or NO_x, except as provided in (b) and (c) of Section 75.2 in 40 CFR Part 75.

The amendments to this part do not have any effect on current permit requirements and will therefore not be addressed further in this evaluation.

The following conditions on the draft renewed permits is a mechanism to ensure compliance with the requirements of this part:

Renewed Permits	Permit Conditions
N-4940-1-4	5, 51, 52, 55, 64, and 65
N-4940-2-4	5, 51, 52, 55, 64, and 65

11.40 CFR Part 82 Subpart B – Servicing of Motor Vehicle Air Conditioners

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

These regulations apply to any person performing service on a motor vehicle for consideration when this service involves the refrigerant in the motor vehicle air conditioner.

The amendments to this subpart did not have any effect on the current permit requirements and will therefore not be addressed further in this evaluation.

The following condition on the draft renewed permit is a mechanism to ensure compliance with the requirements of this subpart:

Renewed Permit	Permit Condition
N-4940-0-4	28

12.40 CFR Part 82 Subpart F – Recycling and Emissions Reductions

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

These regulations apply to any person servicing, maintaining, or repairing appliances. This subpart also applies to persons disposing of appliances, including small appliances and motor vehicle air conditioners. In addition, this subpart applies to refrigerant reclaimers, technician certifying programs, appliance owners and operators, manufacturers of appliances, manufacturers of recycling and recovery equipment, approved recycling and recovery equipment testing organizations, persons selling class I or class II refrigerants or offering class I or class II refrigerants for sale, and persons purchasing class I or class II refrigerants.

The amendments to this subpart did not have any effect on the current permit requirements and will therefore not be addressed further in this evaluation.

The following condition on the draft renewed permit is a mechanism to ensure compliance with the requirements of this subpart:

Renewed Permit	Permit Condition
N-4940-0-4	27

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

Model General Permit Template SJV-UM-0-3

By submitting Model General Permit Template SJV-UM-0-3 qualification form, the applicant has requested that a permit shield be granted for all the applicable requirements identified by the template. Therefore, the permit shield as granted in Model General Permit Template is included as conditions 40 and 41 of the facility-wide requirements (N-4940-0-4).

B. Requirements not Addressed by Model General Permit Templates

This Title V permit renewal application does not include any proposals for new permit shields or modifications to any pre-existing permit shields. The proposed renewed Title V permit therefore does not include any new or modified permit shields.

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
- D. HAP Major Source Calculations

ATTACHMENT A

Draft Renewed Title V Operating Permit

San Joaquin Valley Air Pollution Control District

FACILITY: N-4940-0-3

EXPIRATION DATE: 03/31/2021

FACILITY-WIDE REQUIREMENTS

1. {4362} The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
2. {4363} The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
3. {4364} The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
4. {4365} Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (12/20/07). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
5. {4366} The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.8.1 and 9.13.1] Federally Enforceable Through Title V Permit
6. {4367} A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit
7. {4368} Every application for a permit required under Rule 2010 (12/17/92) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit
8. {4369} The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit

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.

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

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

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

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

34. {4395} Any unpaved vehicle/equipment area that anticipates more than 50 Average annual daily Trips (AADT) shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 150 vehicle trips per day (VDT) shall comply with the requirements of Section 5.1.2 of District Rule 8071. On each day that 25 or more VDT with 3 or more axles will occur on an unpaved vehicle/equipment traffic area, the owner/operator shall comply with the requirements of Section 5.1.3 of District Rule 8071. On each day when a special event will result in 1,000 or more vehicles that will travel/park on an unpaved area, the owner/operator shall comply with the requirements of Section 5.1.4 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (9/16/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8071] Federally Enforceable Through Title V Permit
35. {4396} Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M] Federally Enforceable Through Title V Permit
36. {4397} The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.16] Federally Enforceable Through Title V Permit
37. {4398} The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2] Federally Enforceable Through Title V Permit
38. {4399} When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permits shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit
39. {4400} Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Rule 401 (Madera, Fresno, Kern, Kings, San Joaquin, Stanislaus, Tulare and Merced), Rule 110 (Fresno, Stanislaus, San Joaquin), Rule 109 (Merced), Rule 113 (Madera), Rule 111 (Kern, Tulare, Kings), and Rule 202 (Fresno, Kern, Tulare, Kings, Madera, Stanislaus, Merced, San Joaquin). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
40. {4401} Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (2/17/05); 4601 (12/17/09); 8021 (8/19/2004); 8031 (8/19/2004); 8041 (8/19/2004); 8051 (8/19/2004); 8061 (8/19/2004); and 8071 (9/16/2004). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
41. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
42. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
43. On November 30, 2011, the initial Title V permit was issued. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin December 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: N-4940-1-5

EXPIRATION DATE: 03/31/2021

EQUIPMENT DESCRIPTION:

47.5 MW NOMINALLY RATED SIMPLE-CYCLE PEAK-DEMAND POWER GENERATING SYSTEM CONSISTING OF A 500 MMBTU/HR GENERAL ELECTRIC, MODEL LM6000 SPRINT, NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR WITH A WATER SPRAY PREMIXED COMBUSTION SYSTEM, SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION AND AN OXIDATION CATALYST

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in proper operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
2. A selective catalytic reduction (SCR) system and an oxidation catalyst shall serve the gas turbine engine. Exhaust ducting shall be equipped with a fresh air inlet blower to be used to lower the exhaust temperature prior to the inlet of the SCR system catalyst. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The gas turbine engine and generator lube oil vents shall be equipped with mist eliminators or equivalent technology sufficient to limit the visible emissions from the lube oil vents to not exceed 5% opacity, except for a period not exceeding three minutes in any one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The turbine shall be equipped with a continuous monitoring system to measure and record hours of operation, mass ratio of water-to-fuel injected and fuel consumption. [District Rules 2201 and 4703, 6.2; and 40 CFR 60.334 (a)] Federally Enforceable Through Title V Permit
5. The exhaust stack shall be equipped with a continuous emissions monitor (CEM) for NO_x, CO, and O₂. The CEM shall meet the requirements of 40 CFR parts 60 and 75 and shall be capable of monitoring emissions during startups and shutdowns as well as during normal operating conditions. [District Rules 1080, 2201 and 4703, 6.2.1; and 40 CFR 60.334 (b)(d)] Federally Enforceable Through Title V Permit
6. The permittee shall monitor and record the fuel flow rate, NO_x emission rate, CO emission rate, ammonia injection rate, exhaust temperature both prior to and after the SCR system, exhaust oxygen content and exhaust flow rate. [District Rules 2201 and 4703, 6.2] Federally Enforceable Through Title V Permit
7. 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
8. 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
9. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO_x, CO, and O₂ analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 1080, 6.4 and 40 CFR 60.334 (b)(2)] Federally Enforceable Through Title V Permit
11. Results of continuous emissions monitoring shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080] Federally Enforceable Through Title V Permit
12. In accordance with 40 CFR, Part 60, Appendix F, 5.1, cylinder gas audits (CGA) or relative accuracy audits (RAA) of the continuous emission monitors shall be conducted quarterly, except during quarters in which a relative accuracy test audit (RATA) is performed. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
13. The owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F, 5.1.1, at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080 and 40 CFR 60.334 (b)(1)] Federally Enforceable Through Title V Permit
14. The turbine shall be fired only on natural gas with a sulfur content (as S) not exceeding 1.0 grain per 100 standard cubic feet. [District Rules 2201 and 4801; and 40 CFR 60.333 (b)] Federally Enforceable Through Title V Permit
15. The NO_x (as NO₂) emissions during each start-up event and each shutdown event shall not exceed 20.0 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The CO emissions during each start-up event and each shutdown event shall not exceed 20.0 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Startup shall be defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operations, and the unit meets the lb/hr and ppmvd emission limits specified within this permit. Shutdown shall be defined as the period of time during which a unit is taken from an operational to a non-operational status as the fuel supply to the unit is completely turned off. Start-up and shutdown period emissions shall be counted toward all applicable emission limits (lb/day and lb/year). [District Rules 2201 and 4703, 3.26, 3.29 and 5.3] Federally Enforceable Through Title V Permit
18. Duration of each start-up or each shutdown event shall not exceed two hours. [District Rule 4703, 5.3.1.1] Federally Enforceable Through Title V Permit
19. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown. [District Rule 4703, 5.3.2] Federally Enforceable Through Title V Permit
20. The NO_x (as NO₂) emissions from this unit, except during start-up and shutdown events, shall not exceed either of the following: 4.53 lb/hr or 2.5 ppmvd @ 15% O₂. The emission concentration limit is based on a three-hour rolling average. [District Rules 2201 and 4703, 5.1] Federally Enforceable Through Title V Permit
21. The CO emissions from this unit, except during start-up and shutdown events, shall not exceed either of the following: 6.62 lb/hr or 6.0 ppmvd @ 15% O₂. The emission concentration limit is based on a three-hour rolling average. [District Rules 2201 and 4703, 5.2] Federally Enforceable Through Title V Permit
22. The VOC emissions from this unit shall not exceed either of the following: 1.26 lb/hr or 2.0 ppmvd @ 15% O₂. The emission concentration limit is based on a three-hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
23. The SO_x emissions shall not exceed 1.4 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
24. The PM₁₀ emissions shall not exceed 3.00 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

25. The ammonia slip emissions shall not exceed either of the following: 6.71 lb/hr or 10.0 ppmvd @ 15% O₂. The emission concentration limit is based on a 24-hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Each three hour rolling average will be compiled from the three most recent one hour periods. Each one hour period shall commence on the hour. 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
27. The daily emissions from this unit shall not exceed any of the following: NO_x (as NO₂) - 155.1 lb/day; VOC - 30.2 lb/day; CO - 158.9 lb/day; PM₁₀ - 72.0 lb/day; or SO_x (as SO₂) - 34.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
28. The annual emissions from this unit shall not exceed any of the following: NO_x (as NO₂) - 44,505 lb/year; VOC - 11,038 lb/year; CO - 57,991 lb/year, PM₁₀ - 26,280 lb/year; or SO_x - 12,483 lb/year. All annual emission limits are based on 12 consecutive month rolling emissions totals. [District Rule 2201] Federally Enforceable Through Title V Permit
29. 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 total shall commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions totals used to determine compliance with annual emission limits shall be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit
30. Compliance with the ammonia emission limits shall be demonstrated utilizing one of the following procedures: 1) Calculate ammonia slip utilizing the following equation: ammonia slip ppmvd @ 15% O₂ = $\left[\left\{ a - \left(b \times \frac{c}{1,000,000} \right) \right\} \times \left(\frac{1,000,000}{b} \right) \times \left(\frac{20.9 - 15.0}{20.9 - e} \right) \times d \right]$, where a = ammonia injection rate (lb/hr) / (17 lb/lb mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NO_x concentration across the catalyst, d = correction factor, and e = stack O₂ concentration (%vd). The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip; 2.) Utilize another District-approved calculation method using measured surrogate parameters to determine the daily ammonia emissions in ppmvd @ 15% O₂. If this option is chosen, the permittee shall submit a detailed calculation protocol for District approval at least 60 days prior to commencement of operation; 3.) Alternatively, the permittee may utilize a continuous in-stack ammonia monitor to verify compliance with the ammonia emissions limit. If this option is chosen, the permittee shall submit a monitoring plan for District approval at least 60 days prior to commencement of operation. [District Rule 4102]
31. Source testing to measure the NO_x, VOC, CO and ammonia slip emissions (ppmvd @ 15% O₂ and lb/hr) and PM₁₀ emissions (lb/hr) shall be conducted at least once every twelve months. [District Rules 2201 and 4703, 6.3.1] Federally Enforceable Through Title V Permit
32. Source testing to measure the CO emissions during start-up periods shall be conducted at least once every seven years thereafter. [District Rule 2201] Federally Enforceable Through Title V Permit
33. Source testing to measure the NO_x emissions during start-up periods shall be conducted at least once every seven years. [District Rule 2201] Federally Enforceable Through Title V Permit
34. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
35. Source testing shall be witnessed or authorized by District personnel and samples shall be collected by a California Air Resources Board (CARB) certified testing laboratory or a CARB certified source testing firm. [District Rule 1081] Federally Enforceable Through Title V Permit
36. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

37. NO_x emissions (referenced as NO₂) shall be determined using EPA method 7E, EPA method 20 or CARB method 20. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. The request to utilize EPA approved alternative source testing methods must be submitted in writing and written approval received from the District prior to the submission of the source test plan. [District Rules 1081, 2201 and 4703, 5.1 & 6.4.1; and 40 CFR 60.335 (a) & (b)] Federally Enforceable Through Title V Permit
38. CO emissions shall be determined using EPA method 10 or EPA method 10B. [District Rules 1081, 2201 and 4703, 6.4.2] Federally Enforceable Through Title V Permit
39. VOC emissions (referenced as methane) shall be determined using EPA method 18 or EPA method 25. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
40. PM₁₀ emissions shall be determined using EPA methods 201 and 202, EPA methods 201A and 202, CARB method 501 in conjunction with CARB method 5, or EPA method 5 and CARB method 5. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
41. Ammonia emissions shall be determined using BAAQMD method ST-1B. [District Rule 1081] Federally Enforceable Through Title V Permit
42. Oxygen content of the exhaust gas shall be determined by using EPA method 3, EPA method 3A or EPA method 20. [District Rules 1081, 2201 and 4703, 6.4.3] Federally Enforceable Through Title V Permit
43. The owner or operator shall demonstrate maximum total sulfur content of the fuel by maintaining gas quality characteristics in a current, valid purchase contract, a tariff sheet or transportation contract for the fuel. [40 CFR 60.334 (h)(3)] Federally Enforceable Through Title V Permit
44. EPA approved alternative source testing methods will be allowed, upon District approval, provided it does not result in a relaxation of emission limitations. The request to utilize EPA approved alternative source testing methods must be submitted in writing and written approval received from the District prior to the submission of the source test plan. [District Rules 1081, 4001 and 4703, 6.4] Federally Enforceable Through Title V Permit
45. 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 emissions (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
46. The permittee shall maintain a daily stationary gas turbine system operating log that includes the actual local startup and stop time, length and reason for reduced load periods, total hours of operation and the type and quantity of fuel used. [District Rule 4703, 6.2.6] Federally Enforceable Through Title V Permit
47. The operator performing start-up or shutdown of this unit shall keep records of the duration of start-up or shutdown. [District Rule 4703, 6.2.8] Federally Enforceable Through Title V Permit
48. The permittee shall maintain the following records: date and time, duration, and type of any startup, shutdown, or malfunction; performance testing, evaluations, calibrations, checks, adjustments, any period which a continuous monitoring system or device was inoperative, and maintenance of any continuous emission monitoring system or device. [District Rule 2201] Federally Enforceable Through Title V Permit
49. 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 4703, 6.2.4] Federally Enforceable Through Title V Permit
50. The owners and operators of each affected source and each affected unit at the source shall: (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and (ii) Have an Acid Rain permit. [40 CFR 72] 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.

51. 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
52. 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
53. 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 73] Federally Enforceable Through Title V Permit
54. 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 77] Federally Enforceable Through Title V Permit
55. An affected unit shall be subject to the sulfur dioxide requirements starting on the later of January 1, 2000, or the deadline for monitoring certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3) that is not a substitution or compensating unit. [40 CFR 72 and 40 CFR 75] Federally Enforceable Through Title V Permit
56. 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
57. 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
58. An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or the written exemption under 40 CFR 72.7 and 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization. [40 CFR 72] Federally Enforceable Through Title V Permit
59. An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right. [40 CFR 72] Federally Enforceable Through Title V Permit
60. The owners and operators of each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides. [40 CFR 72] Federally Enforceable Through Title V Permit
61. 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
62. 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 77. [40 CFR 77] Federally Enforceable Through Title V Permit
63. 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 superseded because of the submission of a new certificate of representation changing the designated representative. [40 CFR 72] 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.

64. 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 75] Federally Enforceable Through Title V Permit
65. 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: N-4940-2-5

EXPIRATION DATE: 03/31/2021

EQUIPMENT DESCRIPTION:

47.5 MW NOMINALLY RATED SIMPLE-CYCLE PEAK-DEMAND POWER GENERATING SYSTEM CONSISTING OF A 500 MMBTU/HR GENERAL ELECTRIC, MODEL LM6000 SPRINT, NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR WITH A WATER SPRAY PREMIXED COMBUSTION SYSTEM, SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION AND AN OXIDATION CATALYST

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in proper operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
2. A selective catalytic reduction (SCR) system and an oxidation catalyst shall serve the gas turbine engine. Exhaust ducting shall be equipped with a fresh air inlet blower to be used to lower the exhaust temperature prior to the inlet of the SCR system catalyst. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The gas turbine engine and generator lube oil vents shall be equipped with mist eliminators or equivalent technology sufficient to limit the visible emissions from the lube oil vents to not exceed 5% opacity, except for a period not exceeding three minutes in any one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The turbine shall be equipped with a continuous monitoring system to measure and record hours of operation, mass ratio of water-to-fuel injected and fuel consumption. [District Rules 2201 and 4703, 6.2; and 40 CFR 60.334 (a)] Federally Enforceable Through Title V Permit
5. The exhaust stack shall be equipped with a continuous emissions monitor (CEM) for NO_x, CO, and O₂. The CEM shall meet the requirements of 40 CFR parts 60 and 75 and shall be capable of monitoring emissions during startups and shutdowns as well as during normal operating conditions. [District Rules 1080, 2201 and 4703, 6.2.1; and 40 CFR 60.334 (b)(d)] Federally Enforceable Through Title V Permit
6. The permittee shall monitor and record the fuel flow rate, NO_x emission rate, CO emission rate, ammonia injection rate, exhaust temperature both prior to and after the SCR system, exhaust oxygen content and exhaust flow rate. [District Rules 2201 and 4703, 6.2] Federally Enforceable Through Title V Permit
7. 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
8. 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
9. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO_x, CO, and O₂ analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 1080, 6.4 and 40 CFR 60.334 (b)(2)] Federally Enforceable Through Title V Permit
11. Results of continuous emissions monitoring shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080] Federally Enforceable Through Title V Permit
12. In accordance with 40 CFR, Part 60, Appendix F, 5.1, cylinder gas audits (CGA) or relative accuracy audits (RAA) of the continuous emission monitors shall be conducted quarterly, except during quarters in which a relative accuracy test audit (RATA) is performed. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
13. The owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F, 5.1.1, at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080 and 40 CFR 60.334 (b)(1)] Federally Enforceable Through Title V Permit
14. The turbine shall be fired only on natural gas with a sulfur content (as S) not exceeding 1.0 grain per 100 standard cubic feet. [District Rules 2201 and 4801; and 40 CFR 60.333 (b)] Federally Enforceable Through Title V Permit
15. The NO_x (as NO₂) emissions during each start-up event and each shutdown event shall not exceed 20.0 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The CO emissions during each start-up event and each shutdown event shall not exceed 20.0 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Startup shall be defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operations, and the unit meets the lb/hr and ppmvd emission limits specified within this permit. Shutdown shall be defined as the period of time during which a unit is taken from an operational to a non-operational status as the fuel supply to the unit is completely turned off. Start-up and shutdown period emissions shall be counted toward all applicable emission limits (lb/day and lb/year). [District Rules 2201 and 4703, 3.26, 3.29 and 5.3] Federally Enforceable Through Title V Permit
18. Duration of each start-up or each shutdown event shall not exceed two hours. [District Rule 4703, 5.3.1.1] Federally Enforceable Through Title V Permit
19. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown. [District Rule 4703, 5.3.2] Federally Enforceable Through Title V Permit
20. The NO_x (as NO₂) emissions from this unit, except during start-up and shutdown events, shall not exceed either of the following: 4.53 lb/hr or 2.5 ppmvd @ 15% O₂. The emission concentration limit is based on a three-hour rolling average. [District Rules 2201 and 4703, 5.1] Federally Enforceable Through Title V Permit
21. The CO emissions from this unit, except during start-up and shutdown events, shall not exceed either of the following: 6.62 lb/hr or 6.0 ppmvd @ 15% O₂. The emission concentration limit is based on a three-hour rolling average. [District Rules 2201 and 4703, 5.2] Federally Enforceable Through Title V Permit
22. The VOC emissions from this unit shall not exceed either of the following: 1.26 lb/hr or 2.0 ppmvd @ 15% O₂. The emission concentration limit is based on a three-hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
23. The SO_x emissions shall not exceed 1.4 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
24. The PM₁₀ emissions shall not exceed 3.00 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

25. The ammonia slip emissions shall not exceed either of the following: 6.71 lb/hr or 10.0 ppmvd @ 15% O₂. The emission concentration limit is based on a 24-hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Each three hour rolling average will be compiled from the three most recent one hour periods. Each one hour period shall commence on the hour. 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
27. The daily emissions from this unit shall not exceed any of the following: NO_x (as NO₂) - 155.1 lb/day; VOC - 30.2 lb/day; CO - 158.9 lb/day; PM₁₀ - 72.0 lb/day; or SO_x (as SO₂) - 34.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
28. The annual emissions from this unit shall not exceed any of the following: NO_x (as NO₂) - 44,505 lb/year; VOC - 11,038 lb/year; CO - 57,991 lb/year, PM₁₀ - 26,280 lb/year; or SO_x - 12,483 lb/year. All annual emission limits are based on 12 consecutive month rolling emissions totals. [District Rule 2201] Federally Enforceable Through Title V Permit
29. 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 total shall commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions totals used to determine compliance with annual emission limits shall be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit
30. Compliance with the ammonia emission limits shall be demonstrated utilizing one of the following procedures: 1) Calculate ammonia slip utilizing the following equation: ammonia slip ppmvd @ 15% O₂ = $\left[\left\{ a - \left(b \times \frac{c}{1,000,000} \right) \right\} \times \left(\frac{1,000,000}{b} \right) \times \left(\frac{20.9 - 15.0}{20.9 - e} \right) \times d \right]$, where a = ammonia injection rate (lb/hr) / (17 lb/lb mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NO_x concentration across the catalyst, d = correction factor, and e = stack O₂ concentration (%vd). The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip; 2.) Utilize another District-approved calculation method using measured surrogate parameters to determine the daily ammonia emissions in ppmvd @ 15% O₂. If this option is chosen, the permittee shall submit a detailed calculation protocol for District approval at least 60 days prior to commencement of operation; 3.) Alternatively, the permittee may utilize a continuous in-stack ammonia monitor to verify compliance with the ammonia emissions limit. If this option is chosen, the permittee shall submit a monitoring plan for District approval at least 60 days prior to commencement of operation. [District Rule 4102]
31. Source testing to measure the NO_x, VOC, CO and ammonia slip emissions (ppmvd @ 15% O₂ and lb/hr) and PM₁₀ emissions (lb/hr) shall be conducted at least once every twelve months. [District Rules 2201 and 4703, 6.3.1] Federally Enforceable Through Title V Permit
32. Source testing to measure the CO emissions during start-up periods shall be conducted at least once every seven years thereafter. [District Rule 2201] Federally Enforceable Through Title V Permit
33. Source testing to measure the NO_x emissions during start-up periods shall be conducted at least once every seven years. [District Rule 2201] Federally Enforceable Through Title V Permit
34. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
35. Source testing shall be witnessed or authorized by District personnel and samples shall be collected by a California Air Resources Board (CARB) certified testing laboratory or a CARB certified source testing firm. [District Rule 1081] Federally Enforceable Through Title V Permit
36. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

37. NO_x emissions (referenced as NO₂) shall be determined using EPA method 7E, EPA method 20 or CARB method 20. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. The request to utilize EPA approved alternative source testing methods must be submitted in writing and written approval received from the District prior to the submission of the source test plan. [District Rules 1081, 2201 and 4703, 5.1 & 6.4.1; and 40 CFR 60.335 (a) & (b)] Federally Enforceable Through Title V Permit
38. CO emissions shall be determined using EPA method 10 or EPA method 10B. [District Rules 1081, 2201 and 4703, 6.4.2] Federally Enforceable Through Title V Permit
39. VOC emissions (referenced as methane) shall be determined using EPA method 18 or EPA method 25. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
40. PM₁₀ emissions shall be determined using EPA methods 201 and 202, EPA methods 201A and 202, CARB method 501 in conjunction with CARB method 5, or EPA method 5 and CARB method 5. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
41. Ammonia emissions shall be determined using BAAQMD method ST-1B. [District Rule 1081] Federally Enforceable Through Title V Permit
42. Oxygen content of the exhaust gas shall be determined by using EPA method 3, EPA method 3A or EPA method 20. [District Rules 1081, 2201 and 4703, 6.4.3] Federally Enforceable Through Title V Permit
43. The owner or operator shall demonstrate maximum total sulfur content of the fuel by maintaining gas quality characteristics in a current, valid purchase contract, a tariff sheet or transportation contract for the fuel. [40 CFR 60.334 (h)(3)] Federally Enforceable Through Title V Permit
44. EPA approved alternative source testing methods will be allowed, upon District approval, provided it does not result in a relaxation of emission limitations. The request to utilize EPA approved alternative source testing methods must be submitted in writing and written approval received from the District prior to the submission of the source test plan. [District Rules 1081, 4001 and 4703, 6.4] Federally Enforceable Through Title V Permit
45. 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 emissions (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
46. The permittee shall maintain a daily stationary gas turbine system operating log that includes the actual local startup and stop time, length and reason for reduced load periods, total hours of operation and the type and quantity of fuel used. [District Rule 4703, 6.2.6] Federally Enforceable Through Title V Permit
47. The operator performing start-up or shutdown of this unit shall keep records of the duration of start-up or shutdown. [District Rule 4703, 6.2.8] Federally Enforceable Through Title V Permit
48. The permittee shall maintain the following records: date and time, duration, and type of any startup, shutdown, or malfunction; performance testing, evaluations, calibrations, checks, adjustments, any period which a continuous monitoring system or device was inoperative, and maintenance of any continuous emission monitoring system or device. [District Rule 2201] Federally Enforceable Through Title V Permit
49. 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 4703, 6.2.4] Federally Enforceable Through Title V Permit
50. The owners and operators of each affected source and each affected unit at the source shall: (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and (ii) Have an Acid Rain permit. [40 CFR 72] 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.

51. 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
52. 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
53. 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 73] Federally Enforceable Through Title V Permit
54. 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 77] Federally Enforceable Through Title V Permit
55. An affected unit shall be subject to the sulfur dioxide requirements starting on the later of January 1, 2000, or the deadline for monitoring certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3) that is not a substitution or compensating unit. [40 CFR 72 and 40 CFR 75] Federally Enforceable Through Title V Permit
56. 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
57. 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
58. An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or the written exemption under 40 CFR 72.7 and 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization. [40 CFR 72] Federally Enforceable Through Title V Permit
59. An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right. [40 CFR 72] Federally Enforceable Through Title V Permit
60. The owners and operators of each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides. [40 CFR 72] Federally Enforceable Through Title V Permit
61. 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
62. 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 77. [40 CFR 77] Federally Enforceable Through Title V Permit
63. 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 superseded because of the submission of a new certificate of representation changing the designated representative. [40 CFR 72] 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.

64. 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 75] Federally Enforceable Through Title V Permit
65. 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: N-4940-4-2

EXPIRATION DATE: 03/31/2021

EQUIPMENT DESCRIPTION:

198 BHP GENERAC POWER SYSTEMS MODEL SD100 TIER 3 CERTIFIED DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

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 Rules 4701 and 4702, 17 CCR 93115, and 40 CFR Part 60 Subpart III] Federally Enforceable Through Title V Permit
3. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801, 17 CCR 93115 and 40 CFR Part 60 Subpart III] Federally Enforceable Through Title V Permit
4. Emissions from this IC engine shall not exceed any of the following limits: 2.66 g-NOx/bhp-hr, 0.7 g-CO/bhp-hr, or 0.14 g-VOC/bhp-hr. [District Rule 2201, 17 CCR 93115, and 40 CFR Part 60 Subpart III] Federally Enforceable Through Title V Permit
5. Emissions from this IC engine shall not exceed 0.12 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102, 17 CCR 93115, and 40 CFR Part 60 Subpart III] Federally Enforceable Through Title V Permit
6. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702 and 40 CFR Part 60 Subpart III] Federally Enforceable Through Title V Permit
7. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
8. 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 and 17 CCR 93115] Federally Enforceable Through Title V Permit
9. This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702 and 17 CCR 93115] 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. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rules 4102 and 4702, 17 CCR 93115, and 40 CFR Part 60 Subpart III] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

11. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rules 4701 and 4702, 17 CCR 93115, and 40 CFR Part 60 Subpart III] Federally Enforceable Through Title V Permit
12. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 4701 and 4702, 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: N-4940-0-2

EXPIRATION DATE: 03/31/2021

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, 6.1; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
2. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
3. The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
4. Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (12/20/07). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
5. The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.8.1 and 9.13.1] Federally Enforceable Through Title V Permit
6. A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit
7. Every application for a permit required under Rule 2010 (12/17/92) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit
8. The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit
9. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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

Facility Name: MODESTO IRRIGATION DISTRICT
Location: 1015 S STOCKTON AVE, RIPON, CA 95366
N-4940-0-2 : May 14 2021 1:32PM -- BRARG

10. The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.5.1] Federally Enforceable Through Title V Permit
11. Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520 (6/21/01). [District Rules 2520, 9.5.2 and 1100, 7.0] Federally Enforceable Through Title V Permit
12. If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit. [District Rule 2520, 9.7] Federally Enforceable Through Title V Permit
13. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.8.2] Federally Enforceable Through Title V Permit
14. The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.8.3] Federally Enforceable Through Title V Permit
15. The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.8.4] Federally Enforceable Through Title V Permit
16. The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.8.5] Federally Enforceable Through Title V Permit
17. The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.9] Federally Enforceable Through Title V Permit
18. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 2520, 9.13.2.1] Federally Enforceable Through Title V Permit
19. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.13.2.2] Federally Enforceable Through Title V Permit
20. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.13.2.3] Federally Enforceable Through Title V Permit
21. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.13.2.4] Federally Enforceable Through Title V Permit
22. No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (02/17/05). If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and County Rules 401 (in all eight counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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

23. No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating with a VOC content in excess of the corresponding limit specified in Table of Standards 1 effective until 12/30/10 or Table of Standards 2 effective on and after 1/1/11 of District Rule 4601 (12/17/09) for use or sale within the District. [District Rule 4601, 5.1] Federally Enforceable Through Title V Permit
24. All VOC-containing materials subject to Rule 4601 (12/17/09) shall be stored in closed containers when not in use. [District Rule 4601, 5.4] Federally Enforceable Through Title V Permit
25. The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.3 (12/17/09). [District Rule 4601, 6.1 and 6.3] Federally Enforceable Through Title V Permit
26. With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.13.1 and 10.0] Federally Enforceable Through Title V Permit
27. If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR Part 82, Subpart F. [40 CFR 82 Subpart F] Federally Enforceable Through Title V Permit
28. If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR Part 82, Subpart B. [40 CFR Part 82, Subpart B] Federally Enforceable Through Title V Permit
29. Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8021] Federally Enforceable Through Title V Permit
30. Outdoor handling, storage and transport of any bulk material which emits dust shall comply with the requirements of District Rule 8031, unless specifically exempted under Section 4.0 of Rule 8031 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8031] Federally Enforceable Through Title V Permit
31. An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8041] Federally Enforceable Through Title V Permit
32. Whenever open areas are disturbed, or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8051] Federally Enforceable Through Title V Permit
33. Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8061] Federally Enforceable Through Title V Permit
34. Any unpaved vehicle/equipment area that anticipates more than 50 Average annual daily Trips (AADT) shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 150 vehicle trips per day (VDT) shall comply with the requirements of Section 5.1.2 of District Rule 8071. On each day that 25 or more VDT with 3 or more axles will occur on an unpaved vehicle/equipment traffic area, the owner/operator shall comply with the requirements of Section 5.1.3 of District Rule 8071. On each day when a special event will result in 1,000 or more vehicles that will travel/park on an unpaved area, the owner/operator shall comply with the requirements of Section 5.1.4 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (9/16/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8071] Federally Enforceable Through Title V Permit
35. Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M] Federally Enforceable Through Title V Permit

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

36. The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.16] Federally Enforceable Through Title V Permit
37. The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2] Federally Enforceable Through Title V Permit
38. When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permits shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit
39. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Rule 401 (Madera, Fresno, Kern, Kings, San Joaquin, Stanislaus, Tulare and Merced), Rule 110 (Fresno, Stanislaus, San Joaquin), Rule 109 (Merced), Rule 113 (Madera), Rule 111 (Kern, Tulare, Kings), and Rule 202 (Fresno, Kern, Tulare, Kings, Madera, Stanislaus, Merced, San Joaquin). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
40. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (2/17/05); 4601 (12/17/09); 8021 (8/19/2004); 8031 (8/19/2004); 8041 (8/19/2004); 8051 (8/19/2004); 8061 (8/19/2004); and 8071 (9/16/2004). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
41. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
42. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
43. On November 30, 2011, the initial Title V permit was issued. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin December 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: N-4940-1-4

EXPIRATION DATE: 03/31/2021

EQUIPMENT DESCRIPTION:

47.5 MW NOMINALLY RATED SIMPLE-CYCLE PEAK-DEMAND POWER GENERATING SYSTEM CONSISTING OF A 500 MMBTU/HR GENERAL ELECTRIC, MODEL LM6000 SPRINT, NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR WITH A WATER SPRAY PREMIXED COMBUSTION SYSTEM, SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION AND AN OXIDATION CATALYST

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in proper operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
2. A selective catalytic reduction (SCR) system and an oxidation catalyst shall serve the gas turbine engine. Exhaust ducting shall be equipped with a fresh air inlet blower to be used to lower the exhaust temperature prior to the inlet of the SCR system catalyst. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The gas turbine engine and generator lube oil vents shall be equipped with mist eliminators or equivalent technology sufficient to limit the visible emissions from the lube oil vents to not exceed 5% opacity, except for a period not exceeding three minutes in any one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The turbine shall be equipped with a continuous monitoring system to measure and record hours of operation, mass ratio of water-to-fuel injected and fuel consumption. [District Rules 2201 and 4703, 6.2; and 40 CFR 60.334 (a)] Federally Enforceable Through Title V Permit
5. The exhaust stack shall be equipped with a continuous emissions monitor (CEM) for NO_x, CO, and O₂. The CEM shall meet the requirements of 40 CFR parts 60 and 75 and shall be capable of monitoring emissions during startups and shutdowns as well as during normal operating conditions. [District Rules 1080, 2201 and 4703, 6.2.1; and 40 CFR 60.334 (b)(d)] Federally Enforceable Through Title V Permit
6. The permittee shall monitor and record the fuel flow rate, NO_x emission rate, CO emission rate, ammonia injection rate, exhaust temperature both prior to and after the SCR system, exhaust oxygen content and exhaust flow rate. [District Rules 2201 and 4703, 6.2] Federally Enforceable Through Title V Permit
7. 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
8. 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
9. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO_x, CO, and O₂ analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 1080, 6.4 and 40 CFR 60.334 (b)(2)] Federally Enforceable Through Title V Permit
11. Results of continuous emissions monitoring shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080] Federally Enforceable Through Title V Permit
12. In accordance with 40 CFR, Part 60, Appendix F, 5.1, cylinder gas audits (CGA) or relative accuracy audits (RAA) of the continuous emission monitors shall be conducted quarterly, except during quarters in which a relative accuracy test audit (RATA) is performed. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
13. The owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F, 5.1.1, at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080 and 40 CFR 60.334 (b)(1)] Federally Enforceable Through Title V Permit
14. The turbine shall be fired only on natural gas with a sulfur content (as S) not exceeding 1.0 grain per 100 standard cubic feet. [District Rules 2201 and 4801; and 40 CFR 60.333 (b)] Federally Enforceable Through Title V Permit
15. The NO_x (as NO₂) emissions during each start-up event and each shutdown event shall not exceed 20.0 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The CO emissions during each each start-up event and each shutdown event shall not exceed 20.0 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Startup shall be defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operations, and the unit meets the lb/hr and ppmvd emission limits specified within this permit. Shutdown shall be defined as the period of time during which a unit is taken from an operational to a non-operational status as the fuel supply to the unit is completely turned off. Start-up and shutdown period emissions shall be counted toward all applicable emission limits (lb/day and lb/year). [District Rules 2201 and 4703, 3.26, 3.29 and 5.3] Federally Enforceable Through Title V Permit
18. Duration of each start-up or each shutdown event shall not exceed two hours. [District Rule 4703, 5.3.1.1] Federally Enforceable Through Title V Permit
19. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown. [District Rule 4703, 5.3.2] Federally Enforceable Through Title V Permit
20. The NO_x (as NO₂) emissions from this unit, except during start-up and shutdown events, shall not exceed either of the following: 4.53 lb/hr or 2.5 ppmvd @ 15% O₂. The emission concentration limit is based on a three-hour rolling average. [District Rules 2201 and 4703, 5.1] Federally Enforceable Through Title V Permit
21. The CO emissions from this unit, except during start-up and shutdown events, shall not exceed either of the following: 6.62 lb/hr or 6.0 ppmvd @ 15% O₂. The emission concentration limit is based on a three-hour rolling average. [District Rules 2201 and 4703, 5.2] Federally Enforceable Through Title V Permit
22. The VOC emissions from this unit shall not exceed either of the following: 1.26 lb/hr or 2.0 ppmvd @ 15% O₂. The emission concentration limit is based on a three-hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
23. The SO_x emissions shall not exceed 1.4 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
24. The PM₁₀ emissions shall not exceed 3.00 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

25. The ammonia slip emissions shall not exceed either of the following: 6.71 lb/hr or 10.0 ppmvd @ 15% O₂. The emission concentration limit is based on a 24-hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Each three hour rolling average will be compiled from the three most recent one hour periods. Each one hour period shall commence on the hour. 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
27. The daily emissions from this unit shall not exceed any of the following: NO_x (as NO₂) - 155.1 lb/day; VOC - 30.2 lb/day; CO - 158.9 lb/day; PM₁₀ - 72.0 lb/day; or SO_x (as SO₂) - 34.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
28. The annual emissions from this unit shall not exceed any of the following: NO_x (as NO₂) - 44,505 lb/year; VOC - 11,038 lb/year; CO - 57,991 lb/year, PM₁₀ - 26,280 lb/year; or SO_x - 12,483 lb/year. All annual emission limits are based on 12 consecutive month rolling emissions totals. [District Rule 2201] Federally Enforceable Through Title V Permit
29. 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 total shall commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions totals used to determine compliance with annual emission limits shall be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit
30. Compliance with the ammonia emission limits shall be demonstrated utilizing one of the following procedures: 1) Calculate ammonia slip utilizing the following equation: ammonia slip ppmvd @ 15% O₂ = $\left[\left\{ a - \left(b \times \frac{c}{1,000,000} \right) \right\} \times \left(\frac{1,000,000}{b} \right) \times \left[\frac{(20.9 - 15.0)}{(20.9 - e)} \right] \times d \right]$, where a = ammonia injection rate (lb/hr) / (17 lb/lb mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NO_x concentration across the catalyst, d = correction factor, and e = stack O₂ concentration (%vd). The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip; 2.) Utilize another District-approved calculation method using measured surrogate parameters to determine the daily ammonia emissions in ppmvd @ 15% O₂. If this option is chosen, the permittee shall submit a detailed calculation protocol for District approval at least 60 days prior to commencement of operation; 3.) Alternatively, the permittee may utilize a continuous in-stack ammonia monitor to verify compliance with the ammonia emissions limit. If this option is chosen, the permittee shall submit a monitoring plan for District approval at least 60 days prior to commencement of operation. [District Rule 4102]
31. Source testing to measure the NO_x, VOC, CO and ammonia slip emissions (ppmvd @ 15% O₂ and lb/hr) and PM₁₀ emissions (lb/hr) shall be conducted at least once every twelve months. [District Rules 2201 and 4703, 6.3.1] Federally Enforceable Through Title V Permit
32. Source testing to measure the CO emissions during start-up periods shall be conducted at least once every seven years thereafter. [District Rule 2201] Federally Enforceable Through Title V Permit
33. Source testing to measure the NO_x emissions during start-up periods shall be conducted at least once every seven years. [District Rule 2201] Federally Enforceable Through Title V Permit
34. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
35. Source testing shall be witnessed or authorized by District personnel and samples shall be collected by a California Air Resources Board (CARB) certified testing laboratory or a CARB certified source testing firm. [District Rule 1081] Federally Enforceable Through Title V Permit
36. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

37. NO_x emissions (referenced as NO₂) shall be determined using EPA method 7E, EPA method 20 or CARB method 20. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. The request to utilize EPA approved alternative source testing methods must be submitted in writing and written approval received from the District prior to the submission of the source test plan. [District Rules 1081, 2201 and 4703, 5.1 & 6.4.1; and 40 CFR 60.335 (a) & (b)] Federally Enforceable Through Title V Permit
38. CO emissions shall be determined using EPA method 10 or EPA method 10B. [District Rules 1081, 2201 and 4703, 6.4.2] Federally Enforceable Through Title V Permit
39. VOC emissions (referenced as methane) shall be determined using EPA method 18 or EPA method 25. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
40. PM₁₀ emissions shall be determined using EPA methods 201 and 202, EPA methods 201A and 202, CARB method 501 in conjunction with CARB method 5, or EPA method 5 and CARB method 5. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
41. Ammonia emissions shall be determined using BAAQMD method ST-1B. [District Rules 1081] Federally Enforceable Through Title V Permit
42. Oxygen content of the exhaust gas shall be determined by using EPA method 3, EPA method 3A or EPA method 20. [District Rules 1081, 2201 and 4703, 6.4.3] Federally Enforceable Through Title V Permit
43. The owner or operator shall demonstrate maximum total sulfur content of the fuel by maintaining gas quality characteristics in a current, valid purchase contract, a tariff sheet or transportation contract for the fuel. [40 CFR 60.334 (h)(3)] Federally Enforceable Through Title V Permit
44. EPA approved alternative source testing methods will be allowed, upon District approval, provided it does not result in a relaxation of emission limitations. The request to utilize EPA approved alternative source testing methods must be submitted in writing and written approval received from the District prior to the submission of the source test plan. [District Rules 1081, 4001 and 4703, 6.4] Federally Enforceable Through Title V Permit
45. 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 emissions (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
46. The permittee shall maintain a daily stationary gas turbine system operating log that includes the actual local startup and stop time, length and reason for reduced load periods, total hours of operation and the type and quantity of fuel used. [District Rule 4703, 6.2.6] Federally Enforceable Through Title V Permit
47. The operator performing start-up or shutdown of this unit shall keep records of the duration of start-up or shutdown. [District Rule 4703, 6.2.8] Federally Enforceable Through Title V Permit
48. The permittee shall maintain the following records: date and time, duration, and type of any startup, shutdown, or malfunction; performance testing, evaluations, calibrations, checks, adjustments, any period which a continuous monitoring system or device was inoperative, and maintenance of any continuous emission monitoring system or device. [District Rule 2201] Federally Enforceable Through Title V Permit
49. 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 4703, 6.2.4] Federally Enforceable Through Title V Permit
50. The owners and operators of each affected source and each affected unit at the source shall: (i) Operate the unit in compliance with a complete Acid Rain permit application or a superceding Acid Rain permit issued by the permitting authority; and (ii) Have an Acid Rain permit. [40 CFR 72] 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.

51. 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
52. 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
53. 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 73] Federally Enforceable Through Title V Permit
54. 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 77] Federally Enforceable Through Title V Permit
55. An affected unit shall be subject to the sulfur dioxide requirements starting on the later of January 1, 2000, or the deadline for monitoring certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3) that is not a substitution or compensating unit. [40 CFR 72, 40 CFR 75] Federally Enforceable Through Title V Permit
56. 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
57. 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
58. An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or the written exemption under 40 CFR 72.7 and 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization. [40 CFR 72] Federally Enforceable Through Title V Permit
59. An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right. [40 CFR 72] Federally Enforceable Through Title V Permit
60. The owners and operators of each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides. [40 CFR 72] Federally Enforceable Through Title V Permit
61. 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
62. 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 77. [40 CFR 77] Federally Enforceable Through Title V Permit
63. 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 superseded because of the submission of a new certificate of representation changing the designated representative. [40 CFR 72] 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.

64. 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 75] Federally Enforceable Through Title V Permit
65. 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: N-4940-2-4

EXPIRATION DATE: 03/31/2021

EQUIPMENT DESCRIPTION:

47.5 MW NOMINALLY RATED SIMPLE-CYCLE PEAK-DEMAND POWER GENERATING SYSTEM CONSISTING OF A 500 MMBTU/HR GENERAL ELECTRIC, MODEL LM6000 SPRINT, NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR WITH A WATER SPRAY PREMIXED COMBUSTION SYSTEM, SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION AND AN OXIDATION CATALYST

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in proper operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
2. A selective catalytic reduction (SCR) system and an oxidation catalyst shall serve the gas turbine engine. Exhaust ducting shall be equipped with a fresh air inlet blower to be used to lower the exhaust temperature prior to the inlet of the SCR system catalyst. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The gas turbine engine and generator lube oil vents shall be equipped with mist eliminators or equivalent technology sufficient to limit the visible emissions from the lube oil vents to not exceed 5% opacity, except for a period not exceeding three minutes in any one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The turbine shall be equipped with a continuous monitoring system to measure and record hours of operation, mass ratio of water-to-fuel injected and fuel consumption. [District Rules 2201 and 4703, 6.2; and 40 CFR 60.334 (a)] Federally Enforceable Through Title V Permit
5. The exhaust stack shall be equipped with a continuous emissions monitor (CEM) for NO_x, CO, and O₂. The CEM shall meet the requirements of 40 CFR parts 60 and 75 and shall be capable of monitoring emissions during startups and shutdowns as well as during normal operating conditions. [District Rules 1080, 2201 and 4703, 6.2.1; and 40 CFR 60.334 (b)(d)] Federally Enforceable Through Title V Permit
6. The permittee shall monitor and record the fuel flow rate, NO_x emission rate, CO emission rate, ammonia injection rate, exhaust temperature both prior to and after the SCR system, exhaust oxygen content and exhaust flow rate. [District Rules 2201 and 4703, 6.2] Federally Enforceable Through Title V Permit
7. 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
8. 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
9. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO_x, CO, and O₂ analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 1080, 6.4 and 40 CFR 60.334 (b)(2)] Federally Enforceable Through Title V Permit
11. Results of continuous emissions monitoring shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080] Federally Enforceable Through Title V Permit
12. In accordance with 40 CFR, Part 60, Appendix F, 5.1, cylinder gas audits (CGA) or relative accuracy audits (RAA) of the continuous emission monitors shall be conducted quarterly, except during quarters in which a relative accuracy test audit (RATA) is performed. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
13. The owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F, 5.1.1, at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080 and 40 CFR 60.334 (b)(1)] Federally Enforceable Through Title V Permit
14. The turbine shall be fired only on natural gas with a sulfur content (as S) not exceeding 1.0 grain per 100 standard cubic feet. [District Rules 2201 and 4801; and 40 CFR 60.333 (b)] Federally Enforceable Through Title V Permit
15. The NO_x (as NO₂) emissions during each start-up event and each shutdown event shall not exceed 20.0 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The CO emissions during each each start-up event and each shutdown event shall not exceed 20.0 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Startup shall be defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operations, and the unit meets the lb/hr and ppmvd emission limits specified within this permit. Shutdown shall be defined as the period of time during which a unit is taken from an operational to a non-operational status as the fuel supply to the unit is completely turned off. Start-up and shutdown period emissions shall be counted toward all applicable emission limits (lb/day and lb/year). [District Rules 2201 and 4703, 3.26, 3.29 and 5.3] Federally Enforceable Through Title V Permit
18. Duration of each start-up or each shutdown event shall not exceed two hours. [District Rule 4703, 5.3.1.1] Federally Enforceable Through Title V Permit
19. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown. [District Rule 4703, 5.3.2] Federally Enforceable Through Title V Permit
20. The NO_x (as NO₂) emissions from this unit, except during start-up and shutdown events, shall not exceed either of the following: 4.53 lb/hr or 2.5 ppmvd @ 15% O₂. The emission concentration limit is based on a three-hour rolling average. [District Rules 2201 and 4703, 5.1] Federally Enforceable Through Title V Permit
21. The CO emissions from this unit, except during start-up and shutdown events, shall not exceed either of the following: 6.62 lb/hr or 6.0 ppmvd @ 15% O₂. The emission concentration limit is based on a three-hour rolling average. [District Rules 2201 and 4703, 5.2] Federally Enforceable Through Title V Permit
22. The VOC emissions from this unit shall not exceed either of the following: 1.26 lb/hr or 2.0 ppmvd @ 15% O₂. The emission concentration limit is based on a three-hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
23. The SO_x emissions shall not exceed 1.4 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
24. The PM₁₀ emissions shall not exceed 3.00 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

25. The ammonia slip emissions shall not exceed either of the following: 6.71 lb/hr or 10.0 ppmvd @ 15% O₂. The emission concentration limit is based on a 24-hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Each three hour rolling average will be compiled from the three most recent one hour periods. Each one hour period shall commence on the hour. 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
27. The daily emissions from this unit shall not exceed any of the following: NO_x (as NO₂) - 155.1 lb/day; VOC - 30.2 lb/day; CO - 158.9 lb/day; PM₁₀ - 72.0 lb/day; or SO_x (as SO₂) - 34.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
28. The annual emissions from this unit shall not exceed any of the following: NO_x (as NO₂) - 44,505 lb/year; VOC - 11,038 lb/year; CO - 57,991 lb/year, PM₁₀ - 26,280 lb/year; or SO_x - 12,483 lb/year. All annual emission limits are based on 12 consecutive month rolling emissions totals. [District Rule 2201] Federally Enforceable Through Title V Permit
29. 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 total shall commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions totals used to determine compliance with annual emission limits shall be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit
30. Compliance with the ammonia emission limits shall be demonstrated utilizing one of the following procedures: 1) Calculate ammonia slip utilizing the following equation: ammonia slip ppmvd @ 15% O₂ = $\left[\left\{ a - \left(b \times \frac{c}{1,000,000} \right) \right\} \times \left(\frac{1,000,000}{b} \right) \times \left[\frac{20.9 - 15.0}{20.9 - e} \right] \times d \right]$, where a = ammonia injection rate (lb/hr) / (17 lb/lb mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NO_x concentration across the catalyst, d = correction factor, and e = stack O₂ concentration (%vd). The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip; 2.) Utilize another District-approved calculation method using measured surrogate parameters to determine the daily ammonia emissions in ppmvd @ 15% O₂. If this option is chosen, the permittee shall submit a detailed calculation protocol for District approval at least 60 days prior to commencement of operation; 3.) Alternatively, the permittee may utilize a continuous in-stack ammonia monitor to verify compliance with the ammonia emissions limit. If this option is chosen, the permittee shall submit a monitoring plan for District approval at least 60 days prior to commencement of operation. [District Rule 4102]
31. Source testing to measure the NO_x, VOC, CO and ammonia slip emissions (ppmvd @ 15% O₂ and lb/hr) and PM₁₀ emissions (lb/hr) shall be conducted at least once every twelve months. [District Rules 2201 and 4703, 6.3.1] Federally Enforceable Through Title V Permit
32. Source testing to measure the CO emissions during start-up periods shall be conducted at least once every seven years thereafter. [District Rule 2201] Federally Enforceable Through Title V Permit
33. Source testing to measure the NO_x emissions during start-up periods shall be conducted at least once every seven years. [District Rule 2201] Federally Enforceable Through Title V Permit
34. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
35. Source testing shall be witnessed or authorized by District personnel and samples shall be collected by a California Air Resources Board (CARB) certified testing laboratory or a CARB certified source testing firm. [District Rule 1081] Federally Enforceable Through Title V Permit
36. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

37. NO_x emissions (referenced as NO₂) shall be determined using EPA method 7E, EPA method 20 or CARB method 20. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. The request to utilize EPA approved alternative source testing methods must be submitted in writing and written approval received from the District prior to the submission of the source test plan. [District Rules 1081, 2201 and 4703, 5.1 & 6.4.1; and 40 CFR 60.335 (a) & (b)] Federally Enforceable Through Title V Permit
38. CO emissions shall be determined using EPA method 10 or EPA method 10B. [District Rules 1081, 2201 and 4703, 6.4.2] Federally Enforceable Through Title V Permit
39. VOC emissions (referenced as methane) shall be determined using EPA method 18 or EPA method 25. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
40. PM₁₀ emissions shall be determined using EPA methods 201 and 202, EPA methods 201A and 202, CARB method 501 in conjunction with CARB method 5, or EPA method 5 and CARB method 5. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
41. Ammonia emissions shall be determined using BAAQMD method ST-1B. [District Rules 1081] Federally Enforceable Through Title V Permit
42. Oxygen content of the exhaust gas shall be determined by using EPA method 3, EPA method 3A or EPA method 20. [District Rules 1081, 2201 and 4703, 6.4.3] Federally Enforceable Through Title V Permit
43. The owner or operator shall demonstrate maximum total sulfur content of the fuel by maintaining gas quality characteristics in a current, valid purchase contract, a tariff sheet or transportation contract for the fuel. [40 CFR 60.334 (h)(3)] Federally Enforceable Through Title V Permit
44. EPA approved alternative source testing methods will be allowed, upon District approval, provided it does not result in a relaxation of emission limitations. The request to utilize EPA approved alternative source testing methods must be submitted in writing and written approval received from the District prior to the submission of the source test plan. [District Rules 1081, 4001 and 4703, 6.4] Federally Enforceable Through Title V Permit
45. 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 emissions (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
46. The permittee shall maintain a daily stationary gas turbine system operating log that includes the actual local startup and stop time, length and reason for reduced load periods, total hours of operation and the type and quantity of fuel used. [District Rule 4703, 6.2.6] Federally Enforceable Through Title V Permit
47. The operator performing start-up or shutdown of this unit shall keep records of the duration of start-up or shutdown. [District Rule 4703, 6.2.8] Federally Enforceable Through Title V Permit
48. The permittee shall maintain the following records: date and time, duration, and type of any startup, shutdown, or malfunction; performance testing, evaluations, calibrations, checks, adjustments, any period which a continuous monitoring system or device was inoperative, and maintenance of any continuous emission monitoring system or device. [District Rule 2201] Federally Enforceable Through Title V Permit
49. 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 4703, 6.2.4] Federally Enforceable Through Title V Permit
50. The owners and operators of each affected source and each affected unit at the source shall: (i) Operate the unit in compliance with a complete Acid Rain permit application or a superceding Acid Rain permit issued by the permitting authority; and (ii) Have an Acid Rain permit. [40 CFR 72] 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.

51. 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
52. 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
53. 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 73] Federally Enforceable Through Title V Permit
54. 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 77] Federally Enforceable Through Title V Permit
55. An affected unit shall be subject to the sulfur dioxide requirements starting on the later of January 1, 2000, or the deadline for monitoring certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3) that is not a substitution or compensating unit. [40 CFR 72, 40 CFR 75] Federally Enforceable Through Title V Permit
56. 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
57. 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
58. An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or the written exemption under 40 CFR 72.7 and 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization. [40 CFR 72] Federally Enforceable Through Title V Permit
59. An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right. [40 CFR 72] Federally Enforceable Through Title V Permit
60. The owners and operators of each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides. [40 CFR 72] Federally Enforceable Through Title V Permit
61. 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
62. 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 77. [40 CFR 77] Federally Enforceable Through Title V Permit
63. 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 superseded because of the submission of a new certificate of representation changing the designated representative. [40 CFR 72] 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.

64. 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 75] Federally Enforceable Through Title V Permit
65. 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: N-4940-4-1

EXPIRATION DATE: 03/31/2021

EQUIPMENT DESCRIPTION:

198 BHP GENERAC POWER SYSTEMS MODEL SD100 TIER 3 CERTIFIED DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

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 Rules 4701 and 4702, 17 CCR 93115, and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
3. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
4. Emissions from this IC engine shall not exceed any of the following limits: 2.66 g-NOx/bhp-hr, 0.7 g-CO/bhp-hr, or 0.14 g-VOC/bhp-hr. [District Rule 2201, 17 CCR 93115, 40 CFR Part 60 Subpart IIII and 40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
5. Emissions from this IC engine shall not exceed 0.12 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102, 17 CCR 93115, 40 CFR Part 60 Subpart IIII and 40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
6. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702 and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
7. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
8. 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
9. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rules 4701, 4702, 17 CCR 93115 and 40 CFR Part 60 Subpart III] Federally Enforceable Through Title V Permit
11. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 4701 and 4702 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

SJVUAPCD
NORTHERN

Detailed Facility Report
For Facility=4940 and excluding Deleted Permits
Sorted by Facility Name and Permit Number

5/14/21
1:08 pm

MODESTO IRRIGATION DISTRICT 1015 S STOCKTON AVE RIPON, CA 95366	FAC # STATUS: TELEPHONE:	N 4940 A	TYPE: T10#V TOXIC ID: 70168	EXPIRE ON: AREA: INSP. DATE:	03/31/2021 5 / 02/22
---	--------------------------------	-------------	--------------------------------	------------------------------------	----------------------------

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
N-4940-1-4	47,500 kW	3020-08B G	1	12,254.00	12,254.00	A	47.5 MW NOMINALLY RATED SIMPLE-CYCLE PEAK-DEMAND POWER GENERATING SYSTEM CONSISTING OF A 500 MMBTU/HR GENERAL ELECTRIC, MODEL LM6000 SPRINT, NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR WITH A WATER SPRAY PREMIXED COMBUSTION SYSTEM, SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION AND AN OXIDATION CATALYST
N-4940-2-4	47,500 kW	3020-08B G	1	12,254.00	12,254.00	A	47.5 MW NOMINALLY RATED SIMPLE-CYCLE PEAK-DEMAND POWER GENERATING SYSTEM CONSISTING OF A 500 MMBTU/HR GENERAL ELECTRIC, MODEL LM6000 SPRINT, NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR WITH A WATER SPRAY PREMIXED COMBUSTION SYSTEM, SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION AND AN OXIDATION CATALYST
N-4940-4-1	198 bhp	3020-10 B	1	143.00	143.00	A	198 BHP GENERAC POWER SYSTEMS MODEL SD100 TIER 3 CERTIFIED DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

Number of Facilities Reported: 1

ATTACHMENT D

HAP Major Source Calculations

Name		Natural Gas-Fired Turbines						
Applicability		Use this spreadsheet for Natural Gas-Fired Stationary Gas Turbines. Entries required in yellow areas, output in gray areas.						
Author or updater		Matthew Cegielski		Last Update	April 5, 2016			
Facility:		Modesto Irrigation District						
ID#:		N-4940						
Project #:		N-1201887						
Inputs		MMscf /hr	MMscf /yr	Formula				
Natural Gas usage rate		1.00E+00	8,760.000	Supply the necessary rate in MMscf. Use the dropdown to enter a Y if a SCONOX catalyst is used. Emissions are calculated by the multiplication of Fuel Rates and Emission Factors.				
SCONOX Catalyst? Y or N		N						
Substances		CAS#	Emission Factor MMscf lbs/MMscf	LB/HR	LB/YR			
1, 3 Butadiene		106590	4.30E-04	4.30E-04	3.77E+00			
Acetaldehyde		75070	4.00E-02	4.00E-02	3.50E+02			
Acrolein		107028	6.40E-03	6.40E-03	5.61E+01			
Benzene		71432	1.20E-02	1.20E-02	1.05E+02			
Ethyl Benzene		100414	3.20E-02	3.20E-02	2.80E+02			
Formaldehyde		50000	7.10E-01	7.10E-01	6.22E+03			
Naphthalene		91203	1.30E-03	1.30E-03	1.14E+01			
PAH's		1150	2.20E-03	2.20E-03	1.93E+01			
Propylene Oxide		75569	2.90E-02	2.90E-02	2.54E+02			
Toluene		108883	1.30E-01	1.30E-01	1.14E+03			
Xylenes		1330207	6.40E-02	6.40E-02	5.61E+02			
References:								
* The emission factors are derived from table 3.1-3, "Emission Factors for Hazardous Air Pollutants from Natural Gas-Fired Stationary Gas Turbines" in April 2000 AP 42 Chapter 3 Stationary Internal Combustion Sources, Section 3 Stationary Gas Turbines. Assumes 1,000 Btu's per scf natural gas.								
Emission factors in boxes change when a SCONOX catalyst is used. SCONOX™ is a NOx reduction system produced by Goal Line Environmental Technologies (now distributed by EmeraChem)								

Name		Diesel and Biodiesel-Fired Internal Combustion Engines					Diesel Particulate Matter Calculator				
Applicability		Use this spreadsheet for Diesel and Biodiesel-Fired Internal Combustion Engines. (Due to the District's Diesel Screening Methodology, this spreadsheet is not in current use for Diesel, only for Biodiesel; however the Diesel values serve the basis for the Biodiesel blends) Entries required in yellow areas, output in gray areas.					CAS#	PM ₁₀ g/bhp-hr	Bhp	hrs/yr	
Author or updater	Matthew Cegielski	Last Update	February 22, 2016				0.12	198	50		
Facility:	Modesto Irrigation District						lbs/hr	lbs/yr			
ID#:	N-4940					8801	0.05238095	2.61904762			
Project #:	N-1201887										
Inputs		1,000 gallons /hr	1,000 gallons /yr	Formula							
Diesel Fuel usage		2.91E-02	1.5	Supply the necessary rate in 1,000 gallons. Emissions are calculated by the multiplication of Fuel Rates and Emission Factors.							
Substances	CAS#	Diesel Emission Factor lbs/ 1,000 gallons	LB/HR	LB/YR	B20 Biodiesel Blend Emission Factor lbs/ 1,000 gallons	LB/HR	LB/YR	B100 Biodiesel Blend Emission Factor lbs/ 1,000 gallons	LB/HR	LB/YR	
1,3 Butadiene	108890	2.17E-01	6.33E-03	3.17E-01	2.17E-01	6.33E-03	3.17E-01	2.17E-01	6.33E-03	3.17E-01	
Acetaldehyde	76070	7.83E-01	2.28E-02	1.14E+00	7.28E-01	2.12E-02	1.06E+00	6.71E-01	1.95E-02	9.79E-01	
Acroton	107028	3.39E-02	9.86E-04	4.95E-02	3.34E-02	9.72E-04	4.88E-02	3.10E-02	9.03E-04	4.53E-02	
Arsenic	7440382	1.60E-03	4.66E-05	2.34E-03	1.60E-03	4.66E-05	2.34E-03	1.60E-03	4.66E-05	2.34E-03	
Benzene	71432	1.86E-01	5.42E-03	2.72E-01	1.86E-01	5.42E-03	2.72E-01	1.86E-01	5.42E-03	2.72E-01	
Cadmium	7440438	1.50E-03	4.37E-05	2.19E-03	1.50E-03	4.37E-05	2.19E-03	1.50E-03	4.37E-05	2.19E-03	
Chlorobenzene	108807	2.00E-04	5.82E-06	2.92E-04	2.00E-04	5.82E-06	2.92E-04	2.00E-04	5.82E-06	2.92E-04	
Chromium	7440473	6.00E-04	1.75E-05	8.76E-04	6.00E-04	1.75E-05	8.76E-04	6.00E-04	1.75E-05	8.76E-04	
Copper	7440608	4.10E-03	1.19E-04	5.99E-03	4.10E-03	1.19E-04	5.99E-03	4.10E-03	1.19E-04	5.99E-03	
Ethyl Benzene	100414	1.09E-02	3.17E-04	1.59E-02	6.01E-03	1.75E-04	8.77E-03	4.25E-03	1.24E-04	6.21E-03	
Formaldehyde	60000	1.73E+00	5.02E-02	2.52E+00	1.59E+00	4.63E-02	2.32E+00	1.47E+00	4.26E-02	2.14E+00	
Hexane	110643	2.69E-02	7.83E-04	3.93E-02	2.69E-02	7.83E-04	3.93E-02	2.69E-02	7.83E-04	3.93E-02	
Hexavalent Chromium	18540288	1.00E-04	2.91E-06	1.46E-04	1.00E-04	2.91E-06	1.46E-04	1.00E-04	2.91E-06	1.46E-04	
Hydrogen Chloride	7947010	1.86E-01	5.42E-03	2.72E-01	1.86E-01	5.42E-03	2.72E-01	1.86E-01	5.42E-03	2.72E-01	
Lead	7439921	8.30E-03	2.42E-04	1.21E-02	8.30E-03	2.42E-04	1.21E-02	8.30E-03	2.42E-04	1.21E-02	
Manganese	7439866	3.10E-03	9.02E-05	4.53E-03	3.10E-03	9.02E-05	4.53E-03	3.10E-03	9.02E-05	4.53E-03	
Mercury	7439978	2.00E-03	5.82E-05	2.92E-03	2.00E-03	5.82E-05	2.92E-03	2.00E-03	5.82E-05	2.92E-03	
Naphthalene	81203	1.97E-02	5.73E-04	2.88E-02	1.70E-02	4.94E-04	2.48E-02	1.44E-02	4.20E-04	2.11E-02	
Nickel	7440020	3.90E-03	1.13E-04	5.69E-03	3.90E-03	1.13E-04	5.69E-03	3.90E-03	1.13E-04	5.69E-03	
PAHs	1160	5.59E-02	1.63E-03	8.16E-02	5.59E-02	1.63E-03	8.16E-02	5.59E-02	1.63E-03	8.16E-02	
Propylene	116071	4.67E-01	1.36E-02	6.82E-01	4.67E-01	1.36E-02	6.82E-01	4.67E-01	1.36E-02	6.82E-01	
Selenium	7782482	2.20E-03	6.40E-05	3.21E-03	2.20E-03	6.40E-05	3.21E-03	2.20E-03	6.40E-05	3.21E-03	
Toluene	108883	1.05E-01	3.07E-03	1.54E-01	1.05E-01	3.07E-03	1.54E-01	1.05E-01	3.07E-03	1.54E-01	
Xylenes	1330207	4.24E-02	1.23E-03	6.19E-02	3.72E-02	1.08E-03	5.43E-02	2.57E-02	7.46E-04	3.79E-02	
Zinc	7440688	2.24E-02	6.52E-04	3.27E-02	2.24E-02	6.52E-04	3.27E-02	2.24E-02	6.52E-04	3.27E-02	
References:											
* The emission factors were based on the May 2001 update of VCAPCD AB 2588 Combustion Emission Factors and the Biodiesel reductions listed in Table VI.B-6 (pg. 93) in the EPA 2002 Draft Technical Report, A Comprehensive Analysis of Biodiesel Impacts on Exhaust Emissions											
Pollutants required for toxic reporting. Current as of update date.											