



APR 25 2016

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

**Re: Notice of Preliminary Decision – Title V Permit Renewal
District Facility # N-3233
Project # N-1152278**


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 920 Woodland Avenue, Modesto, California.

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

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Errol Villegas, Permit Services Manager, at (559) 230-5900.

Sincerely,



Arnaud Marjolle
Director of Permit Services

Enclosures

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

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**SAN JOAQUIN VALLEY
AIR POLLUTION CONTROL DISTRICT**

**Final Title V Permit Renewal Evaluation
Modesto Irrigation District
N-3233**

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TITLE V PERMIT RENEWAL EVALUATION
Power Generating Facility

Engineer: Brian Clerico
Date: April 20, 2016

Facility Number: N-3233
Facility Name: Modesto Irrigation District
Mailing Address: PO Box 4060
Modesto, CA 95352-4060

Contact Name: Michael Miller
Phone: (209) 526-7617

Responsible Official: Richard Smith
Title: Generation Manager

Project # : N-1152278
Deemed Complete: June 17, 2015

I. PROPOSAL

Modesto Irrigation District (MID) was issued a renewed Title V permit on August 25, 2011. As required by District Rule 2520, the applicant is requesting a permit renewal. The existing Title V permit will be reviewed and modified to reflect all applicable District and federal rules updated, removed, or added since the issuance of the initial Title V permit.

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

II. FACILITY LOCATION

Modesto Irrigation District is located at 920 Woodland Avenue in Modesto, 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 has not requested any changes to the facility-wide permit, N-3233-0-4, which is based on template No. SJV-UM-0-3, Facility Wide Umbrella.

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.

Conditions #1 - 7 and 12 - 44 of the facility wide requirements of N-3233-0-4, including their underlying applicable requirements, originate from the SJV-UM-0-3 umbrella template and are not subject to further EPA or public review.

VI. FEDERALLY ENFORCEABLE REQUIREMENTS

A. Rules Updated

- District Rule 2020, Exemptions
(amended December 20, 2007 ⇒ amended December 18, 2014)
- District Rule 2201, New and Modified Stationary Source Review Rule
(amended May 21, 2011 ⇒ amended February 18, 2016)
- District Rule 4702, Internal Combustion Engines – Phase 2
(amended November 14, 2013)
- 40 CFR Part 60, Subpart A, Section 13, Monitoring Requirements
- 40 CFR Part 60, Subpart GG, New Source Performance Standards: Standard of Performance for Stationary Gas Turbines (amended February 27, 2014)
- 40 CFR Part 60, Subpart IIII, Standards of Performance for Stationary Compression Ignited Internal Combustion Engines (amended February 27, 2014)

- 40 CFR Part 60, Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (amended February 27, 2014)
- 40 CFR Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (amended February 27, 2014)
- 40 CFR Part 64, Compliance Assurance Monitoring (CAM)
- 40 CFR Part 75, Continuous Emission Monitoring (amended March 28, 2011)
- 40 CFR Part 82, Subpart B, Stratospheric Ozone (amended June 25, 2013)
- 40 CFR Part 82, Subpart F, Stratospheric Ozone (amended June 25, 2013)

B. Rules Removed

None.

C. Rules Added

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

D. Rules Not Updated

- District Rule 1070, Inspections (amended December 17, 1992)
- District Rule 1080, Stack Monitoring (amended December 17, 1992)
- District Rule 1081, Source Sampling (amended December 16, 1993)
- District Rule 1100, Equipment Breakdown (amended December 17, 1992)
- District Rule 1160, Emission Statements (adopted November 18, 1992)
- District Rule 2010, Permits Required (amended December 17, 1992)
- District Rule 2031, Transfer of Permits (amended December 17, 1992)
- District Rule 2040, Applications (amended December 17, 1992)

- District Rule 2070, Standards for Granting Applications (amended December 17, 1992)
- District Rule 2080, Conditional Approval (amended December 17, 1992)
- District Rule 2520, Federally Mandated Operating Permits (amended June 21, 2001)
- District Rule 4101, Visible Emissions (amended February 17, 2005)
- District Rule 4102, Nuisance (amended December 17, 1992)
- District Rule 4201, Particulate Matter Concentration (amended December 17, 1992)
- District Rule 4202, Particulate Matter - Emission Rate (amended December 17, 1992)
- District Rule 4301, Fuel Burning Equipment (amended December 17, 1992)
- District Rule 4601, Architectural Coatings (amended December 17, 2009)
- District Rule 4701, Internal Combustion Engines – Phase I (amended August 21, 2003)
- District Rule 4703, Stationary Gas Turbines (amended September 20, 2007)
- District Rule 4801, Sulfur Compounds (amended December 17, 1992)
- District Rule 8011 - General Requirements (amended August 19, 2004)
- District Rule 8021 - Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities (amended August 19, 2004)
- District Rule 8031 - Bulk Materials (amended August 19, 2004)
- District Rule 8041 - Carryout and Trackout (amended August 19, 2004)
- District Rule 8051 - Open Areas (amended August 19, 2004)
- District Rule 8061 - Paved and Unpaved Roads (amended August 19, 2004)

- District Rule 8071 - Unpaved Vehicle/Equipment Traffic Area (amended September 16, 2004)
- 40 CFR Part 60, Subpart KKKK, Standards of Performance for Stationary Combustion Turbines (amended March 20, 2009)
- 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos (amended September 18, 2003)
- 40 CFR Part 63 Subpart YYYY, National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines (amended April 20, 2006)
- 40 CFR Part 68, Chemical Accident Prevention Provisions (amended April 9, 2004)
- 40 CFR Part 72, Acid Rain Program
- 40 CFR Part 73, Sulfur Dioxide Allowance System (amended May 12, 2005)
- 40 CFR Part 77, Excess Emissions (amended April 28, 2006)

VII. REQUIREMENTS NOT FEDERALLY ENFORCEABLE

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

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

A. Rules Added

There are no new rules that are not federally enforceable that were added.

B. Rules Not Updated

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

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

VIII. FEDERALLY ENFORCEABLE PERMIT REQUIREMENTS

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

A. District Rule 1080 – Stack Monitoring

District Rule 1080 covers installation, use, maintenance, and inspection of continuous monitoring equipment.

This rule has not been amended; however, Rule 1080 based conditions #25 and 32 on permits N-3233-6-3 through '11-3 were revised by removing the word "install" from the condition. The CEMS have been installed on all the engines; therefore, this word refers to a requirement that has already been completed.

B. District Rule 2020 – Exemptions

District Rule 2020 lists categories of equipment which are exempt from obtaining permits and specifies recordkeeping requirements to verify such exemptions.

The amendments to this rule involved (1) revisions to the HAP source definition, (2) incorporating additional EPA approved fuel sulfur test methods; (3) adding a small producer exemption for heavy oil storage tanks; (4) and clarifying the existing portable equipment exemption from permits.

The revisions do not affect the permitted units at MID and will therefore not be addressed in this evaluation.

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

District Rule 2201 has been amended since this facility's renewed Title V permit was issued. A Title V permit renewal does not constitute a modification per section 3.26, defined as an action including at least one of the following items:

- 1) Any change in hours of operation, production rate, or method of operation of an existing emissions unit, which would necessitate a change in permit conditions.
- 2) Any structural change or addition to an existing emissions unit which would necessitate a change in permit conditions. Routine replacement shall not be considered to be a structural change.

- 3) An increase in emissions from an emissions unit caused by a modification of the Stationary Source when the emissions unit is not subject to a daily emissions limitation.
- 4) Addition of any new emissions unit which is subject to District permitting requirements.
- 5) A change in a permit term or condition proposed by an applicant to obtain an exemption from an applicable requirement to which the source would otherwise be subject.

Therefore, the updated requirements of this rule are not applicable at this time.

However, the following administrative revisions to Rule 2201 conditions have been made either at the request of MID or to ensure the permits conform to District policy.

N-3233-1-8: 460 MMBtu/hr gas-fired turbine with SCR and oxidation catalyst.

MID has requested the following revision to condition #17 on N-3233-1-8:

- The NO_x emission concentration, ~~measured as NO₂~~, shall not exceed 3.5 ppmv, dry, corrected to 15% O₂, when operating on natural gas; and 6.2 ppmv, dry, corrected to 15% O₂, when operating on fuel oil, except for start-up or shut-down periods. [District Rules 2201 and 4703]

EPA Method 7E and the CEMS measure NO and NO₂, the sum of which, in volume units, is the measured NO_x value. The calibration gas for the NO_x measurements includes both NO and NO₂. Also, the “measured as NO₂” cannot mean that the measured NO_x values should be converted into units of NO₂ because the emission limit on condition #19 is stated in units of ppmv (a volume unit), not ppmw (a mass unit).

Following EPA guidance, District FYI 276, Potential to Emit & Annual Limiting Conditions, specifies the use of a rolling 12-month basis for annual emission limits instead of a calendar year basis for Title V permits or for non-Major Sources whose annual emission limit is established for the purpose of remaining below a Major Source threshold.

Thus, conditions #16 and 17 on current PTO N-3233-1-6 will be modified as indicated, and because these conditions apply to the facility as a whole, they will be moved to the facility-wide permit N-3233-0-4, as conditions #8 and 9:

- The facility-wide CO emissions shall not exceed 199,999 pounds during ~~any one calendar year~~ rolling 12-month period. [District Rule 2201]

- The facility-wide SOx emissions shall not exceed 54,750 pounds ~~per year~~ during any rolling 12-month period. [District Rule 2201]

The words “installed” and “install” will be removed from conditions #30 and 31 on draft PTO N-3233-1-8 concerning the operation of the Continuous Monitoring System (fuel) and Continuous Emissions Monitoring System since the monitoring equipment has been installed.

MID has requested the removal of the word “cold” in condition #39 on N-3233-1-8 since “cold” is not defined in the applicable rules and regulations:

- The ~~cold~~ start-up period must not exceed two (2) hours in any one day, commencing at midnight. The shut-down period must not exceed two (2) hours in any one day, commencing at midnight. [District Rule 2201]

N-3233-4-6: 460 MMBtu/hr gas-fired turbine and 234 MMBtu/hr gas-fired duct burner with SCR and oxidation catalyst.

The word “install” will be removed from condition #5 concerning the operation of the Continuous Emissions Monitoring System since the monitoring equipment has been installed.

Following EPA guidance, District FYI 276, Potential to Emit & Annual Limiting Conditions, specifies the use of a rolling 12-month basis for annual emission limits instead of a calendar year basis for Title V permits.

Thus, conditions #11 and 12 on current PTO N-3233-4-5 will be modified as indicated, and because these conditions apply to the facility as a whole, they will be moved to the facility-wide permit N-3233-0-4, as conditions #8 and 9:

- The facility-wide CO emissions shall not exceed 199,999 pounds during ~~any one calendar year~~ rolling 12-month period. [District ~~NSR~~ Rule 2201]
- The facility-wide SOx emissions shall not exceed 54,750 pounds during ~~any one calendar year~~ rolling 12-month period. [District ~~NSR~~ Rule 2201]

Condition #11 on N-3233-4-6 will be modified as follows:

- The NOx emissions from this unit shall not exceed 58,340 pounds during ~~any one calendar year~~ rolling 12-month period. [District Rule 2201]

The following facility-wide recordkeeping conditions (conditions #33 and 34 on N-3233-4-5) were moved to the facility-wide permit N-3233-0-4 as conditions #10 and 11 and modified in accordance with rolling 12-month requirement noted above:

- The permittee shall retain records of the ~~cumulative annual~~ facility-wide CO and SOx emissions on a rolling 12-month basis. The record shall be updated ~~daily~~ monthly. [District Rule 2201]
- The ~~annual facility~~ facility-wide SOx emissions for natural gas shall be calculated utilizing the ~~annual~~ monthly quantity of natural gas burned and the permitted natural gas sulfur content limit. The ~~annual facility~~ facility-wide SOx emissions for liquid fuels shall be calculated utilizing the ~~annual~~ monthly quantity of liquid fuels burned and either the permitted fuel sulfur content limit or the actual measured sulfur content of the liquid fuels burned. [District Rule 2201]

The following recordkeeping conditions (#31 and 33 on N-3233-4-6) specific to the turbine(s) were also modified to incorporate the rolling 12-month requirement:

- The ~~annual~~ rolling 12-month CO emissions from the turbines shall be determined utilizing CEMS data. [District Rule 2201]
- The permittee shall maintain records of the ~~cumulative annual~~ rolling 12-month NOx emissions from this unit. The record shall be updated ~~daily~~ monthly. [District Rule 2201]

N-3233-6-3, '-7-3, '-8-3, '-9-3, '-10-3, and '-11-3:¹ Six 11,667 bhp natural gas-fired IC engines with SCR and oxidation catalyst.

Following EPA guidance, District FYI 276, Potential to Emit & Annual Limiting Conditions, specifies the use of a rolling 12-month basis for annual emission limits instead of a calendar year basis for Title V permits.

Conditions #14 and 17 express emission limits on a calendar year basis; therefore, these requirements will be revised to a rolling 12-month basis.

- The combined CO emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 74,864 pounds during any one calendar year rolling 12-month period. [District Rule 2201]
- The combined SOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 9,600 pounds during any one calendar year rolling 12-month period. The SOx emissions shall be determined by applying the hourly emission limit of

¹ For conditions that will be moved to the facility-wide permit, the condition # referenced will be from the current Title V PTOs N-3233-6-2, '-7-2, '-8-2, '-9-2, '-10-2, and '-11-2. However, for conditions that will remain on the same permit, the condition # on the renewed draft Title V permit will be referenced.

these permits to the combined number of operating hours of these engines. [District Rule 2201]

Conditions #35, 37, 38, and 40 are calendar year recordkeeping requirements relating to emissions that will be revised to a rolling 12-month basis:

- A record of the combined quarterly and annual NOx, VOC and PM10 emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar quarter and a ~~calendar year~~ rolling 12-month basis and shall be updated ~~daily~~ monthly. [District Rule 2201]
- A record of the combined annual CO and SOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a ~~calendar year~~ rolling 12-month basis and shall be updated ~~daily~~ monthly. [District Rule 2201]
- A record of the combined number of hours of operation of permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a ~~calendar year~~ rolling 12-month basis and shall be updated ~~daily~~ monthly. [District Rule 2201]
- A record of the combined number of hours of start-up and shutdown time for units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a ~~calendar year~~ rolling 12-month basis and shall be updated ~~daily~~ monthly. [District Rule 2201]

Facility-wide conditions #19 and 20 (on N-3233-6-2, '-7-2, '-8-2, '-9-2, '-10-2, and '-11-2) were moved to the facility-wide permit N-3233-0-4 as conditions #8 and 9:

- The facility-wide SOx emissions shall not exceed 54,750 pounds during any ~~one calendar year~~ rolling 12-month period. [District Rule 2201]
- The facility-wide CO emissions shall not exceed 199,999 pounds during any ~~one calendar year~~ rolling 12-month period. [District Rule 2201]

Condition #37 (on N-3233-6-2, '-7-2, '-8-2, '-9-2, '-10-2, and '-11-2) was moved to the facility-wide permit as condition #10 and revised per FYI 276:

- ~~Records of the facility wide CO and SOx emissions shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [District Rule 2201]~~
- The permittee shall retain records of the facility-wide CO and SOx emissions on a rolling 12-month basis. The record shall be updated monthly. [District Rule 2201]

MID requested the District add CARB Method 5 and EPA Method 5 in conjunction with EPA Method 202 for the measurement of total (filterable and condensable) PM10 on condition #24 of N-3233-6-3, '-7-3, '-8-3, '-9-3, '-10-3. And '-11-3:

- The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 18, 25A or 25B, or ARB Method 100, SOx - CARB Method 100, PM10 - EPA Methods 201A and 202, CARB Method 5, or EPA Methods 5 and 202, and ammonia - BAAQMD Method ST-1B. Alternative source test methods are allowed provided prior written District authorization is received. [District Rules 1081, 2201 and 4702]

The District has approved the use of the CARB Method 5 and EPA Method 5 in conjunction with EPA Method 202 previously for MID because the standard apparatus for Method 201A in-stack filtration is not suitable for "hot" stacks (> 500 °F).

Finally, the District has replaced "District NSR Rule" with "District Rule 2201" throughout the permits for consistency with current rule referencing practice.

D. District Rule 2410 – Prevention of Significant Deterioration

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

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

E. District Rule 2520 – Federally Mandated Operating Permits

No changes to this Rule have occurred since issuance of the TV permit; however, greenhouse gas emissions will be addressed under Rule 2520 during this renewal.

Greenhouse Gas Discussion

There are no federally applicable Greenhouse Gas (GHG) requirements for this source. It should be noted that the Mandatory Greenhouse Gas Reporting rule (40 CFR Part 98) is not included in the definition of an applicable requirement within Title V (per 40 CFR 71.2). Therefore, there will be no further discussion of GHG in this evaluation.

F. District Rule 4702 – Internal Combustion Engines

This rule limits the emissions of NO_x, CO, VOC, and SO_x from internal combustion engines. The requirements of this rule apply to engines rated at 25 bhp or greater.

None of the amendments to Rule 4702 since the last Title V renewal affect the engines at this facility; therefore, this rule will not be discussed further.

G. 40 CFR Part 60, Subpart A, Section 13 – Monitoring Requirements

MID proposed the following revision to condition #29 of N-3233-6-3 through '11-3:

- In accordance with 40 CFR Part 60, Appendix F, each CEMS shall be audited at least once each calendar quarter. ~~A quarterly CEMS audit is not required for the quarters in which both a relative accuracy test audit (RATA) and source testing were performed. The District shall be notified prior to completion of the audits.~~ The audit shall be either a Relative Accuracy Test Audit (RATA) or a Cylinder Gas Audit (CGA). A RATA must be conducted at least once every four calendar quarters. A CGA may be conducted in three of four calendar quarters, but in no more than three quarters in succession. The audit reports and the quarterly compliance reports shall be submitted to the District. [District Rule 1080 and 40 CFR 60.8 and 40 CFR 60.13]

The language in the revised condition is more consistent with the language used in 40 CFR Part 60 Appendix F, highlighted below. Moreover, there is no requirement in District Rule 1080, 40 CFR 60.8 or 40 CFR 60.13 for the facility to notify the District prior to the completion of a CGA audit. For RATA audits, the District has in practice interpreted source test pre-notification

conditions as applying to RATA audits as well. Hence, the existing source test notification requirement in condition #20 covers the required notification for the RATA audit.

Appendix F to Part 60 – Quality Assurance Procedures

5. Data Accuracy Assessment

*5.1 Auditing Requirements. **Each CEMS must be audited at least once each calendar quarter.** Successive quarterly audits shall occur no closer than 2 months. The audits shall be conducted as follows:*

*5.1.1 Relative Accuracy Test Audit (RATA). **The RATA must be conducted at least once every four calendar quarters.** Conduct the RATA as described for the RA test procedure in the applicable PS in appendix B (e.g., PS 2 for SO₂ and NO_x). In addition, analyze the appropriate performance audit samples received from EPA as described in the applicable sampling methods (e.g., Methods 6 and 7).*

*5.1.2 Cylinder Gas Audit (CGA). If applicable, **a CGA may be conducted in three of four calendar quarters, but in no more than three quarters in succession.***

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

The provisions of this subpart are applicable to all stationary gas turbines with a heat input at peak load equal to or greater than 10 million Btu per hour that have commenced construction, modification, or reconstruction after October 3, 1977.

This subpart applies to both turbines operated by MID.

N-3233-1-8: General Electric LM5000 PD Aero-Derivative 460 MMBtu/hr Gas Turbine Engine

Compliance with this subpart has been shown in the ATC application review for project N-1010750 and with subsequent Title V Renewals (project N-1041129 and N-1091426). Conditions #2, 3, 7, 26, 27, and 31 on the renewal permit will continue to ensure compliance with this subpart.

MID has requested the following correction to condition #26:

- Performance testing shall be conducted annually to measure NO_x and CO emission concentrations using the following test methods: EPA Methods 7E or 20 for NO_x emissions, EPA Methods 10 or 10B for CO emissions,

EPA Methods 3, 3A, or 20 for Oxygen content of the exhaust gas. ~~The 9-run tests for NOx RATA purposes, shall be performed at highest physically achievable load of the gas turbine. The operator shall conduct RATA testing according to 40 CFR 60 Appendix B and 40 CFR 75 Appendix A. [40 CFR 60.335(a), (b)(7) 40 CFR 60, Appendix B, 40 CFR 75, Appendix A, and District Rule 4703, 6.3.1, 6.4.1, 6.4.2, & 6.4.3]~~

The "9-run test" reference in condition #26 is misleading by itself. The language in the performance specifications (40 CFR 60, Appendix B, PS 2, Section 8.4.4) requires a minimum of nine runs, although more may be performed with criteria for data set acceptance. To avoid the confusion that could be caused by summarizing specific portions of the RATA testing requirements (and not others) in a permit condition, general references to 40 CFR 60 Appendix B and 40 CFR 75 Appendix A will be used within which all the applicable RATA testing requirements can be found. The reference to 40 CFR 60.335 (b)(7) will be removed as it applies to the initial performance testing of the CEMS, which has been completed.

N-3233-4-6: 87 MW Load Following Power Plant Served by a 466 MMBtu/hr General Electric LM6000 Sprint Natural Gas-Fired Turbine

Compliance with this subpart has been shown in the ATC application review for project N-1010750 and with subsequent Title V Renewals (project N-1041129 and N-1091426). Conditions #5, 6, 19, 20, 23, 34, and 36 on the renewal permit will continue to ensure compliance with this subpart. N-3233-4-6 has an additional condition (#36) compared to N-3233-1-6 to account for the auxiliary burner on N-3233-4-6.

Similar to N-3233-1-8 above, MID has requested the following correction to condition #23:

- Performance testing shall be conducted annually to measure NOx and CO emission concentrations using the following test methods: EPA Methods 7E or 20 for NOx emissions, EPA Methods 10 or 10B for CO emissions, EPA Methods 3, 3A, or 20 for Oxygen content of the exhaust gas. ~~The 9-run tests for NOx RATA purposes, shall be performed at highest physically achievable load of the gas turbine. The operator shall conduct RATA testing according to 40 CFR 60 Appendix B and 40 CFR 75 Appendix A. [40 CFR 60.335(a), (b)(7) 40 CFR 60 Appendix B, 40 CFR 75 Appendix A, and District Rule 4703, 6.3.1, 6.4.1, 6.4.2, & 6.4.3]~~

Refer to the explanation given for N-3233-1-8, condition #26 above.

The February 27, 2014 amendments to this subpart concern:

§60.335 (Test Methods and Procedures).

The definitions of terms for the equation in Section 60.335(b)(1) were revised to allow the reference combustor inlet absolute pressure (P_r) to be measured in millimeters of mercury (mm Hg). The site barometric pressure is allowed as an alternative to the observed combustor inlet absolute pressure for calculating the mean NO_x emission concentration.

§60.335 Test methods and procedures.

(b) * * *
(1) * * *

$$\text{NO}_x = (\text{NO}_{x0})(P_r/P_o)^{0.5} e^{19(H_o-0.00633)} (288 \text{ }^\circ\text{K}/T_a)^{1.53}$$

P_r = reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure. Alternatively, you may use 760 mm Hg (29.92 in Hg),
 P_o = observed combustor inlet absolute pressure at test, mmHg. Alternatively, you may use the barometric pressure for the date of the test,

The use of the above equation for the performance test is only an optional requirement for units equipped with add-on emission controls per Section 60.335 (b)(1). Since this equation has not been specified on the current version of MID's turbine permits, it will not be included on the renewal permit.

The above amendment to this subpart does not require any modification to the renewal permits for N-3233-1-8 or '4-6.

I. **40 CFR Part 60, Subpart IIII – Standards of Performance for Stationary Compression Ignited Internal Combustion Engines (amended February 27, 2014)**

The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) that have commenced construction after June 12, 2006.

N-3233-13-1 is a 62 bhp CI emergency fire pump ICE manufactured in 2007.

N-3233-14-2 is a 480 bhp CI emergency ICE powering an electrical generator manufactured in 2007.

Compliance with this subpart has been shown for N-3233-13 in the application review for project N-1083510 and for N-3233-14 in the application review for project N-1110796. Therefore, only the changes to this subpart and their effect, if any, on the permits will be addressed.

The June 28, 2011 amendments to this subpart concern:

§60.4202: the emission standards that engine manufacturers must meet;

§60.4203: the length of time their engines must meet the emission standards;

§60.4209: operators of emergency engines not meeting the emission standards applicable to non-emergency engines must install a non-resettable hour meter prior to start-up;

- Condition #2 on N-3233-13-1 and condition # 2 on N-3233-14-2 satisfy this requirement.

§60.4210: compliance requirements applying to the engine manufacturer;

§60.4214: notification, reporting, and recordkeeping for operators. For emergency engines not meeting the emission requirements of this subpart for non-emergency engines, the operator must keep records of the hours of operation and reason for operation.

- Condition #10 on N-3233-13-1 and condition #13 on N-3233-14-2 satisfy this requirement.

§60.4215: requirements applying to U.S. territories.

§60.4217: requirements applying to "special" fuels.

None of the above amendments require any modification to the permits for N-3233-13-1 or '-14-2.

The January 30, 2013 amendments to this subpart concern:

§60.4207: CI ICE less than 30 liters per cylinder must use diesel fuel that meets the requirements of 40 CFR 80.510(b), except owners and operators may use up any diesel fuel acquired prior to October 1, 2010, that does not meet the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.

- Condition #7 on N-3233-13-1 and condition #7 on N-3233-14-2 satisfy this requirement.

§60.4211(f) and §60.4219 was revised to specify that emergency engines must limit operation for engine maintenance and testing and emergency demand response to a maximum of 100 hours per year.

- Condition #8 on N-3233-13-1 and condition #9 on N-3233-14-2 satisfy this requirement.

§60.4214 specifies new reporting requirements for emergency ICE operating for purposes of emergency demand response or to supply power as part of a financial arrangement with another entity.

None of the above amendments require any modification to the permits for N-3233-13-1 or '-14-2.

The February 27, 2014 amendments to this subpart concern:

Table 7 Performance Tests for Stationary CI ICE with a Displacement of ≥ 30 Liters per Cylinder.

The above amendment does not require any modification to the permits for N-3233-13-1 or '-14-2.

J. 40 CFR Part 60, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (amended February 27, 2014)

The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary spark ignition (SI) internal combustion engines (ICE). The SI ICE engines operated by MID have previously been demonstrated to be subject to this subpart, and compliance with this subpart has been shown for N-3233-6 through '-11 in the application review for project N-1083510. Therefore, only the changes to this subpart and their effect, if any, on the permits will be addressed

The June 28, 2011 amendments to this subpart concern:

§60.4230: the applicability;

§60.4231: emission standards for small ≤ 25 hp SI ICE;

§60.4233: emission standards for modified or reconstructed SI ICE;

§60.4236: compliance requirements applying to the engine manufacturer;

§60.4241: requirements pertaining to manufacturers participating in the voluntary certification program.

§60.4243: compliance requirements for operators of SI ICE that must comply with the emission standards specified in §60.4233(a) – (c). *[MID's SI ICEs are subject to the emission standards in §60.4233(e)]*

§60.4248: definitions.

Table 1, Emission Standards for non-emergency SI ICE \geq 100 hp, excluding gasoline and rich burn LPG. *[The emission limits that MID's SI ICEs were not modified].*

Table 2, Performance Tests

None of the above amendments require any revision to the renewal permits N-3233-6-3 through '-11-3.

The January 30, 2013 amendments to this subpart concern:

§60.4231: emission standards for manufacturers

§60.4243: compliance requirements for operators of emergency SI ICEs. *[MID does not have any emergency SI ICEs]*

§60.4245: reporting requirements for operators of emergency SI ICEs. *[MID does not have any emergency SI ICEs]*

§60.4248: definitions.

Table 1, Emission Standards for non-emergency SI ICE \geq 100 hp, excluding gasoline and rich burn LPG. *[The emission limits that MID's SI ICEs were not modified].*

Table 2, Performance Tests

The February 27, 2014 amendments to this subpart concern:

Table 2, Performance Tests: the requirement to use Method 1 or 1A for sampling point selection in testing gaseous emissions from engines with smaller ducts is dropped, and single- or three-point sampling, depending on duct size, is added.

None of the above amendments require any revision to the renewal permits N-3233-6-3 through '-11-3.

K. 40 CFR Part 60, Subpart KKKK – Standards of Performance for Combustion Gas Turbines

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

The turbines at MID were constructed prior to February 18, 2005 and have not undergone modification or reconstruction after February 18, 2005; therefore, this subpart is not applicable.

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

This subpart establishes emission 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.

This subpart applies to stationary combustion turbines located at a major source of HAP emissions.

As seen by the calculations performed in **Attachment D**, MID is not a major source of HAP emissions. Therefore, this subpart is not applicable.

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

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

District FYI 309, Guidance to Address 40 CFR Part 63 Subpart ZZZZ Requirements for IC engines, states that “new” engines, i.e. those installed after 6/12/06, shall comply with either 40 CFR 60, Subpart IIII or Subpart JJJJ. For those cases, Subpart ZZZZ is not applicable.

All the engines at MID were installed after 6/12/06; therefore, this subpart is not applicable.

N. 40 CFR Part 64, - Compliance Assurance Monitoring

The CAM rule requires facilities to monitor the performance of their emission control equipment. EPA developed 40 CFR 64 (Compliance Assurance Monitoring or "CAM") in order to provide *reasonable assurance* (§64.3(a)) that facilities comply with emissions limitations *by monitoring the operation and maintenance of their control devices*.

CAM Section 64.1 Definitions

This section defines the key terms in the CAM rule.

CAM Section 64.2(a) General Applicability

Except for certain exemptions enumerated in subpart (b), CAM requirements apply to a pollutant specific emissions unit at a Major Source if the unit satisfies all of the following criteria:

- 1) the unit must have an emission limit for the pollutant; and
- 2) the unit must have add-on controls for the pollutant that enable it to achieve the emission limit; and
- 3) the unit must have a pre-control potential to emit for that pollutant greater than the Major Source threshold for that pollutant.

CAM Applicability Determinations by Permit Unit:

Although CAM applicability determinations were previous made for the turbines in the last Title V Renewal project N-1091426, the major source thresholds for NOx and VOC have dropped since project N-1091426 was deemed complete. Therefore, all the units will be evaluated in this Title V Renewal to ensure all the units have been evaluated under the present major source thresholds.

The following Major Source thresholds will be used, as necessary, to determine whether CAM is triggered.

Major Source Thresholds		
Pollutant	lb/year	ton/year
NOx	20,000	10
SOx	140,000	70
PM10	140,000	70
CO	200,000	100
VOC	20,000	10

N-3233-1-8: 460 MMBtu/hr gas-fired turbine with SCR and oxidation catalyst.

1. This unit has emission limits for NOx, CO, VOC, SOx, and PM10.
2. This unit has add-on controls for NOx (SCR), CO (oxidation catalyst), and VOC (oxidation catalyst), but not for SOx, and PM10. Therefore, CAM is not required for SOx and PM10.
3. The pre-control potential to emit for NOx, CO, and VOC are indicated below:

N-3233-1-6, 460 MMBtu/hr Turbine			
Pollutant	PE _{controlled} (lb/yr)	PE _{uncontrolled} (lb/yr)	Major Source Threshold (lb/yr)
NOx	54,750	> 54,750	20,000
CO	199,999	> 199,999	200,000
VOC	-	8,462 ²	20,000

As the table indicates, the pre-control potential to emit for NOx and CO exceeds the major source threshold for these pollutants; therefore, CAM is triggered for NOx and CO.

The turbine has a part 70 permit that specifies CEMS for NOx and CO; therefore, NOx and CO are exempt from CAM requirements per 40 CFR 64.2(b)(1)(vi).

N-3233-4-6: 460 MMBtu/hr gas-fired turbine and 234 MMBtu/hr gas-fired duct burner with SCR and oxidation catalyst.

1. This unit has emission limits for NOx, CO, VOC, SOx, and PM10.
2. This unit has add-on controls for NOx (SCR), CO (oxidation catalyst), and VOC (oxidation catalyst), but not for SOx, and PM10. Therefore, CAM is not required for SOx and PM10.
3. The pre-control potential to emit for NOx, CO, and VOC are indicated below:

N-3233-4-6, 460 MMBtu/hr Turbine			
Pollutant	PE _{controlled} (lb/yr)	PE _{uncontrolled} (lb/yr)	Major Source Threshold (lb/yr)
NOx	58,340	> 58,340	20,000
CO	93,805	> 199,999	200,000
VOC	-	12,877 ³	20,000

As the table indicates, the pre-control potential to emit for NOx and CO exceeds the major source threshold for these pollutants; therefore, CAM is triggered for NOx and CO.

² Value calculated using AP-42 emission factor for an uncontrolled gas turbine = 0.0021 lb-VOC/MMBtu. Uncontrolled PE_{VOC} = 0.0021 lb-VOC/MMBtu × 460 MMBtu/hr × 8,760 hr/yr = 8,462 lb-VOC/yr

³ Value calculated using AP-42 emission factor for an uncontrolled gas turbine = 0.0021 lb-VOC/MMBtu. Uncontrolled PE_{VOC} = 0.0021 lb-VOC/MMBtu × (466 + 234) MMBtu/hr × 8,760 hr/yr = 12,877 lb-VOC/yr

The turbine has a part 70 permit that specifies CEMS for NO_x and CO; therefore, NO_x and CO are exempt from CAM requirements per 40 CFR 64.2(b)(1)(vi).

N-3233-5-2: Cooling Tower with Drift Eliminator

1. The cooling tower has an emission limit for PM₁₀.
2. The mist eliminator(s) may be considered an add-on control for PM₁₀.
3. The pre-control potential to emit for PM₁₀ is below the Major Source threshold for PM₁₀ (140,000 lb/yr) as shown by the following calculations.
 - Cooling tower water circulation rate: 27,000 gal/min
 - EF_{pm} (Uncontrolled): 0.019 lb/1,000 gal (AP-42, table 13.4-1)

Uncontrolled PM₁₀ emission rate = 27,000 gal/min × 0.019 lb-PM/ 1,000 gallons × 60 min/hr × 24 hr/day × 365 day/yr × 0.149 lb-PM₁₀/ 1 lb-PM⁴

Uncontrolled PM₁₀ emission rate = 40,175 lb-PM₁₀/yr.

Since the pre-control emission rate for PM₁₀ (40,175 lb-PM₁₀/yr) is not greater than the Major Source threshold for PM₁₀ (140,000 lb/yr), CAM is not required.

N-3233-6-3, '-7-3, '-8-3, '-9-3, '-10-3, and '-11-3: Six 11,667 bhp natural gas-fired IC engines with SCR and oxidation catalyst.

1. The gas-fired engine permits have emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
2. The engines do not have add-on controls for SO_x or PM₁₀⁵; therefore, CAM is not applicable to SO_x or PM₁₀. The engines do have add-on controls for NO_x (SCR, 95.8% reduction), CO (oxidation catalyst, 95.0% reduction), VOC (oxidation catalyst, 81.8% reduction).⁶
3. For each engine, the pre-control potential to emit for NO_x, CO, and VOC are all above their Major Source threshold as shown by the following calculations:

$$\begin{aligned} \text{Pre-control PE}_{\text{NO}_x} &= \text{PE}_{\text{start-up \& shutdown}} + \text{PE}_{\text{steady state}} / (1 - \% \text{ control efficiency}) \\ &= 3,176 \text{ lb-NO}_x/\text{yr} + 11,165 \text{ lb-NO}_x/\text{yr} / (1 - 0.958) \\ &= 269,000 \text{ lb-NO}_x/\text{yr} \end{aligned}$$

⁴ Calculating Realistic PM₁₀ Emissions from Cooling Towers, Joel Reisman and Gordon Frisbie

⁵ An oxidation catalyst may have some control on PM₁₀; however, the oxidation catalyst was not identified as a PM₁₀ control device in the District's application review for these engines (N-1083510)

⁶ % reductions indicated are from the District's application review N-1083510.

$$\begin{aligned} \text{Pre-control PE}_{\text{CO}} &= \text{PE}_{\text{start-up \& shutdown}} + \text{PE}_{\text{steady state}} / (1 - \% \text{ control efficiency}) \\ &= 4,791 \text{ lb-CO/yr} + 17,670 \text{ lb-CO/yr} / (1 - 0.950) \\ &= 358,000 \text{ lb-CO/yr} \end{aligned}$$

$$\begin{aligned} \text{Pre-control PE}_{\text{VOC}} &= \text{PE}_{\text{start-up \& shutdown}} + \text{PE}_{\text{steady state}} / (1 - \% \text{ control efficiency}) \\ &= 2,523 \text{ lb-VOC/yr} + 15,534 \text{ lb-VOC/yr} / (1 - 0.818) \\ &= 87,900 \text{ lb-VOC/yr} \end{aligned}$$

CAM Determination for 11,667 bhp natural gas-fired IC engine with SCR and oxidation catalyst			
Pollutant	PE _{controlled} (lb/yr)	PE _{uncontrolled} (lb/yr)	Major Source Tthreshold (lb/yr)
NOx	14,341	269,000	20,000
CO	22,461	358,000	200,000
VOC	18,057	87,900	20,000

(b) Exemptions

As the table above indicates, CAM is triggered for NOx, CO, and VOC. However, the (part 70) permit for each engine specifies CEMS for NOx and CO; therefore, NOx and CO are exempt from CAM per 40 CFR 64.2(b)(1)(vi).

Use of CO CEMS to satisfy CAM for oxidation catalyst triggered by VOC

Since VOC and CO are both a by-product of incomplete combustion and both are controlled by the oxidation catalyst, the CO concentration as monitored by the CEMS may serve as a surrogate for VOC.⁷

⁷ From EPA online introduction to air emissions monitoring:
http://cfpub.epa.gov/oarweb/mkb/basic_information.cfm

CONTINUOUS MONITORING SYSTEMS

A CEMS is an instrument that continuously measures actual emissions levels from a stationary source. The CEMS measures directly the pollutant of concern or measures a surrogate pollutant for the pollutant of concern. An example of direct measurement of the pollutant of concern is the use of a Nitrogen Oxides (NOx) CEMS to monitor the NOx concentration (emissions level) of the effluent from a process stack on a stationary source that must comply with a NOx emissions limit. **An example of monitoring a surrogate pollutant is the use of a Carbon Monoxide (CO) CEMS to monitor the CO concentration of the effluent from a stationary combustion source that must comply with a Volatile Organic Compounds (VOC) limit. In this instance, CO concentration is used as a surrogate for VOC because CO is a product of incomplete combustion and elevated levels of CO indicate incomplete combustion (i.e., low CO concentrations indicate complete combustion of VOC compounds).**

A review of the source test results for CO, VOC, and O₂ from the six engines from 2012 – 2015 (see **Attachment E**) is supportive of using CO as a surrogate for VOC. The permitted emissions limit for CO (13 ppmv at 15% O₂) is stricter than for VOC (20 ppmv at 15% O₂). The results show that, generally, the CO concentration is higher than the VOC concentration and that in every case, the margin of compliance for VOC is greater than for CO. In addition, the O₂ concentration is consistently around 11% (i.e. ~ 110,000 ppmv) indicating that there is abundant O₂ present as a reactant to oxidize both the CO and VOC (and methane). The CO and VOC are likely present in concentration of not more than a few hundred ppmv. According to MID, the lean-burn engines cannot operate below 8 – 9% O₂; therefore, having sufficient O₂ present is ensured without further stipulation by permit condition.

Part of this discussion includes previously approved permit conditions that have been used to satisfy CAM for an oxidation catalyst. For example, GWF Energy has incorporated catalyst temperature monitoring for large turbines (permits N-4597-1-8 and '-2-8). However, MID has made a case that CO CEMS monitoring is a better surrogate for catalyst function than temperature monitoring for two reasons:

- Temperature only indicates that the catalyst is operating at its designed specification but does not indicate the reactive capacity of the catalyst. Thus, a catalyst can be damaged (poisoned) or at the end of its life, but a temperature monitor will not indicate the diminished capacity of the catalyst.
- CO emissions are directly related to the catalyst's oxidation capacity. A loss in CO reaction efficiency would indicate that the catalyst is at the end of its life or needs maintenance. Since the engines have low CO emissions limits (13 ppmv CO at 15% O₂), any significant loss to the catalyst's reactive capacity would be indicated by the CO CEMS, which, in turn, would trigger maintenance or replacement of the catalyst.

Based on the above considerations, continuous CO monitoring would satisfy the CAM requirements for the oxidation catalyst triggered by VOC and be a better indicator of catalyst function (and therefore compliance with the permitted VOC emission limit) than catalyst temperature monitoring.

No additional permit conditions are necessary because the existing CO CEMS requirements (conditions #27 – 36) are sufficient to ensure compliance with the applicable CEMS performance specifications.

N-3233-13-0: 62 bhp Tier 2 certified diesel IC engine powering an emergency fire pump.

The emergency IC engine does not have add-on controls for any pollutant. Therefore, CAM is not required for this unit.

N-3233-14-1: 480 bhp Tier 3 certified diesel IC engine powering an emergency generator.

The emergency IC engine does not have add-on controls for any pollutant. Therefore, CAM is not required for this unit.

40 CFR 64.2(b)(1)(vi) exempts, NO_x and CO emissions limits are exempt from CAM since the Part 70 permit already specifies a continuous compliance determination method for both NO_x and CO. This permit unit may be subject to CAM for VOC since there is a VOC limit and it has add-on control in the form of an oxidation catalytic system. However, the pre-control VOC potential to emit is less than the major source threshold of 50,000 lb-VOC/year as shown below. Therefore, this unit is not subject to CAM.

O. 40 CFR Part 75 – Continuous Emission Monitoring

The purpose of this part is to establish requirements for the monitoring, recordkeeping, and reporting of sulfur dioxide (SO₂), nitrogen oxides (NO_x), and carbon dioxide (CO₂) emissions, volumetric flow, and opacity data from affected units under the Acid Rain Program.

N-3233-1-8: General Electric LM5000 PD Aero-Derivative 460 MMBtu/hr Gas Turbine Engine

- Conditions #26, 45, 46, 49, 58, and 59 on the proposed permit ensure compliance with the rule.

Condition #45 will ensure compliance with any of the applicable revisions to this part.

N-3233-4-6: 87 MW Load Following Power Plant Served by a 466 MMBtu/hr General Electric LM6000 Sprint Natural Gas-Fired Turbine

- Conditions #23, 38, 39, 42, 51, and 52 on the proposed permit ensure compliance with the rule.

Condition #38 will ensure compliance with any of the applicable revisions to this part.

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

These regulations apply to servicing motor vehicles when this service involves the ozone depleting refrigerant in the motor vehicle air conditioner (MVAC). Sections of this regulation were amended in 2013. Conditions #31 and 32 on the facility-wide permit N-3233-0-4 ensure compliance with the amended applicable requirements of these subparts.

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.

The following permit shields listed on N-3233-0-4 were issued via the umbrella template UM-0-3:

Condition #43: Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Stanislaus County Rules 110, 202, and 401. A permit shield is granted from these requirements. [District Rule 2520, 13.2]

Condition #44: 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); 4801 (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]

X. PERMIT CONDITIONS

See Attachment A - Renewed Title V Operating Permit.

XI. ATTACHMENTS

- A. Renewed Title V Operating Permit
- B. Previous Title V Operating Permit
- C. Detailed Facility List
- D. Major Source Determination for Hazardous Air Pollutants
- E: Historical Source Test Results for CO and VOC from Six Natural Gas Fired IC Engines N-3233-6-3 through '-11-3

ATTACHMENT A

Renewed Title V Operating Permit

San Joaquin Valley Air Pollution Control District

FACILITY: N-3233-0-4

EXPIRATION DATE: 11/30/2015

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, 9.9.1 and 9.13.1] Federally Enforceable Through Title V Permit
6. {4367} A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit
7. {4368} Every application for a permit required under Rule 2010 (12/17/92) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit
8. The facility-wide CO emissions shall not exceed 199,999 pounds during any rolling 12-month period. [District Rule 2201]
9. The facility-wide SO_x emissions shall not exceed 54,750 pounds during any rolling 12-month period. [District Rule 2201]
10. The permittee shall retain records of the facility-wide CO and SO_x emissions on a rolling 12-month basis. The record shall be updated monthly. [District Rule 2201] 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: 920 WOODLAND AVENUE, MODESTO, CA 95351
N-3233-0-4 : Apr 20 2016 1:05PM - CLERICOB

11. The facility-wide SOx emissions for natural gas shall be calculated utilizing the monthly quantity of natural gas burned and the permitted natural gas sulfur content limit. The facility-wide SOx emissions for liquid fuels shall be calculated utilizing the monthly quantity of liquid fuels burned and either the permitted fuel sulfur content limit or the actual measured sulfur content of the liquid fuels burned. [District Rule 2201] Federally Enforceable Through Title V Permit
12. {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
13. {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
14. {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
15. {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
16. {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
17. {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
18. {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
19. {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
20. {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
21. {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
22. {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
23. {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

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

24. {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
25. {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
26. {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
27. {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
28. {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
29. {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
30. {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
31. {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
32. {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
33. {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 8021 and 8011] Federally Enforceable Through Title V Permit
34. {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 8031 and 8011] Federally Enforceable Through Title V Permit
35. {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 8041 and 8011] Federally Enforceable Through Title V Permit
36. {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 8051 and 8011] Federally Enforceable Through Title V Permit
37. {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 8061 and Rule 8011] Federally Enforceable Through Title V Permit

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

38. {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 8071 and Rule 8011] Federally Enforceable Through Title V Permit
39. {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
40. {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
41. {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
42. {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
43. {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
44. {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
45. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin January 1st 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
46. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-3233-1-8

EXPIRATION DATE: 11/30/2015

EQUIPMENT DESCRIPTION:

ONE (1) GENERAL ELECTRIC LM5000 PD AERO-DERIVATIVE 460 MMBTU/HR (HHV) GAS TURBINE ENGINE WITH STEAM INJECTION, OXIDIZATION CATALYST, AMMONIA INJECTION, AND SELECTIVE CATALYTIC REDUCTION SERVING A 49.9 MW ELECTRICAL GENERATOR

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
2. When operating on natural gas, the unit shall be fired exclusively on PUC-regulated natural gas which has a sulfur content of less than or equal to 0.017% by weight. When operating on liquid fuel, the unit shall be fired on low sulfur light distillate fuel with less than or equal to 0.05% sulfur by weight. [District Rule 2201; 40 CFR 60.333(b); Stanislaus County Rule 407] Federally Enforceable Through Title V Permit
3. The sulfur content of each fuel source shall be documented in a valid purchase contract, a supplier certification, a tariff sheet or transportation contract. [40 CFR 60.334(h)(3) and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
4. Start-up is defined as the period beginning with the initial firing of the turbine and ending when the turbine meets the NOx and CO limits for steady state operation. Shutdown is defined as the period beginning with initiation of the turbine shutdown sequence and ending with cessation of firing of the gas turbine. [District Rule 4703] Federally Enforceable Through Title V Permit
5. A violation of NOx emission standards indicated by the NOx CEM shall be reported by the operator to the APCO within 96 hours. [District Rule 1080, 9.0] Federally Enforceable Through Title V Permit
6. Operator shall notify the APCO no later than eight hours after the detection of a breakdown of the CEM. Operator shall inform the APCO of the intent to shut down the CEM at least 24 hours prior to the event. [District Rule 1080, 10.0] Federally Enforceable Through Title V Permit
7. The owner or operator shall submit a written report of CEM operations for each calendar quarter to the APCO. The report shall be received by the District within 30 days of the end of the quarter and shall include the following: time intervals, data and magnitude of excess NOx emissions, nature and the cause of excess emissions (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; applicable time and date of each period during which a CEM was inoperative (monitor downtime), except for zero and span checks and the nature of system repairs and adjustments; a negative declaration when no excess emissions occurred. [40 CFR 60.334(j), (j)(5) and District Rule 1080, 8.0] Federally Enforceable Through Title V Permit
8. The owner or operator shall maintain CEMS records that contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance, duration of any periods during which a continuous monitoring system or monitoring device was inoperative and emission measurements. [40 CFR 60.7 (b) and District Rules 1080 and 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.

9. The CEMS shall be linked to a data logger which is compatible with the District's Data acquisition system. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year from the date the facility is notified of the problem by the District, provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080, 7.1] Federally Enforceable Through Title V Permit
10. The Turbine and associated ancillary equipment must be properly maintained and kept in good operating condition at all times. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The Turbine and associated ancillary equipment shall only be operated by personnel properly trained in its operation. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Natural gas; OGT; JP4; Jet A; Jet B; No. 1d; No. 1; 1GT; No. 2d; No. 2; and 2GT are the only fuels permitted for combustion in the Turbine. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The Turbine shall be equipped and operated with an Automatic Combustion Control System. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The Turbine shall not be operated unless the exhaust gas is subjected to the Oxidation (CO) Catalyst System and the Selective Catalytic Reduction (SCR) System prior to discharge to the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The CO Catalyst System and the SCR Systems must be in full use whenever the Turbine is in operation, except during start-up and shutdown periods. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The Ammonia Injection System must be utilized whenever the flue gas temperature at the inlet of the SCR System exceeds 550 degrees F, except during start up and shutdown. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The NOx emission concentration shall not exceed 3.5 ppmv, dry, corrected to 15% O2, when operating on natural gas; and 6.2 ppmv, dry, corrected to 15% O2, when operating on fuel oil, except for start-up or shut-down periods. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
18. A visible emissions inspection shall be conducted after every 400 cumulative hours of operation on fuel oil. If a visible emissions inspection documents opacity, a EPA Method 9 evaluation shall be completed within three working days, or during the next period of operation if the unit ceases firing on fuel oil within the three working day period. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
19. The CO emission concentration, at maximum heat input capacity shall not exceed 16.0 ppmv, dry, corrected to 15% O2, when operating on Natural Gas, and 20.0 ppmv, dry, corrected to 15% O2, when operating on Fuel Oil, except for start-up and shut-down periods. [District Rule 2201] Federally Enforceable Through Title V Permit
20. The NMHC emission concentration, at maximum heat input capacity shall not exceed 0.000475% by weight, wet, while operating on Natural Gas and 0.000713% by weight, wet, while operating on Fuel Oil, except for start-up and shut-down periods. [District Rule 2201] Federally Enforceable Through Title V Permit
21. The NH3 emission concentration shall not exceed 25.0 ppmv, dry, corrected to 15% O2. [District Rule 2201] Federally Enforceable Through Title V Permit
22. The owner or operator shall be required to conform to the compliance testing and sampling procedures described in District Rule 1081, 3.0, and 6.0 (as amended 12/16/93). [District Rule 1081] Federally Enforceable Through Title V Permit
23. All concentrations of gaseous emissions must be expressed in parts per million, by volume, dry basis, corrected to 15% O2. [District Rule 2201] Federally Enforceable Through Title V Permit
24. A complete laboratory analysis of Fuel Oil combusted during any source test shall be provided along with the source test results. Testing shall include, but not be limited to, an ultimate analysis of Fuel Oil & a full set of metals pursuant to AB2588. [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. Annual performance testing shall include, but not be limited to, an analysis of the exhaust stream directly after the HRSG for: A. Flow rate; B. Oxides of Nitrogen; C. Carbon Monoxide; D. Hydrocarbons: Methane & Non-Methane, including saturated and unsaturated; E. Ammonia; F. Particulates (Fuel Oil only); G. Oxides of Sulfur (Fuel Oil only). [District Rule 2201] Federally Enforceable Through Title V Permit
26. Performance testing shall be conducted annually to measure NOx and CO emission concentrations using the following test methods: EPA Methods 7E or 20 for NOx emissions, EPA Methods 10 or 10B for CO emissions, EPA Methods 3, 3A, or 20 for Oxygen content of the exhaust gas. The operator shall conduct RATA testing according to 40 CFR 60 Appendix B and 40 CFR 75 Appendix A. [40 CFR 60.335(a), 40 CFR 60 Appendix B, 40 CFR 75 Appendix A, and District Rule 4703] Federally Enforceable Through Title V Permit
27. Annual performance testing shall be performed at representative performance as specified by the APCO, between 90 and 100 percent of peak, or the highest physically achievable load. Annual performance testing is required for Natural Gas only, unless Fuel Oil usage exceeds 200 hours per year. [District Rule 2201 and 40 CFR 60.8(c)] Federally Enforceable Through Title V Permit
28. The District shall be notified at least 30 days prior to any performance testing and a test plan shall be submitted for District approval at least 15 days prior to such testing. [District Rule 1081, 7.1] Federally Enforceable Through Title V Permit
29. Performance testing shall be witnessed or authorized by District personnel. Test results shall be submitted to the District within 60 days of performance testing. [District Rule 1081, 7.2, 7.3] Federally Enforceable Through Title V Permit
30. A Continuous Monitoring System shall be operated to measure and record the fuel consumption, the mass ratio of steam-to-fuel injected, the mass ratio of water-to-fuel injected into the Combustor, the flue gas temperature at the inlet of the SCR System, NOx, SOx (when firing on fuel oil), O2 or CO2 and CO emission concentration in the exhaust gas after the HRSG. [District Rule 2201] Federally Enforceable Through Title V Permit
31. The owner or operator shall certify, maintain, operate and quality-assure a Continuous Emission Monitoring System (CEMS) for NOx, CO, and O2. The CEMS shall continuously measure and record the exhaust gas NOx and O2 concentrations, hours of operation and fuel consumption. The CEMS shall be capable of monitoring emissions during startups and shutdowns as well as during normal operating conditions. [40 CFR 60.334 (b)(2) and District Rules 2201 and 4703, 6.2.1] Federally Enforceable Through Title V Permit
32. The Continuous Monitoring System shall convert the actual NOx, SOx (when firing on fuel oil), and CO concentrations to corrected concentrations at 15% O2, dry basis. The System shall also record the total lb/day emissions of NOx, SOx (when firing on fuel oil), and CO. [District Rule 2201] Federally Enforceable Through Title V Permit
33. Results of the CEM system shall be averaged over a three hour time period, using consecutive 15-minute sampling periods in accordance with all applicable requirements of CFR 60.13. [40 CFR 60.13 and District Rule 4703, 5.1, 6.4] Federally Enforceable Through Title V Permit
34. The NOx emission rate shall not exceed 150.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
35. The CO emission rate shall not exceed 550.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
36. The NMHC emission rate shall not exceed 143.0 lb/day while operating on Natural Gas and 143.4 lb/day when operating on Fuel Oil. [District Rule 2201] Federally Enforceable Through Title V Permit
37. The SOx emission rate shall not exceed 12.9 lb/day while operating on Natural Gas and 150.0 lb/day when operating on Fuel Oil. [District Rule 2201] Federally Enforceable Through Title V Permit
38. The PM10 emission rate shall not exceed 10.0 lb/hr while operating on either Natural Gas or Fuel Oil. The PM10 emission rate shall not exceed 74.4 lb/day while operating on Natural Gas and 80.0 lb/day when operating on Fuel Oil. [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.

39. The start-up period must not exceed two (2) hours in any one day, commencing at midnight. The shut-down period must not exceed two (2) hours in any one day, commencing at midnight. [District Rule 2201] Federally Enforceable Through Title V Permit
40. The emissions during the start-up and shut-down periods must be counted towards the applicable daily emission limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
41. There shall be no visible emissions from the turbine, except for uncombined water and except during periods of start-up and shutdown. [District Rule 2201] Federally Enforceable Through Title V Permit
42. The owner or operator shall maintain a stationary gas turbine system operating log that includes on a daily basis, the actual local time start-up and stop time, length and reason for reduced load periods, total hours of operation, the quantity and type of fuel used, steam-to-fuel ratios, water-to-fuel ratios and ammonia usage. [40 CFR 60.334 (j) and District Rule 4703; 6.2.6] Federally Enforceable Through Title V Permit
43. The permittee shall retain records of the cumulative annual facility-wide CO and SOx emissions. The record shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
44. 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
45. 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
46. 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
47. 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
48. 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
49. 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
50. Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program. [40 CFR 72] Federally Enforceable Through Title V Permit
51. An allowance shall not be deducted in order to comply with the requirements under 40 CFR part 73, prior to the calendar year for which the allowance was allocated. [40 CFR 73] Federally Enforceable Through Title V Permit
52. 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
53. 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
54. 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

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

55. 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
56. 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
57. The owners and operators of the each affected unit at the source shall keep on site the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority: (i) The certificate of representation for the designated representative for the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site beyond such five-year period until such documents are superceded because of the submission of a new certificate of representation changing the designated representative. [40 CFR 72] Federally Enforceable Through Title V Permit
58. 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
59. 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-3233-4-6

EXPIRATION DATE: 11/30/2015

EQUIPMENT DESCRIPTION:

87 MW LOAD FOLLOWING POWER PLANT SERVED BY A 466 MMBTU/HR GENERAL ELECTRIC LM6000 SPRINT MODEL NATURAL GAS FIRED TURBINE WITH WATER INJECTION, A 234 MMBTU/HR JOHN ZINK LDRW-LE OR EQUIVALENT DUCT BURNER, A HEAT RECOVERY STEAM GENERATOR, A CONDENSING STEAM TURBINE, AN INLET AIR COOLING/FILTERING SYSTEM, A SELECTIVE CATALYTIC REDUCTION SYSTEM, AN OXIDATION CATALYST AND A LUBE OIL COALESCER

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. The exhaust stack exit shall be at least 90 feet in height, the exhaust shall be vertical and the stack exhaust flow shall not be impeded. [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. Visible emissions from lube oil vents shall not exhibit opacity of 5% or greater except for up to three minutes in any hour. [District Rule 2201] Federally Enforceable Through Title V Permit
4. 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
5. The owner or operator shall certify, maintain, operate and quality-assure a Continuous Emission Monitoring System (CEMS) for NO_x, CO, and O₂. The CEMS shall continuously measure and record the exhaust gas NO_x and O₂ concentrations, hours of operation and fuel consumption. The CEMS shall be capable of monitoring emissions during startups and shutdowns as well as during normal operating conditions. [40 CFR 60.334 (b)(2) and District Rules 2201 and 4703, 6.2.1] Federally Enforceable Through Title V Permit
6. 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. [40 CFR 60.334(b)(2) and District Rule 1080, 6.4] Federally Enforceable Through Title V Permit
7. The CEMS shall be linked to a data logger which is compatible with the District's Data acquisition system. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080, 7.1] Federally Enforceable Through Title V Permit
8. The permittee shall monitor and record the NO_x emission rate, the ammonia injection rate, the water injection rate, the exhaust temperature and the calculated exhaust flow rate. [District Rules 4703 and 4001] Federally Enforceable Through Title V Permit
9. The owner or operator shall be required to conform to the compliance testing and sampling procedures described in District Rule 1081, 3.0, and 6.0 (as amended 12/16/93). [District Rule 1081, 3.0, and 6.0] 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. Start-up and shutdown durations shall not exceed 2 hours per day and 365 hours per calendar year. Start-up is defined as the period beginning with the initial firing of the turbine and ending when the turbine meets the NOx and CO limits for steady state operation. Shutdown is defined as the period beginning with initiation of the turbine shutdown sequence and ending with cessation of firing of the gas turbine. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
11. The NOx emissions from this unit shall not exceed 58,340 pounds during any rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The NOx emissions during start-up and shutdown periods shall not exceed 24.6 pounds during any one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The NOx emissions, except during start-up and shutdown periods, shall not exceed 2.5 ppmvd @ 15% O2 over a 1 hour rolling average. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
14. The CO emissions during start-up and shutdown periods shall not exceed 40.8 pounds during any one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The CO emissions, except during start-up and shutdown periods, shall not exceed 6.0 ppmvd @ 15% O2 over a 3 hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The VOC emissions shall not exceed 2.0 ppmvd, as methane, @ 15% O2 over a 3 hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The PM10 emissions shall not exceed 2.5 pounds during any one hour while only the turbine is operating. [District Rule 2201] Federally Enforceable Through Title V Permit
18. The PM10 emission shall not exceed 3.0 pounds during any one hour while both the turbine and duct burner are operating. [District Rule 2201] Federally Enforceable Through Title V Permit
19. This unit shall be fired exclusively on natural gas as defined in 40 CFR 60.331(u) which has a total sulfur content of no greater than 1.0 grain of sulfur compounds (as S) per 100 scf. [40 CFR 60.333(b), Stanislaus County Rule 407, and District Rule 2201] Federally Enforceable Through Title V Permit
20. The sulfur content of each fuel source shall be: (i) documented in a valid purchase contract, a supplier certification, a tariff sheet or transportation contract or (ii) monitored weekly using ASTM Methods D4084, D5504, D6228, or Gas Processors Association Standard 2377. If sulfur content is less than 1.0 gr/100 scf for 8 consecutive weeks, then the Monitoring frequency shall be every six (6) months. If any six (6) month monitoring show an exceedance, weekly monitoring shall resume. [40 CFR 60.334(h)(3) and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. The ammonia (NH3) emissions shall not exceed 10 ppmvd @ 15% O2 over a 24 hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
22. Ammonia slip shall be calculated utilizing the following procedure: ammonia slip ppmvd @ 15% O2 = ((a - (b x c/1,000,000)) x (1,000,000 / b) x d, where a = ammonia injection rate (lb/hr) / (17 lb/lb mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NOx concentration ppmvd @ 15% O2 across the catalyst and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip. Should the calculated ammonia slip value indicate a violation of the emission limit, source testing for ammonia slip shall be conducted with the turbine system operating under conditions similar to those it was operating at during the calculated violation. Source testing shall be conducted within 60 days of the calculated violation. Alternatively, the permittee may utilize a continuous in-stack ammonia monitor, acceptable to the District to monitor compliance. At least 60 days prior to using a NH3 CEM, the permittee shall submit a monitoring plan for District review and approval. [District Rule 4102]
23. Performance testing shall be conducted annually to measure NOx and CO emission concentrations using the following test methods: EPA Methods 7E or 20 for NOx emissions, EPA Methods 10 or 10B for CO emissions, EPA Methods 3, 3A, or 20 for Oxygen content of the exhaust gas. The operator shall conduct RATA testing according to 40 CFR 60 Appendix B and 40 CFR 75 Appendix A. [40 CFR 60.335(a), 40 CFR 60 Appendix B, 40 CFR 75 Appendix A, and District Rule 4703] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

24. Performance testing to demonstrate compliance with the VOC, PM10 and NH3 requirements of this permit shall be conducted at least once every twelve months. [District Rules 2201 and 4001] Federally Enforceable Through Title V Permit
25. The District shall be notified at least 30 days prior to any performance testing and a test plan shall be submitted for District approval at least 15 days prior to such testing. [District Rule 1081, 7.1] Federally Enforceable Through Title V Permit
26. Performance testing shall be witnessed or authorized by District personnel. Test results shall be submitted to the District within 60 days of performance testing. [District Rule 1081, 7.2, 7.3] Federally Enforceable Through Title V Permit
27. Performance testing for VOC shall be conducted utilizing EPA method 18 or EPA method 25. Alternative source testing methods will be allowed provided prior written approval is received from both the District and the EPA. [District Rule 2201] Federally Enforceable Through Title V Permit
28. Performance testing to measure concentrations of PM10 shall be conducted using EPA methods 201 and 202, or EPA methods 201A and 202, or CARB method 501 in conjunction with CARB method 5. Alternative source testing methods will be allowed provided prior written approval is received from both the District and the EPA. [District Rule 2201] Federally Enforceable Through Title V Permit
29. The owner or operator shall maintain CEMS records that contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance, duration of any periods during which a continuous monitoring system or monitoring device was inoperative and emission measurements. [40 CFR 60.7 (b) and District Rules 1080 and 2201] Federally Enforceable Through Title V Permit
30. The owner or operator shall maintain a stationary gas turbine system operating log that includes on a daily basis, the actual local time start-up and stop time, length and reason for reduced load periods, total hours of operation, and the quantity and type of fuel used. [District Rule 4703] Federally Enforceable Through Title V Permit
31. The rolling 12-month CO emissions from the turbines shall be determined utilizing CEMS data. [District Rule 2201] Federally Enforceable Through Title V Permit
32. The permittee shall maintain hourly records of the NOx, CO and ammonia concentrations (ppmv @ 15% O2). [District Rules 2201 and 4201] Federally Enforceable Through Title V Permit
33. The permittee shall maintain records of the rolling 12-month NOx emissions from this unit. The record shall be updated monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
34. The owner or operator shall submit a written report of CEM operations for each calendar quarter to the APCO. The report shall be received by the District within 30 days of the end of the quarter and shall include the following: time intervals, data and magnitude of excess NOx emissions, nature and the cause of excess emissions (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; applicable time and date of each period during which a CEM was inoperative (monitor downtime), except for zero and span checks and the nature of system repairs and adjustments; a negative declaration when no excess emissions occurred. [40 CFR 60.334(j), (j)(5) and District Rule 1080, 8.0] Federally Enforceable Through Title V Permit
35. Results of the CEM system shall be averaged over the time period applicable to each emission limit listed on this permit, using consecutive 15-minute sampling periods in accordance with all applicable requirements of CFR 60.13. [40 CFR 60.13 and District Rule 4703, 5.1, 6.4] Federally Enforceable Through Title V Permit
36. Any gas turbine with an intermittently operated auxiliary burner shall demonstrate compliance with the auxiliary burner both on and off. [40 CFR 60.335(b)(3) and District Rule 4703, 6.3.3] Federally Enforceable Through Title V Permit
37. 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.

38. 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
39. 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
40. 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
41. 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
42. 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
43. 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
44. 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
45. 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
46. 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
47. 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
48. 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
49. 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
50. The owners and operators of the each affected unit at the source shall keep on site the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority: (i) The certificate of representation for the designated representative for the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site beyond such five-year period until such documents are superceded because of the submission of a new certificate of representation changing the designated representative. [40 CFR 72] Federally Enforceable Through Title V Permit

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 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
52. 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.

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-3233-5-4

EXPIRATION DATE: 11/30/2015

EQUIPMENT DESCRIPTION:

27,000 GALLON PER MINUTE COOLING TOWER WITH A HIGH EFFICIENCY DRIFT ELIMINATOR

PERMIT UNIT REQUIREMENTS

1. No hexavalent chromium containing compounds shall be added to the water that is circulating through the cooling tower or will circulate through the cooling tower. [District Rule 7012]
2. The drift rate shall not exceed 0.0005%. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The PM10 emission rate shall not exceed 0.17 pounds during any one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Compliance with the PM10 daily emission limit shall be demonstrated as follows: $PM10 \text{ lb/day} = \text{circulating water recirculation rate} * \text{total dissolved solids concentration in the blowdown water} * \text{design drift rate}$. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. Total Dissolved Solids (TDS) in the blowdown water shall be sampled and analyzed using a conductivity analyzer at least quarterly. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. Water recirculation rate shall be measured and recorded quarterly. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. {2256} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
8. The operator shall maintain records of all circulating water tests performed. Records shall be maintained for at least 5 years and shall be made available to the District upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-3233-6-3

EXPIRATION DATE: 11/30/2015

EQUIPMENT DESCRIPTION:

11,667 BHP NATURAL GAS FIRED WARTSILA 20V34SG IC ENGINE POWERING AN 8.44 MW ELECTRICAL GENERATOR. THE ENGINE IS EQUIPPED WITH A TURBOCHARGER, AN INTERCOOLER, A SELECTIVE CATALYTIC REDUCTION SYSTEM WITH AMMONIA INJECTION AND AN OXIDATION CATALYST (MODESTO IRRIGATION DISTRICT DESIGNATION 3A).

PERMIT UNIT REQUIREMENTS

1. The unit shall be fueled solely with PUC quality natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The combined start-up and shutdown duration of this unit shall not exceed 2 hours during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The combined start-up and shutdown duration for permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 2010 hours during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The NOx emissions during steady state operation shall not exceed 5 ppmvd @15% O2, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
5. The NOx emissions during start-up and shutdown periods shall not exceed 9.48 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The CO emissions during steady state operation shall not exceed 13 ppmvd @ 15% O2, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
7. The CO emissions during start-up and shutdown periods shall not exceed 14.3 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The VOC emissions during steady state operation shall not exceed 20 ppmvd @ 15% O2 as methane, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
9. The VOC emissions during start-up and shutdown periods shall not exceed 7.53 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The SOx emissions shall not exceed 0.4 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The PM10 emissions shall not exceed 1.3 lb/hr. The filterable portion of the PM10 shall not exceed 0.02 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The ammonia emissions shall not exceed 10 ppmvd @ 15% O2 over a 24 hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The combined NOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 12,049 pounds during the first calendar quarter, 12,049 pounds during the second calendar quarter, 12,049 pounds during the third calendar quarter and 12,050 pounds during the fourth calendar quarter. [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.

14. The combined CO emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 74,864 pounds during any rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The combined VOC emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 13,920 pounds during the first calendar quarter, 13,920 pounds during the second calendar quarter, 13,920 pounds during the third calendar quarter and 13,921 pounds during the fourth calendar quarter. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The combined VOC emissions from units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 49,993 lb/yr, based on a 12-month rolling total. The start-up and shutdown period contributions shall be determined utilizing the number of start-up and shutdown hours in combination with the start-up and shutdown period emission limit. The steady-state contribution shall be determined utilizing the fuel usage during the previous 12 months and the VOC emission concentration determined during the most recent District approved source test or representative testing allowed by the District. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The combined SOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 9,600 pounds during any rolling 12-month period. The SOx emissions shall be determined by applying the hourly emission limit of these permits to the combined number of operating hours of these engines. [District Rule 2201] Federally Enforceable Through Title V Permit
18. The combined PM10 emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 7,800 pounds during the first calendar quarter, 7,800 pounds during the second calendar quarter, 7,800 pounds during the third calendar quarter and 7,800 pounds during the fourth calendar quarter. The PM10 emissions shall be determined by applying the hourly emission limit of these permits to the combined number of operating hours of these engines. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Source testing to determine compliance with the NOx, CO, VOC, PM10 and ammonia emission limits of this permit shall be conducted not less than once every 12 months. The filterable and condensable PM10 emissions shall be determined separately. Representative testing, as specified in Rule 4702, may be allowed provided prior written District authorization is received. [District Rule 4702] Federally Enforceable Through Title V Permit
20. 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
21. 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
22. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702] Federally Enforceable Through Title V Permit
23. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC emissions shall be reported as methane and the NOx emissions shall be reported as NO2. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
24. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 18, 25A or 25B, or ARB Method 100, SOx - CARB Method 100, PM10 - EPA Methods 201A and 202, CARB Method 5, or EPA Methods 5 and 202, and ammonia - BAAQMD Method ST-1B. Alternative source test methods are allowed provided prior written District authorization is received. [District Rules 1081, 2201 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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25. The owner or operator shall certify, maintain, operate, and quality-assure a continuous emission monitor system (CEMS) on each engine exhaust that continuously measures and records the exhaust gas NO_x, CO, and O₂ concentrations. Continuous emissions monitors shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns. [District Rules 1080 and 4702 and 40 CFR 60.8 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
26. NO_x, CO and O₂ CEMS shall meet the requirements in 40 CFR Part 60, Appendix F and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
27. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
28. The CEMS data shall be reduced to hourly averages as specified in 40 CFR Part 60 section 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
29. In accordance with 40 CFR Part 60, Appendix F, each CEMS shall be audited at least once each calendar quarter. The audit shall be either a Relative Accuracy Test Audit (RATA) or a Cylinder Gas Audit (CGA). A RATA must be conducted at least once every four calendar quarters. A CGA may be conducted in three of four calendar quarters, but in no more than three quarters in succession. The audit reports and the quarterly compliance reports shall be submitted to the District. [District Rule 1080 and 40 CFR 60.8 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
30. The owner or operator shall perform a RATA for NO_x, CO and O₂ as specified by 40 CFR Part 60, Appendix F 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 monitoring equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
31. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CEMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit
32. The facility shall maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system and shall make CEMS data available to the District's automated polling system on a daily basis. Upon notice by the District that the facility's CEMS 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 CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
33. The owner or operator shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period that a continuous monitoring system or monitoring device was inoperative. [District Rules 1080 and 2201 and 40 CFR 60.7(f)] Federally Enforceable Through Title V Permit
34. The owner or operator shall submit a written report of CEMS operations for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NO_x emissions, nature and the cause of excess emissions (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEMS was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.7(c) and (d)] Federally Enforceable Through Title V Permit
35. A record of the combined quarterly and annual NO_x, VOC and PM₁₀ emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar quarter and a rolling 12-month basis and shall be updated monthly. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
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36. A record of the combined VOC emissions from units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11, based on a 12-month rolling total, shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
37. A record of the combined annual CO and SOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a rolling 12-month basis and shall be updated monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
38. A record of the combined number of hours of operation of permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a rolling 12-month basis and shall be updated monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
39. A record of the daily number of hours of start-up and shutdown time for this unit shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
40. A record of the combined number of hours of start-up and shutdown time for units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a rolling 12-month basis and shall be updated monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
41. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
42. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit
43. All records shall be maintained and retained on-site for a minimum of five years, and shall be made available for District inspection upon request. [District Rule 4702] 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-3233-7-3

EXPIRATION DATE: 11/30/2015

EQUIPMENT DESCRIPTION:

11,667 BHP NATURAL GAS FIRED WARTSILA 20V34SG IC ENGINE POWERING AN 8.44 MW ELECTRICAL GENERATOR. THE ENGINE IS EQUIPPED WITH A TURBOCHARGER, AN INTERCOOLER, A SELECTIVE CATALYTIC REDUCTION SYSTEM WITH AMMONIA INJECTION AND AN OXIDATION CATALYST (MODESTO IRRIGATION DISTRICT DESIGNATION 3B).

PERMIT UNIT REQUIREMENTS

1. The unit shall be fueled solely with PUC quality natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The combined start-up and shutdown duration of this unit shall not exceed 2 hours during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The combined start-up and shutdown duration for permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 2010 hours during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The NOx emissions during steady state operation shall not exceed 5 ppmvd @15% O2, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
5. The NOx emissions during start-up and shutdown periods shall not exceed 9.48 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The CO emissions during steady state operation shall not exceed 13 ppmvd @ 15% O2, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
7. The CO emissions during start-up and shutdown periods shall not exceed 14.3 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The VOC emissions during steady state operation shall not exceed 20 ppmvd @ 15% O2 as methane, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
9. The VOC emissions during start-up and shutdown periods shall not exceed 7.53 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The SOx emissions shall not exceed 0.4 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The PM10 emissions shall not exceed 1.3 lb/hr. The filterable portion of the PM10 shall not exceed 0.02 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The ammonia emissions shall not exceed 10 ppmvd @ 15% O2 over a 24 hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The combined NOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 12,049 pounds during the first calendar quarter, 12,049 pounds during the second calendar quarter, 12,049 pounds during the third calendar quarter and 12,050 pounds during the fourth calendar quarter. [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.

14. The combined CO emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 74,864 pounds during any rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The combined VOC emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 13,920 pounds during the first calendar quarter, 13,920 pounds during the second calendar quarter, 13,920 pounds during the third calendar quarter and 13,921 pounds during the fourth calendar quarter. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The combined VOC emissions from units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 49,993 lb/yr, based on a 12-month rolling total. The start-up and shutdown period contributions shall be determined utilizing the number of start-up and shutdown hours in combination with the start-up and shutdown period emission limit. The steady-state contribution shall be determined utilizing the fuel usage during the previous 12 months and the VOC emission concentration determined during the most recent District approved source test or representative testing allowed by the District. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The combined SOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 9,600 pounds during any rolling 12-month period. The SOx emissions shall be determined by applying the hourly emission limit of these permits to the combined number of operating hours of these engines. [District Rule 2201] Federally Enforceable Through Title V Permit
18. The combined PM10 emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 7,800 pounds during the first calendar quarter, 7,800 pounds during the second calendar quarter, 7,800 pounds during the third calendar quarter and 7,800 pounds during the fourth calendar quarter. The PM10 emissions shall be determined by applying the hourly emission limit of these permits to the combined number of operating hours of these engines. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Source testing to determine compliance with the NOx, CO, VOC, PM10 and ammonia emission limits of this permit shall be conducted not less than once every 12 months. The filterable and condensable PM10 emissions shall be determined separately. Representative testing, as specified in Rule 4702, may be allowed provided prior written District authorization is received. [District Rule 4702] Federally Enforceable Through Title V Permit
20. 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
21. 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
22. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702] Federally Enforceable Through Title V Permit
23. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC emissions shall be reported as methane and the NOx emissions shall be reported as NO2. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
24. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 18, 25A or 25B, or ARB Method 100, SOx - CARB Method 100, PM10 - EPA Methods 201A and 202, CARB Method 5, or EPA Methods 5 and 202, and ammonia - BAAQMD Method ST-1B. Alternative source test methods are allowed provided prior written District authorization is received. [District Rules 1081, 2201 and 4702] 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 owner or operator shall certify, maintain, operate, and quality-assure a continuous emission monitor system (CEMS) on each engine exhaust that continuously measures and records the exhaust gas NO_x, CO, and O₂ concentrations. Continuous emissions monitors shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns. [District Rules 1080 and 4702 and 40 CFR 60.8 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
26. NO_x, CO and O₂ CEMS shall meet the requirements in 40 CFR Part 60, Appendix F and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
27. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
28. The CEMS data shall be reduced to hourly averages as specified in 40 CFR Part 60 section 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
29. In accordance with 40 CFR Part 60, Appendix F, each CEMS shall be audited at least once each calendar quarter. The audit shall be either a Relative Accuracy Test Audit (RATA) or a Cylinder Gas Audit (CGA). A RATA must be conducted at least once every four calendar quarters. A CGA may be conducted in three of four calendar quarters, but in no more than three quarters in succession. The audit reports and the quarterly compliance reports shall be submitted to the District. [District Rule 1080 and 40 CFR 60.8 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
30. The owner or operator shall perform a RATA for NO_x, CO and O₂ as specified by 40 CFR Part 60, Appendix F 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 monitoring equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
31. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CEMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit
32. The facility shall maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system and shall make CEMS data available to the District's automated polling system on a daily basis. Upon notice by the District that the facility's CEMS 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 CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
33. The owner or operator shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period that a continuous monitoring system or monitoring device was inoperative. [District Rules 1080 and 2201 and 40 CFR 60.7(f)] Federally Enforceable Through Title V Permit
34. The owner or operator shall submit a written report of CEMS operations for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NO_x emissions, nature and the cause of excess emissions (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEMS was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.7(c) and (d)] Federally Enforceable Through Title V Permit
35. A record of the combined quarterly and annual NO_x, VOC and PM₁₀ emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar quarter and a rolling 12-month basis and shall be updated monthly. [District Rule 2201] Federally Enforceable Through Title V Permit

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

36. A record of the combined VOC emissions from units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11, based on a 12-month rolling total, shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
37. A record of the combined annual CO and SOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a rolling 12-month basis and shall be updated monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
38. A record of the combined number of hours of operation of permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a rolling 12-month basis and shall be updated monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
39. A record of the daily number of hours of start-up and shutdown time for this unit shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
40. A record of the combined number of hours of start-up and shutdown time for units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a rolling 12-month basis and shall be updated monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
41. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
42. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit
43. All records shall be maintained and retained on-site for a minimum of five years, and shall be made available for District inspection upon request. [District Rule 4702] 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-3233-8-3

EXPIRATION DATE: 11/30/2015

EQUIPMENT DESCRIPTION:

11,667 BHP NATURAL GAS FIRED WARTSILA 20V34SG IC ENGINE POWERING AN 8.44 MW ELECTRICAL GENERATOR. THE ENGINE IS EQUIPPED WITH A TURBOCHARGER, AN INTERCOOLER, A SELECTIVE CATALYTIC REDUCTION SYSTEM WITH AMMONIA INJECTION AND AN OXIDATION CATALYST (MODESTO IRRIGATION DISTRICT DESIGNATION 3C).

PERMIT UNIT REQUIREMENTS

1. The unit shall be fueled solely with PUC quality natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The combined start-up and shutdown duration of this unit shall not exceed 2 hours during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The combined start-up and shutdown duration for permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 2010 hours during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The NOx emissions during steady state operation shall not exceed 5 ppmvd @15% O2, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
5. The NOx emissions during start-up and shutdown periods shall not exceed 9.48 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The CO emissions during steady state operation shall not exceed 13 ppmvd @ 15% O2, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
7. The CO emissions during start-up and shutdown periods shall not exceed 14.3 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The VOC emissions during steady state operation shall not exceed 20 ppmvd @ 15% O2 as methane, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
9. The VOC emissions during start-up and shutdown periods shall not exceed 7.53 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The SOx emissions shall not exceed 0.4 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The PM10 emissions shall not exceed 1.3 lb/hr. The filterable portion of the PM10 shall not exceed 0.02 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The ammonia emissions shall not exceed 10 ppmvd @ 15% O2 over a 24 hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The combined NOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 12,049 pounds during the first calendar quarter, 12,049 pounds during the second calendar quarter, 12,049 pounds during the third calendar quarter and 12,050 pounds during the fourth calendar quarter. [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.

14. The combined CO emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 74,864 pounds during any rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The combined VOC emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 13,920 pounds during the first calendar quarter, 13,920 pounds during the second calendar quarter, 13,920 pounds during the third calendar quarter and 13,921 pounds during the fourth calendar quarter. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The combined VOC emissions from units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 49,993 lb/yr, based on a 12-month rolling total. The start-up and shutdown period contributions shall be determined utilizing the number of start-up and shutdown hours in combination with the start-up and shutdown period emission limit. The steady-state contribution shall be determined utilizing the fuel usage during the previous 12 months and the VOC emission concentration determined during the most recent District approved source test or representative testing allowed by the District. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The combined SOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 9,600 pounds during any rolling 12-month period. The SOx emissions shall be determined by applying the hourly emission limit of these permits to the combined number of operating hours of these engines. [District Rule 2201] Federally Enforceable Through Title V Permit
18. The combined PM10 emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 7,800 pounds during the first calendar quarter, 7,800 pounds during the second calendar quarter, 7,800 pounds during the third calendar quarter and 7,800 pounds during the fourth calendar quarter. The PM10 emissions shall be determined by applying the hourly emission limit of these permits to the combined number of operating hours of these engines. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Source testing to determine compliance with the NOx, CO, VOC, PM10 and ammonia emission limits of this permit shall be conducted not less than once every 12 months. The filterable and condensable PM10 emissions shall be determined separately. Representative testing, as specified in Rule 4702, may be allowed provided prior written District authorization is received. [District Rule 4702] Federally Enforceable Through Title V Permit
20. 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
21. 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
22. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702] Federally Enforceable Through Title V Permit
23. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC emissions shall be reported as methane and the NOx emissions shall be reported as NO2. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
24. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 18, 25A or 25B, or ARB Method 100, SOx - CARB Method 100, PM10 - EPA Methods 201A and 202, CARB Method 5, or EPA Methods 5 and 202, and ammonia - BAAQMD Method ST-1B. Alternative source test methods are allowed provided prior written District authorization is received. [District Rules 1081, 2201 and 4702] 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 owner or operator shall certify, maintain, operate, and quality-assure a continuous emission monitor system (CEMS) on each engine exhaust that continuously measures and records the exhaust gas NO_x, CO, and O₂ concentrations. Continuous emissions monitors shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns. [District Rules 1080 and 4702 and 40 CFR 60.8 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
26. NO_x, CO and O₂ CEMS shall meet the requirements in 40 CFR Part 60, Appendix F and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
27. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
28. The CEMS data shall be reduced to hourly averages as specified in 40 CFR Part 60 section 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
29. In accordance with 40 CFR Part 60, Appendix F, each CEMS shall be audited at least once each calendar quarter. The audit shall be either a Relative Accuracy Test Audit (RATA) or a Cylinder Gas Audit (CGA). A RATA must be conducted at least once every four calendar quarters. A CGA may be conducted in three of four calendar quarters, but in no more than three quarters in succession. The audit reports and the quarterly compliance reports shall be submitted to the District. [District Rule 1080 and 40 CFR 60.8 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
30. The owner or operator shall perform a RATA for NO_x, CO and O₂ as specified by 40 CFR Part 60, Appendix F 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 monitoring equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
31. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CEMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit
32. The facility shall maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system and shall make CEMS data available to the District's automated polling system on a daily basis. Upon notice by the District that the facility's CEMS 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 CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
33. The owner or operator shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period that a continuous monitoring system or monitoring device was inoperative. [District Rules 1080 and 2201 and 40 CFR 60.7(f)] Federally Enforceable Through Title V Permit
34. The owner or operator shall submit a written report of CEMS operations for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NO_x emissions, nature and the cause of excess emissions (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEMS was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.7(c) and (d)] Federally Enforceable Through Title V Permit
35. A record of the combined quarterly and annual NO_x, VOC and PM₁₀ emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar quarter and a rolling 12-month basis and shall be updated monthly. [District Rule 2201] Federally Enforceable Through Title V Permit

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

36. A record of the combined VOC emissions from units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11, based on a 12-month rolling total, shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
37. A record of the combined annual CO and SOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a rolling 12-month basis and shall be updated monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
38. A record of the combined number of hours of operation of permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a rolling 12-month basis and shall be updated monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
39. A record of the daily number of hours of start-up and shutdown time for this unit shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
40. A record of the combined number of hours of start-up and shutdown time for units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a rolling 12-month basis and shall be updated monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
41. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
42. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit
43. All records shall be maintained and retained on-site for a minimum of five years, and shall be made available for District inspection upon request. [District Rule 4702] 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-3233-9-3

EXPIRATION DATE: 11/30/2015

EQUIPMENT DESCRIPTION:

11,667 BHP NATURAL GAS FIRED WARTSILA 20V34SG IC ENGINE POWERING AN 8.44 MW ELECTRICAL GENERATOR. THE ENGINE IS EQUIPPED WITH A TURBOCHARGER, AN INTERCOOLER, A SELECTIVE CATALYTIC REDUCTION SYSTEM WITH AMMONIA INJECTION AND AN OXIDATION CATALYST (MODESTO IRRIGATION DISTRICT DESIGNATION 3D).

PERMIT UNIT REQUIREMENTS

1. The unit shall be fueled solely with PUC quality natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The combined start-up and shutdown duration of this unit shall not exceed 2 hours during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The combined start-up and shutdown duration for permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 2010 hours during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The NOx emissions during steady state operation shall not exceed 5 ppmvd @15% O2, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
5. The NOx emissions during start-up and shutdown periods shall not exceed 9.48 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The CO emissions during steady state operation shall not exceed 13 ppmvd @ 15% O2, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
7. The CO emissions during start-up and shutdown periods shall not exceed 14.3 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The VOC emissions during steady state operation shall not exceed 20 ppmvd @ 15% O2 as methane, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
9. The VOC emissions during start-up and shutdown periods shall not exceed 7.53 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The SOx emissions shall not exceed 0.4 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The PM10 emissions shall not exceed 1.3 lb/hr. The filterable portion of the PM10 shall not exceed 0.02 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The ammonia emissions shall not exceed 10 ppmvd @ 15% O2 over a 24 hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The combined NOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 12,049 pounds during the first calendar quarter, 12,049 pounds during the second calendar quarter, 12,049 pounds during the third calendar quarter and 12,050 pounds during the fourth calendar quarter. [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.

14. The combined CO emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 74,864 pounds during any rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The combined VOC emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 13,920 pounds during the first calendar quarter, 13,920 pounds during the second calendar quarter, 13,920 pounds during the third calendar quarter and 13,921 pounds during the fourth calendar quarter. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The combined VOC emissions from units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 49,993 lb/yr, based on a 12-month rolling total. The start-up and shutdown period contributions shall be determined utilizing the number of start-up and shutdown hours in combination with the start-up and shutdown period emission limit. The steady-state contribution shall be determined utilizing the fuel usage during the previous 12 months and the VOC emission concentration determined during the most recent District approved source test or representative testing allowed by the District. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The combined SOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 9,600 pounds during any rolling 12-month period. The SOx emissions shall be determined by applying the hourly emission limit of these permits to the combined number of operating hours of these engines. [District Rule 2201] Federally Enforceable Through Title V Permit
18. The combined PM10 emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 7,800 pounds during the first calendar quarter, 7,800 pounds during the second calendar quarter, 7,800 pounds during the third calendar quarter and 7,800 pounds during the fourth calendar quarter. The PM10 emissions shall be determined by applying the hourly emission limit of these permits to the combined number of operating hours of these engines. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Source testing to determine compliance with the NOx, CO, VOC, PM10 and ammonia emission limits of this permit shall be conducted not less than once every 12 months. The filterable and condensable PM10 emissions shall be determined separately. Representative testing, as specified in Rule 4702, may be allowed provided prior written District authorization is received. [District Rule 4702] Federally Enforceable Through Title V Permit
20. 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
21. 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
22. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702] Federally Enforceable Through Title V Permit
23. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC emissions shall be reported as methane and the NOx emissions shall be reported as NO2. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
24. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 18, 25A or 25B, or ARB Method 100, SOx - CARB Method 100, PM10 - EPA Methods 201A and 202, CARB Method 5, or EPA Methods 5 and 202, and ammonia - BAAQMD Method ST-1B. Alternative source test methods are allowed provided prior written District authorization is received. [District Rules 1081, 2201 and 4702] 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 owner or operator shall certify, maintain, operate, and quality-assure a continuous emission monitor system (CEMS) on each engine exhaust that continuously measures and records the exhaust gas NO_x, CO, and O₂ concentrations. Continuous emissions monitors shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns. [District Rules 1080 and 4702 and 40 CFR 60.8 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
26. NO_x, CO and O₂ CEMS shall meet the requirements in 40 CFR Part 60, Appendix F and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
27. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
28. The CEMS data shall be reduced to hourly averages as specified in 40 CFR Part 60 section 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
29. In accordance with 40 CFR Part 60, Appendix F, each CEMS shall be audited at least once each calendar quarter. The audit shall be either a Relative Accuracy Test Audit (RATA) or a Cylinder Gas Audit (CGA). A RATA must be conducted at least once every four calendar quarters. A CGA may be conducted in three of four calendar quarters, but in no more than three quarters in succession. The audit reports and the quarterly compliance reports shall be submitted to the District. [District Rule 1080 and 40 CFR 60.8 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
30. The owner or operator shall perform a RATA for NO_x, CO and O₂ as specified by 40 CFR Part 60, Appendix F 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 monitoring equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
31. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CEMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit
32. The facility shall maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system and shall make CEMS data available to the District's automated polling system on a daily basis. Upon notice by the District that the facility's CEMS 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 CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
33. The owner or operator shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period that a continuous monitoring system or monitoring device was inoperative. [District Rules 1080 and 2201 and 40 CFR 60.7(f)] Federally Enforceable Through Title V Permit
34. The owner or operator shall submit a written report of CEMS operations for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NO_x emissions, nature and the cause of excess emissions (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEMS was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.7(c) and (d)] Federally Enforceable Through Title V Permit
35. A record of the combined quarterly and annual NO_x, VOC and PM₁₀ emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar quarter and a rolling 12-month basis and shall be updated monthly. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

36. A record of the combined VOC emissions from units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11, based on a 12-month rolling total, shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
37. A record of the combined annual CO and SO_x emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a rolling 12-month basis and shall be updated monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
38. A record of the combined number of hours of operation of permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a rolling 12-month basis and shall be updated monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
39. A record of the daily number of hours of start-up and shutdown time for this unit shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
40. A record of the combined number of hours of start-up and shutdown time for units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a rolling 12-month basis and shall be updated monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
41. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
42. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit
43. All records shall be maintained and retained on-site for a minimum of five years, and shall be made available for District inspection upon request. [District Rule 4702] Federally Enforceable Through Title V Permit

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

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-3233-10-3

EXPIRATION DATE: 11/30/2015

EQUIPMENT DESCRIPTION:

11,667 BHP NATURAL GAS FIRED WARTSILA 20V34SG IC ENGINE POWERING AN 8.44 MW ELECTRICAL GENERATOR. THE ENGINE IS EQUIPPED WITH A TURBOCHARGER, AN INTERCOOLER, A SELECTIVE CATALYTIC REDUCTION SYSTEM WITH AMMONIA INJECTION AND AN OXIDATION CATALYST (MODESTO IRRIGATION DISTRICT DESIGNATION 3E).

PERMIT UNIT REQUIREMENTS

1. The unit shall be fueled solely with PUC quality natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The combined start-up and shutdown duration of this unit shall not exceed 2 hours during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The combined start-up and shutdown duration for permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 2010 hours during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The NOx emissions during steady state operation shall not exceed 5 ppmvd @15% O₂, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
5. The NOx emissions during start-up and shutdown periods shall not exceed 9.48 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The CO emissions during steady state operation shall not exceed 13 ppmvd @ 15% O₂, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
7. The CO emissions during start-up and shutdown periods shall not exceed 14.3 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The VOC emissions during steady state operation shall not exceed 20 ppmvd @ 15% O₂ as methane, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
9. The VOC emissions during start-up and shutdown periods shall not exceed 7.53 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The SOx emissions shall not exceed 0.4 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The PM₁₀ emissions shall not exceed 1.3 lb/hr. The filterable portion of the PM₁₀ shall not exceed 0.02 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The ammonia emissions shall not exceed 10 ppmvd @ 15% O₂ over a 24 hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The combined NOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 12,049 pounds during the first calendar quarter, 12,049 pounds during the second calendar quarter, 12,049 pounds during the third calendar quarter and 12,050 pounds during the fourth calendar quarter. [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.

14. The combined CO emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 74,864 pounds during any rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The combined VOC emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 13,920 pounds during the first calendar quarter, 13,920 pounds during the second calendar quarter, 13,920 pounds during the third calendar quarter and 13,921 pounds during the fourth calendar quarter. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The combined VOC emissions from units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 49,993 lb/yr, based on a 12-month rolling total. The start-up and shutdown period contributions shall be determined utilizing the number of start-up and shutdown hours in combination with the start-up and shutdown period emission limit. The steady-state contribution shall be determined utilizing the fuel usage during the previous 12 months and the VOC emission concentration determined during the most recent District approved source test or representative testing allowed by the District. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The combined SOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 9,600 pounds during any rolling 12-month period. The SOx emissions shall be determined by applying the hourly emission limit of these permits to the combined number of operating hours of these engines. [District Rule 2201] Federally Enforceable Through Title V Permit
18. The combined PM10 emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 7,800 pounds during the first calendar quarter, 7,800 pounds during the second calendar quarter, 7,800 pounds during the third calendar quarter and 7,800 pounds during the fourth calendar quarter. The PM10 emissions shall be determined by applying the hourly emission limit of these permits to the combined number of operating hours of these engines. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Source testing to determine compliance with the NOx, CO, VOC, PM10 and ammonia emission limits of this permit shall be conducted not less than once every 12 months. The filterable and condensable PM10 emissions shall be determined separately. Representative testing, as specified in Rule 4702, may be allowed provided prior written District authorization is received. [District Rule 4702] Federally Enforceable Through Title V Permit
20. 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
21. 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
22. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702] Federally Enforceable Through Title V Permit
23. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC emissions shall be reported as methane and the NOx emissions shall be reported as NO2. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
24. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 18, 25A or 25B, or ARB Method 100, SOx - CARB Method 100, PM10 - EPA Methods 201A and 202, CARB Method 5, or EPA Methods 5 and 202, and ammonia - BAAQMD Method ST-1B. Alternative source test methods are allowed provided prior written District authorization is received. [District Rules 1081, 2201 and 4702] 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 owner or operator shall certify, maintain, operate, and quality-assure a continuous emission monitor system (CEMS) on each engine exhaust that continuously measures and records the exhaust gas NO_x, CO, and O₂ concentrations. Continuous emissions monitors shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns. [District Rules 1080 and 4702 and 40 CFR 60.8 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
26. NO_x, CO and O₂ CEMS shall meet the requirements in 40 CFR Part 60, Appendix F and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
27. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
28. The CEMS data shall be reduced to hourly averages as specified in 40 CFR Part 60 section 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
29. In accordance with 40 CFR Part 60, Appendix F, each CEMS shall be audited at least once each calendar quarter. The audit shall be either a Relative Accuracy Test Audit (RATA) or a Cylinder Gas Audit (CGA). A RATA must be conducted at least once every four calendar quarters. A CGA may be conducted in three of four calendar quarters, but in no more than three quarters in succession. The audit reports and the quarterly compliance reports shall be submitted to the District. [District Rule 1080 and 40 CFR 60.8 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
30. The owner or operator shall perform a RATA for NO_x, CO and O₂ as specified by 40 CFR Part 60, Appendix F 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 monitoring equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
31. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CEMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit
32. The facility shall maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system and shall make CEMS data available to the District's automated polling system on a daily basis. Upon notice by the District that the facility's CEMS 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 CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
33. The owner or operator shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period that a continuous monitoring system or monitoring device was inoperative. [District Rules 1080 and 2201 and 40 CFR 60.7(f)] Federally Enforceable Through Title V Permit
34. The owner or operator shall submit a written report of CEMS operations for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NO_x emissions, nature and the cause of excess emissions (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEMS was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.7(c) and (d)] Federally Enforceable Through Title V Permit
35. A record of the combined quarterly and annual NO_x, VOC and PM₁₀ emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar quarter and a rolling 12-month basis and shall be updated monthly. [District Rule 2201] Federally Enforceable Through Title V Permit

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

36. A record of the combined VOC emissions from units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11, based on a 12 month rolling total, shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
37. A record of the combined annual CO and SOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a rolling 12-month basis and shall be updated monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
38. A record of the combined number of hours of operation of permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a rolling 12-month basis and shall be updated monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
39. A record of the daily number of hours of start-up and shutdown time for this unit shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
40. A record of the combined number of hours of start-up and shutdown time for units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a rolling 12-month basis and shall be updated monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
41. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
42. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit
43. All records shall be maintained and retained on-site for a minimum of five years, and shall be made available for District inspection upon request. [District Rule 4702] Federally Enforceable Through Title V Permit

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

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-3233-11-3

EXPIRATION DATE: 11/30/2015

EQUIPMENT DESCRIPTION:

11,667 BHP NATURAL GAS FIRED WARTSILA 20V34SG IC ENGINE POWERING AN 8.44 MW ELECTRICAL GENERATOR. THE ENGINE IS EQUIPPED WITH A TURBOCHARGER, AN INTERCOOLER, A SELECTIVE CATALYTIC REDUCTION SYSTEM WITH AMMONIA INJECTION AND AN OXIDATION CATALYST (MODESTO IRRIGATION DISTRICT DESIGNATION 3F).

PERMIT UNIT REQUIREMENTS

1. The unit shall be fueled solely with PUC quality natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The combined start-up and shutdown duration of this unit shall not exceed 2 hours during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The combined start-up and shutdown duration for permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 2010 hours during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The NOx emissions during steady state operation shall not exceed 5 ppmvd @15% O2, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
5. The NOx emissions during start-up and shutdown periods shall not exceed 9.48 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The CO emissions during steady state operation shall not exceed 13 ppmvd @ 15% O2, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
7. The CO emissions during start-up and shutdown periods shall not exceed 14.3 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The VOC emissions during steady state operation shall not exceed 20 ppmvd @ 15% O2 as methane, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
9. The VOC emissions during start-up and shutdown periods shall not exceed 7.53 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The SOx emissions shall not exceed 0.4 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The PM10 emissions shall not exceed 1.3 lb/hr. The filterable portion of the PM10 shall not exceed 0.02 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The ammonia emissions shall not exceed 10 ppmvd @ 15% O2 over a 24 hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The combined NOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 12,049 pounds during the first calendar quarter, 12,049 pounds during the second calendar quarter, 12,049 pounds during the third calendar quarter and 12,050 pounds during the fourth calendar quarter. [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.

14. The combined CO emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 74,864 pounds during any rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The combined VOC emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 13,920 pounds during the first calendar quarter, 13,920 pounds during the second calendar quarter, 13,920 pounds during the third calendar quarter and 13,921 pounds during the fourth calendar quarter. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The combined VOC emissions from units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 49,993 lb/yr, based on a 12-month rolling total. The start-up and shutdown period contributions shall be determined utilizing the number of start-up and shutdown hours in combination with the start-up and shutdown period emission limit. The steady-state contribution shall be determined utilizing the fuel usage during the previous 12 months and the VOC emission concentration determined during the most recent District approved source test or representative testing allowed by the District. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The combined SOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 9,600 pounds during any rolling 12-month period. The SOx emissions shall be determined by applying the hourly emission limit of these permits to the combined number of operating hours of these engines. [District Rule 2201] Federally Enforceable Through Title V Permit
18. The combined PM10 emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 7,800 pounds during the first calendar quarter, 7,800 pounds during the second calendar quarter, 7,800 pounds during the third calendar quarter and 7,800 pounds during the fourth calendar quarter. The PM10 emissions shall be determined by applying the hourly emission limit of these permits to the combined number of operating hours of these engines. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Source testing to determine compliance with the NOx, CO, VOC, PM10 and ammonia emission limits of this permit shall be conducted not less than once every 12 months. The filterable and condensable PM10 emissions shall be determined separately. Representative testing, as specified in Rule 4702, may be allowed provided prior written District authorization is received. [District Rule 4702] Federally Enforceable Through Title V Permit
20. 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
21. 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
22. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702] Federally Enforceable Through Title V Permit
23. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC emissions shall be reported as methane and the NOx emissions shall be reported as NO2. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
24. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 18, 25A or 25B, or ARB Method 100, SOx - CARB Method 100, PM10 - EPA Methods 201A and 202, CARB Method 5, or EPA Methods 5 and 202, and ammonia - BAAQMD Method ST-1B. Alternative source test methods are allowed provided prior written District authorization is received. [District Rules 1081, 2201 and 4702] 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 owner or operator shall certify, maintain, operate, and quality-assure a continuous emission monitor system (CEMS) on each engine exhaust that continuously measures and records the exhaust gas NO_x, CO, and O₂ concentrations. Continuous emissions monitors shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns. [District Rules 1080 and 4702 and 40 CFR 60.8 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
26. NO_x, CO and O₂ CEMS shall meet the requirements in 40 CFR Part 60, Appendix F and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
27. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
28. The CEMS data shall be reduced to hourly averages as specified in 40 CFR Part 60 section 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
29. In accordance with 40 CFR Part 60, Appendix F, each CEMS shall be audited at least once each calendar quarter. The audit shall be either a Relative Accuracy Test Audit (RATA) or a Cylinder Gas Audit (CGA). A RATA must be conducted at least once every four calendar quarters. A CGA may be conducted in three of four calendar quarters, but in no more than three quarters in succession. The audit reports and the quarterly compliance reports shall be submitted to the District. [District Rule 1080 and 40 CFR 60.8 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
30. The owner or operator shall perform a RATA for NO_x, CO and O₂ as specified by 40 CFR Part 60, Appendix F 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 monitoring equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
31. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CEMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit
32. The facility shall maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system and shall make CEMS data available to the District's automated polling system on a daily basis. Upon notice by the District that the facility's CEMS 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 CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
33. The owner or operator shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period that a continuous monitoring system or monitoring device was inoperative. [District Rules 1080 and 2201 and 40 CFR 60.7(f)] Federally Enforceable Through Title V Permit
34. The owner or operator shall submit a written report of CEMS operations for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NO_x emissions, nature and the cause of excess emissions (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEMS was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.7(c) and (d)] Federally Enforceable Through Title V Permit
35. A record of the combined quarterly and annual NO_x, VOC and PM₁₀ emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar quarter and a rolling 12-month basis and shall be updated monthly. [District Rule 2201] Federally Enforceable Through Title V Permit

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

36. A record of the combined VOC emissions from units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11, based on a 12 month rolling total, shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
37. A record of the combined annual CO and SOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a rolling 12-month basis and shall be updated monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
38. A record of the combined number of hours of operation of permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a rolling 12-month basis and shall be updated month. [District Rule 2201] Federally Enforceable Through Title V Permit
39. A record of the daily number of hours of start-up and shutdown time for this unit shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
40. A record of the combined number of hours of start-up and shutdown time for units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a rolling 12-month basis and shall be updated monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
41. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
42. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit
43. All records shall be maintained and retained on-site for a minimum of five years, and shall be made available for District inspection upon request. [District Rule 4702] Federally Enforceable Through Title V Permit

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

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-3233-13-1

EXPIRATION DATE: 11/30/2015

EQUIPMENT DESCRIPTION:

62 BHP CUMMINS CFP33-F25 (OR EQUIVALENT) TIER 2 CERTIFIED DIESEL FIRED IC ENGINE POWERING AN EMERGENCY FIRE PUMP.

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702 and 17 CCR 93115 and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
3. 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]
4. 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] Federally Enforceable Through Title V Permit
5. The emissions from this engine shall not exceed any of the following limits: 4.24 g-NOx/bhp-hr, 0.82 g-CO/bhp-hr, 0.18 g-VOC/bhp-hr or 0.0053 g-SOx/bhp-hr. [District Rule 2201 and 13 CCR 2423 and 17 CCR 93115 and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
6. The emissions from this engine shall not exceed 0.17 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102 and 13 CCR 2423 and 17 CCR 93115 and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
7. 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 and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
8. 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 and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
9. 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
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 Rule 4702 and 17 CCR 93115 and 40 CFR Part 60 Subpart IIII] 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. All records shall be maintained and retained on-site for a minimum of five years, and shall be made available for District inspection upon request. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit

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

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-3233-14-2

EXPIRATION DATE: 11/30/2015

EQUIPMENT DESCRIPTION:

480 BHP CATERPILLAR MODEL C9 ATAAC TIER 3 CERTIFIED DIESEL FIRED IC ENGINE POWERING AN EMERGENCY GENERATOR

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702 and 17 CCR 93115 and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
3. {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]
4. 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] Federally Enforceable Through Title V Permit
5. The emissions from this engine shall not exceed any of the following limits: 4.11 g-NO_x/bhp-hr, 0.25 g-CO/bhp-hr, 0.06 g-VOC/bhp-hr or 0.0058 g-SO_x/bhp-hr. [District Rule 2201 and 17 CCR 93115 and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
6. The PM₁₀ emissions from this engine shall not exceed 0.033 g/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102 and 17 CCR 93115 and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
7. 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 and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
8. Operation of this engine shall not exceed 12 hours for any purpose in any one day. [District Rule 2201] 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 41 hours per calendar year. [District Rule 4702 and 17 CCR 93115 and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
10. 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
11. 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] Federally Enforceable Through Title V Permit

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

12. 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
13. 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 and 17 CCR 93115 and 40 CFR Part 60 Subpart IIII]] Federally Enforceable Through Title V Permit
14. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702 and 17 CCR 93115 and 40 CFR Part 60 Subpart IIII]] Federally Enforceable Through Title V Permit

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

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ATTACHMENT B

Previous Title V Operating Permit

San Joaquin Valley Air Pollution Control District

FACILITY: N-3233-0-3

EXPIRATION DATE: 11/30/2015

FACILITY-WIDE REQUIREMENTS

1. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [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, 9.9.1 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: 920 WOODLAND AVENUE, MODESTO, CA 95351
N-3233-0-3; Nov 30 2015 1:19PM - CLERICOB

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 Rule 8021 and 8011] Federally Enforceable Through Title V Permit
30. Outdoor handling, storage and transport of any bulk material which emits dust shall comply with the requirements of District Rule 8031, unless specifically exempted under Section 4.0 of Rule 8031 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8031 and 8011] Federally Enforceable Through Title V Permit
31. An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8041 and 8011] Federally Enforceable Through Title V Permit
32. Whenever open areas are disturbed, or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8051 and 8011] Federally Enforceable Through Title V Permit
33. Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8061 and Rule 8011] Federally Enforceable Through Title V Permit
34. Any unpaved vehicle/equipment area that anticipates more than 50 Average annual daily Trips (AADT) shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 150 vehicle trips per day (VDT) shall comply with the requirements of Section 5.1.2 of District Rule 8071. On each day that 25 or more VDT with 3 or more axles will occur on an unpaved vehicle/equipment traffic area, the owner/operator shall comply with the requirements of Section 5.1.3 of District Rule 8071. On each day when a special event will result in 1,000 or more vehicles that will travel/park on an unpaved area, the owner/operator shall comply with the requirements of Section 5.1.4 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (9/16/2004) or Rule 8011 (8/19/2004). [District Rule 8071 and Rule 8011] Federally Enforceable Through Title V Permit
35. Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M] Federally Enforceable Through Title V Permit

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. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin January 1st 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
42. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-3233-1-6

EXPIRATION DATE: 11/30/2015

EQUIPMENT DESCRIPTION:

ONE (1) GENERAL ELECTRIC LM5000 PD AERO-DERIVATIVE 460 MMBTU/HR (HHV) GAS TURBINE ENGINE WITH STEAM INJECTION, OXIDIZATION CATALYST, AMMONIA INJECTION, AND SELECTIVE CATALYTIC REDUCTION SERVING A 49.9 MW ELECTRICAL GENERATOR

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
2. When operating on natural gas, the unit shall be fired exclusively on PUC-regulated natural gas which has a sulfur content of less than or equal to 0.017% by weight. When operating on liquid fuel, the unit shall be fired on low sulfur light distillate fuel with less than or equal to 0.05% sulfur by weight. [District NSR Rule; 40 CFR 60.333(b); Stanislaus County Rule 407] Federally Enforceable Through Title V Permit
3. The sulfur content of each fuel source shall be documented in a valid purchase contract, a supplier certification, a tariff sheet or transportation contract. [40 CFR 60.334(h)(3) and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
4. Start-up is defined as the period beginning with the initial firing of the turbine and ending when the turbine meets the NOx and CO limits for steady state operation. Shutdown is defined as the period beginning with initiation of the turbine shutdown sequence and ending with cessation of firing of the gas turbine. [District Rule 4703] Federally Enforceable Through Title V Permit
5. A violation of NOx emission standards indicated by the NOx CEM shall be reported by the operator to the APCO within 96 hours. [District Rule 1080, 9.0] Federally Enforceable Through Title V Permit
6. Operator shall notify the APCO no later than eight hours after the detection of a breakdown of the CEM. Operator shall inform the APCO of the intent to shut down the CEM at least 24 hours prior to the event. [District Rule 1080, 10.0] Federally Enforceable Through Title V Permit
7. The owner or operator shall submit a written report of CEM operations for each calendar quarter to the APCO. The report shall be received by the District within 30 days of the end of the quarter and shall include the following: time intervals, data and magnitude of excess NOx emissions, nature and the cause of excess emissions (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; applicable time and date of each period during which a CEM was inoperative (monitor downtime), except for zero and span checks and the nature of system repairs and adjustments; a negative declaration when no excess emissions occurred. [40 CFR 60.334(j), (j)(5) and District Rule 1080, 8.0] Federally Enforceable Through Title V Permit
8. The owner or operator shall maintain CEMS records that contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance, duration of any periods during which a continuous monitoring system or monitoring device was inoperative and emission measurements. [40 CFR 60.7 (b) and District Rules 1080, 7.3 and District NSR Rule] Federally Enforceable Through Title V Permit

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

9. The CEMS shall be linked to a data logger which is compatible with the District's Data acquisition system. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year from the date the facility is notified of the problem by the District, provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080, 7.1] Federally Enforceable Through Title V Permit
10. The Turbine and associated ancillary equipment must be properly maintained and kept in good operating condition at all times. [District NSR Rule] Federally Enforceable Through Title V Permit
11. The Turbine and associated ancillary equipment shall only be operated by personnel properly trained in its operation. [District NSR Rule] Federally Enforceable Through Title V Permit
12. Natural gas; OGT; JP4; Jet A; Jet B; No. 1d; No 1; 1GT; No. 2d; No. 2; and 2GT are the only fuels permitted for combustion in the Turbine. [District NSR Rule] Federally Enforceable Through Title V Permit
13. The Turbine shall be equipped and operated with an Automatic Combustion Control System. [District NSR Rule] Federally Enforceable Through Title V Permit
14. The Turbine shall not be operated unless the exhaust gas is subjected to the Oxidation (CO) Catalyst System and the Selective Catalytic Reduction (SCR) System prior to discharge to the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
15. The CO Catalyst System and the SCR Systems must be in full use whenever the Turbine is in operation, except during start-up and shutdown periods. [District NSR Rule] Federally Enforceable Through Title V Permit
16. The facility-wide CO emissions shall not exceed 199,999 pounds during any one calendar year. [District NSR Rule] Federally Enforceable Through Title V Permit
17. The facility-wide SOx emissions shall not exceed 54,750 pounds per year. [District NSR Rule] Federally Enforceable Through Title V Permit
18. The Ammonia Injection System must be utilized whenever the flue gas temperature at the inlet of the SCR System exceeds 550 degrees F, except during start up and shutdown. [District NSR Rule] Federally Enforceable Through Title V Permit
19. The NOx emission concentration, measured as NO2, shall not exceed 3.5 ppmv, dry, corrected to 15% O2 when operating on natural gas; and 6.2 ppmv, dry, corrected to 15% O2 when operating on fuel oil, except for start-up or shut-down periods. [District NSR Rule and 4703] Federally Enforceable Through Title V Permit
20. A visible emissions inspection shall be conducted after every 400 cumulative hours of operation on fuel oil. If a visible emissions inspection documents opacity, a EPA Method 9 evaluation shall be completed within three working days, or during the next period of operation if the unit ceases firing on fuel oil within the three working day period. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. The CO emission concentration, at maximum heat input capacity shall not exceed 16.0 ppmv, dry, corrected to 15% O2, when operating on Natural Gas, and 20.0 ppmv, dry, corrected to 15% O2, when operating on Fuel Oil, except for start-up and shut-down periods. [District NSR Rule] Federally Enforceable Through Title V Permit
22. The NMHC emission concentration, at maximum heat input capacity shall not exceed 0.000475% by weight, wet, while operating on Natural Gas and 0.000713% by weight, wet, while operating on Fuel Oil, except for start-up and shut-down periods. [District NSR Rule] Federally Enforceable Through Title V Permit
23. The NH3 emission concentration shall not exceed 25.0 ppmv, dry, corrected to 15% O2. [District NSR Rule] Federally Enforceable Through Title V Permit
24. The owner or operator shall be required to conform to the compliance testing and sampling procedures described in District Rule 1081, 3.0, and 6.0 (as amended 12/16/93). [District Rule 1081 , 3.0, and 6.0] Federally Enforceable Through Title V Permit
25. All concentrations of gaseous emissions must be expressed in parts per million, by volume, dry basis, corrected to 15% O2. [District NSR Rule] 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.

26. A complete laboratory analysis of Fuel Oil combusted during any source test shall be provided along with the source test results. Testing shall include, but not be limited to, an ultimate analysis of Fuel Oil & a full set of metals pursuant to AB2588. [District NSR Rule] Federally Enforceable Through Title V Permit
27. Annual performance testing shall include, but not be limited to, an analysis of the exhaust stream directly after the HRSG for: A. Flow rate; B. Oxides of Nitrogen; C. Carbon Monoxide; D. Hydrocarbons: Methane & Non-Methane, including saturated and unsaturated; E. Ammonia; F. Particulates (Fuel Oil only); G. Oxides of Sulfur (Fuel Oil only). [District NSR Rule] Federally Enforceable Through Title V Permit
28. Performance testing shall be conducted annually to measure NOx and CO emission concentrations using the following test methods: EPA Methods 7E or 20 for NOx emissions, EPA Methods 10 or 10B for CO emissions, EPA Methods 3, 3A, or 20 for Oxygen content of the exhaust gas. The 9-run tests for NOx RATA purposes, shall be performed at highest physically achievable load of the gas turbine. [40 CFR 60.335(a), (b)(7) and District Rule 4703, 6.3.1, 6.4.1, 6.4.2, & 6.4.3] Federally Enforceable Through Title V Permit
29. Annual performance testing shall be performed at representative performance as specified by the APCO or between 90 and 100 percent of peak (or the highest physically achievable) load. Annual performance testing is required for Natural Gas only, unless Fuel Oil usage exceeds 200 hours per year. [District NSR Rule and 40 CFR 60.335(b)(7) and 60.8(c)] Federally Enforceable Through Title V Permit
30. The District shall be notified at least 30 days prior to any performance testing and a test plan shall be submitted for District approval at least 15 days prior to such testing. [District Rule 1081, 7.1] Federally Enforceable Through Title V Permit
31. Performance testing shall be witnessed or authorized by District personnel. Test results shall be submitted to the District within 60 days of performance testing. [District Rule 1081, 7.2, 7.3] Federally Enforceable Through Title V Permit
32. A Continuous Monitoring System shall be installed and operated to measure and record the fuel consumption, the mass ratio of steam-to-fuel injected, the mass ratio of water-to-fuel injected into the Combustor, the flue gas temperature at the inlet of the SCR System, NOx, SOx (when firing on fuel oil), O2 or CO2 and CO emission concentration in the exhaust gas after the HRSG. [District NSR Rule] Federally Enforceable Through Title V Permit
33. The owner or operator shall install, certify, maintain, operate and quality-assure a Continuous Emission Monitoring System (CEMS) for NOx, CO, and O2. The CEMS shall continuously measure and record the exhaust gas NOx and O2 concentrations, hours of operation and fuel consumption. The CEMS shall be capable of monitoring emissions during startups and shutdowns as well as during normal operating conditions. [40 CFR 60.334 (b)(2) and District NSR Rule and 4703, 6.2.1] Federally Enforceable Through Title V Permit
34. The Continuous Monitoring System shall convert the actual NOx, SOx (when firing on fuel oil), and CO concentrations to corrected concentrations at 15% O2, dry basis. The System shall also record the total lb/day emissions of NOx, SOx (when firing on fuel oil), and CO. [District NSR Rule] Federally Enforceable Through Title V Permit
35. Results of the CEM system shall be averaged over a three hour time period, using consecutive 15-minute sampling periods in accordance with all applicable requirements of CFR 60.13. [40 CFR 60.13 and District Rule 4703, 5.1, 6.4] Federally Enforceable Through Title V Permit
36. The NOx emission rate shall not exceed 150.0 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
37. The CO emission rate shall not exceed 550.0 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
38. The NMHC emission rate shall not exceed 143.0 lb/day while operating on Natural Gas and 143.4 lb/day when operating on Fuel Oil. [District NSR Rule] Federally Enforceable Through Title V Permit
39. The SOx emission rate shall not exceed 12.9 lb/day while operating on Natural Gas and 150.0 lb/day when operating on Fuel Oil. [District NSR Rule] 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.

40. The PM10 emission rate shall not exceed 10.0 lb/hr while operating on either Natural Gas or Fuel Oil. The PM10 emission rate shall not exceed 74.4 lb/day while operating on Natural Gas and 80.0 lb/day when operating on Fuel Oil. [District NSR Rule] Federally Enforceable Through Title V Permit
41. The cold start-up period must not exceed two (2) hours in any one day, commencing at midnight. The shut-down period must not exceed two (2) hours in any one day, commencing at midnight. [District NSR Rule] Federally Enforceable Through Title V Permit
42. The emissions during the start-up and shut-down periods must be counted towards the applicable daily emission limitations. [District NSR Rule] Federally Enforceable Through Title V Permit
43. There shall be no visible emissions from the turbine, except for uncombined water and except during periods of start-up and shutdown. [District NSR Rule] Federally Enforceable Through Title V Permit
44. The owner or operator shall maintain a stationary gas turbine system operating log that includes on a daily basis, the actual local time start-up and stop time, length and reason for reduced load periods, total hours of operation, the quantity and type of fuel used, steam-to-fuel ratios, water-to-fuel ratios and ammonia usage. [40 CFR 60.334 (j) and District Rule 4703; 6.2.6] Federally Enforceable Through Title V Permit
45. The permittee shall retain records of the cumulative annual facility-wide CO and SOx emissions. The record shall be updated daily. [District NSR Rule] Federally Enforceable Through Title V Permit
46. 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
47. 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
48. 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
49. 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
50. 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
51. 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
52. 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
53. 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
54. 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
55. 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

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

56. 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
57. 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
58. 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
59. The owners and operators of the each affected unit at the source shall keep on site the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority: (i) The certificate of representation for the designated representative for the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site beyond such five-year period until such documents are superceded because of the submission of a new certificate of representation changing the designated representative. [40 CFR 72] Federally Enforceable Through Title V Permit
60. 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
61. 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-3233-4-5

EXPIRATION DATE: 11/30/2015

EQUIPMENT DESCRIPTION:

87 MW LOAD FOLLOWING POWER PLANT SERVED BY A 466 MMBTU/HR GENERAL ELECTRIC LM6000 SPRINT MODEL NATURAL GAS FIRED TURBINE WITH WATER INJECTION, A 234 MMBTU/HR JOHN ZINK LDRW-LE OR EQUIVALENT DUCT BURNER, A HEAT RECOVERY STEAM GENERATOR, A CONDENSING STEAM TURBINE, AN INLET AIR COOLING/FILTERING SYSTEM, A SELECTIVE CATALYTIC REDUCTION SYSTEM, AN OXIDATION CATALYST AND A LUBE OIL COALESCER

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. The exhaust stack exit shall be at least 90 feet in height, the exhaust shall be vertical and the stack exhaust flow shall not be impeded. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The gas turbine engine and generator lube oil vents shall be equipped with mist eliminators. Visible emissions from lube oil vents shall not exhibit opacity of 5% or greater except for up to three minutes in any hour. [District NSR Rule] Federally Enforceable Through Title V Permit
4. 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 NSR Rule] Federally Enforceable Through Title V Permit
5. The owner or operator shall install, certify, maintain, operate and quality-assure a Continuous Emission Monitoring System (CEMS) for NO_x, CO, and O₂. The CEMS shall continuously measure and record the exhaust gas NO_x and O₂ concentrations, hours of operation and fuel consumption. The CEMS shall be capable of monitoring emissions during startups and shutdowns as well as during normal operating conditions. [40 CFR 60.334 (b)(2) and District NSR Rule and 4703, 6.2.1] Federally Enforceable Through Title V Permit
6. 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. [40 CFR 60.334(b)(2) and District Rule 1080, 6.4] Federally Enforceable Through Title V Permit
7. The CEMS shall be linked to a data logger which is compatible with the District's Data acquisition system. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080, 7.1] Federally Enforceable Through Title V Permit
8. The permittee shall monitor and record the NO_x emission rate, the ammonia injection rate, the water injection rate, the exhaust temperature and the calculated exhaust flow rate. [District Rule 4703 and 4001] Federally Enforceable Through Title V Permit
9. The owner or operator shall be required to conform to the compliance testing and sampling procedures described in District Rule 1081, 3.0, and 6.0 (as amended 12/16/93). [District Rule 1081, 3.0, and 6.0] 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. Start-up and shutdown durations shall not exceed 2 hours per day and 365 hours per calendar year. Start-up is defined as the period beginning with the initial firing of the turbine and ending when the turbine meets the NOx and CO limits for steady state operation. Shutdown is defined as the period beginning with initiation of the turbine shutdown sequence and ending with cessation of firing of the gas turbine. [District NSR Rule and 4703] Federally Enforceable Through Title V Permit
11. The facility-wide CO emissions shall not exceed 199,999 pounds during any one calendar year. [District NSR Rule] Federally Enforceable Through Title V Permit
12. The facility-wide SOx emissions shall not exceed 54,750 pounds during any one calendar year. [District NSR Rule] Federally Enforceable Through Title V Permit
13. The NOx emissions from this unit shall not exceed 58,340 pounds during any one calendar year. [District NSR Rule] Federally Enforceable Through Title V Permit
14. The NOx emissions during start-up and shutdown periods shall not exceed 24.6 pounds during any one hour. [District NSR Rule] Federally Enforceable Through Title V Permit
15. The NOx emissions, except during start-up and shutdown periods, shall not exceed 2.5 ppmvd @ 15% O2 over a 1 hour rolling average. [District NSR Rule and 4703] Federally Enforceable Through Title V Permit
16. The CO emissions during start-up and shutdown periods shall not exceed 40.8 pounds during any one hour. [District NSR Rule] Federally Enforceable Through Title V Permit
17. The CO emissions, except during start-up and shutdown periods, shall not exceed 6.0 ppmvd @ 15% O2 over a 3 hour rolling average. [District NSR Rule] Federally Enforceable Through Title V Permit
18. The VOC emissions shall not exceed 2.0 ppmvd, as methane, @ 15% O2 over a 3 hour rolling average. [District NSR Rule] Federally Enforceable Through Title V Permit
19. The PM10 emissions shall not exceed 2.5 pounds during any one hour while only the turbine is operating. [District NSR Rule] Federally Enforceable Through Title V Permit
20. The PM10 emission shall not exceed 3.0 pounds during any one hour while both the turbine and duct burner are operating. [District NSR Rule] Federally Enforceable Through Title V Permit
21. This unit shall be fired exclusively on natural gas as defined in 40 CFR 60.331(u) which has a total sulfur content of no greater than 1.0 grain of sulfur compounds (as S) per 100 scf. [40 CFR 60.333(b), Stanislaus County Rule 407, and District NSR Rule] Federally Enforceable Through Title V Permit
22. The sulfur content of each fuel source shall be: (i) documented in a valid purchase contract, a supplier certification, a tariff sheet or transportation contract or (ii) monitored weekly using ASTM Methods D4084, D5504, D6228, or Gas Processors Association Standard 2377. If sulfur content is less than 1.0 gr/100 scf for 8 consecutive weeks, then the Monitoring frequency shall be every six (6) months. If any six (6) month monitoring show an exceedance, weekly monitoring shall resume. [40 CFR 60.334(h)(3) and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
23. The ammonia (NH3) emissions shall not exceed 10 ppmvd @ 15% O2 over a 24 hour rolling average. [District NSR Rule] Federally Enforceable Through Title V Permit
24. Ammonia slip shall be calculated utilizing the following procedure: ammonia slip ppmvd @ 15% O2 = ((a - (b x c/1,000,000)) x (1,000,000 / b) x d, where a = ammonia injection rate (lb/hr) / (17 lb/lb mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NOx concentration ppmvd @ 15% O2 across the catalyst and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip. Should the calculated ammonia slip value indicate a violation of the emission limit, source testing for ammonia slip shall be conducted with the turbine system operating under conditions similar to those it was operating at during the calculated violation. Source testing shall be conducted within 60 days of the calculated violation. Alternatively, the permittee may utilize a continuous in-stack ammonia monitor, acceptable to the District to monitor compliance. At least 60 days prior to using a NH3 CEM, the permittee shall submit a monitoring plan for District review and approval. [District Rule 4102] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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25. Performance testing shall be conducted annually to measure NOx and CO emission concentrations using the following test methods: EPA Methods 7E or 20 for NOx emissions, EPA Methods 10 or 10B for CO emissions, EPA Methods 3, 3A, or 20 for Oxygen content of the exhaust gas. The 9-run tests for NOx RATA purposes, shall be performed at highest physically achievable load of the gas turbine. [40 CFR 60.335(a), (b)(7) and District Rule 4703, 6.3.1, 6.4.1, 6.4.2, & 6.4.3] Federally Enforceable Through Title V Permit
26. Performance testing to demonstrate compliance with the VOC, PM10 and NH3 requirements of this permit shall be conducted at least once every twelve months. [District NSR Rule and 4001] Federally Enforceable Through Title V Permit
27. The District shall be notified at least 30 days prior to any performance testing and a test plan shall be submitted for District approval at least 15 days prior to such testing. [District Rule 1081, 7.1] Federally Enforceable Through Title V Permit
28. Performance testing shall be witnessed or authorized by District personnel. Test results shall be submitted to the District within 60 days of performance testing. [District Rule 1081, 7.2, 7.3] Federally Enforceable Through Title V Permit
29. Performance testing for VOC shall be conducted utilizing EPA method 18 or EPA method 25. Alternative source testing methods will be allowed provided prior written approval is received from both the District and the EPA. [District NSR Rule] Federally Enforceable Through Title V Permit
30. Performance testing to measure concentrations of PM10 shall be conducted using EPA methods 201 and 202, or EPA methods 201A and 202, or CARB method 501 in conjunction with CARB method 5. Alternative source testing methods will be allowed provided prior written approval is received from both the District and the EPA. [District NSR Rule] Federally Enforceable Through Title V Permit
31. The owner or operator shall maintain CEMS records that contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance, duration of any periods during which a continuous monitoring system or monitoring device was inoperative and emission measurements. [40 CFR 60.7 (b) and District Rule 1080, 7.3 and District NSR Rule] Federally Enforceable Through Title V Permit
32. The owner or operator shall maintain a stationary gas turbine system operating log that includes on a daily basis, the actual local time start-up and stop time, length and reason for reduced load periods, total hours of operation, and the quantity and type of fuel used. [District Rule 4703; 6.2.6] Federally Enforceable Through Title V Permit
33. The permittee shall retain records of the cumulative annual facility-wide CO and SOx emissions. The record shall be updated daily. [District NSR Rule] Federally Enforceable Through Title V Permit
34. The annual facility SOx emissions for natural gas shall be calculated utilizing the annual quantity of natural gas burned and the permitted natural gas sulfur content limit. The annual facility SOx emissions for liquid fuels shall be calculated utilizing the annual quantity of liquid fuels burned and either the permitted fuel sulfur content limit or the actual measured sulfur content of the liquid fuels burned. [District NSR Rule] Federally Enforceable Through Title V Permit
35. The annual CO emissions from the turbines shall be determined utilizing CEMS data. [District NSR Rule] Federally Enforceable Through Title V Permit
36. The permittee shall maintain hourly records of the NOx, CO and ammonia concentrations (ppmv @ 15% O2). [District NSR Rule and 4201] Federally Enforceable Through Title V Permit
37. The permittee shall maintain records of the cumulative annual NOx emissions from this unit. The record shall be updated daily. [District NSR Rule] 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.

38. The owner or operator shall submit a written report of CEM operations for each calendar quarter to the APCO. The report shall be received by the District within 30 days of the end of the quarter and shall include the following: time intervals, data and magnitude of excess NOx emissions, nature and the cause of excess emissions (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; applicable time and date of each period during which a CEM was inoperative (monitor downtime), except for zero and span checks and the nature of system repairs and adjustments; a negative declaration when no excess emissions occurred. [40 CFR 60.334(j), (j)(5) and District Rule 1080, 8.0] Federally Enforceable Through Title V Permit
39. Results of the CEM system shall be averaged over the time period applicable to each emission limit listed on this permit, using consecutive 15-minute sampling periods in accordance with all applicable requirements of CFR 60.13. [40 CFR 60.13 and District Rule 4703, 5.1, 6.4] Federally Enforceable Through Title V Permit
40. Any gas turbine with an intermittently operated auxiliary burner shall demonstrate compliance with the auxiliary burner both on and off. [40 CFR 60.335(b)(3) and District Rule 4703, 6.3.3] Federally Enforceable Through Title V Permit
41. 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
42. 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
43. 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
44. 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
45. 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
46. 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
47. 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
48. 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
49. 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
50. 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
51. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

52. The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77. [40 CFR 77] Federally Enforceable Through Title V Permit
53. The owners and operators of an affected unit that has excess emissions in any calendar year shall: (i) Pay without demand the penalty required, and pay up on demand the interest on that penalty; and (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77. [40 CFR 77] Federally Enforceable Through Title V Permit
54. The owners and operators of the each affected unit at the source shall keep on site the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority: (i) The certificate of representation for the designated representative for the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site beyond such five-year period until such documents are superceded because of the submission of a new certificate of representation changing the designated representative. [40 CFR 72] Federally Enforceable Through Title V Permit
55. The owners and operators of each affected unit at the source shall keep on site each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority; (ii) All emissions monitoring information, in accordance with 40 CFR part 75; (iii) Copies of all reports, compliance certifications and other submissions and all records made or required under the Acid Rain Program; (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission that demonstrates compliance with the requirements of the Acid Rain Program. [40 CFR 75] Federally Enforceable Through Title V Permit
56. The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR 75 Subpart I. [40 CFR 75] Federally Enforceable Through Title V Permit

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-3233-5-3

EXPIRATION DATE: 11/30/2015

EQUIPMENT DESCRIPTION:

27,000 GALLON PER MINUTE COOLING TOWER WITH A HIGH EFFICIENCY DRIFT ELIMINATOR

PERMIT UNIT REQUIREMENTS

1. No hexavalent chromium containing compounds shall be added to the water that is circulating through the cooling tower or will circulate through the cooling tower. [District Rule 7012]
2. The drift rate shall not exceed 0.0005%. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The PM10 emission rate shall not exceed 0.17 pounds during any one hour. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Compliance with the PM10 daily emission limit shall be demonstrated as follows: $PM10 \text{ lb/day} = \text{circulating water recirculation rate} * \text{total dissolved solids concentration in the blowdown water} * \text{design drift rate}$. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. Total Dissolved Solids (TDS) in the blowdown water shall be sampled and analyzed using a conductivity analyzer at least quarterly. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. Water recirculation rate shall be measured and recorded quarterly. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
8. The operator shall maintain records of all circulating water tests performed. Records shall be maintained for at least 5 years and shall be made available to the District upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-3233-6-2

EXPIRATION DATE: 11/30/2015

EQUIPMENT DESCRIPTION:

11,667 BHP NATURAL GAS FIRED WARTSILA 20V34SG IC ENGINE POWERING AN 8.44 MW ELECTRICAL GENERATOR. THE ENGINE IS EQUIPPED WITH A TURBOCHARGER, AN INTERCOOLER, A SELECTIVE CATALYTIC REDUCTION SYSTEM WITH AMMONIA INJECTION AND AN OXIDATION CATALYST (MODESTO IRRIGATION DISTRICT DESIGNATION 3A).

PERMIT UNIT REQUIREMENTS

1. The unit shall be fueled solely with PUC quality natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The combined start-up and shutdown duration of this unit shall not exceed 2 hours during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The combined start-up and shutdown duration for permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 2010 hours during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The NOx emissions during steady state operation shall not exceed 5 ppmvd @15% O2, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
5. The NOx emissions during start-up and shutdown periods shall not exceed 9.48 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The CO emissions during steady state operation shall not exceed 13 ppmvd @ 15% O2, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
7. The CO emissions during start-up and shutdown periods shall not exceed 14.3 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The VOC emissions during steady state operation shall not exceed 20 ppmvd @ 15% O2 as methane, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
9. The VOC emissions during start-up and shutdown periods shall not exceed 7.53 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The SOx emissions shall not exceed 0.4 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The PM10 emissions shall not exceed 1.3 lb/hr. The filterable portion of the PM10 shall not exceed 0.02 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The ammonia emissions shall not exceed 10 ppmvd @ 15% O2 over a 24 hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The combined NOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 12,049 pounds during the first calendar quarter, 12,049 pounds during the second calendar quarter, 12,049 pounds during the third calendar quarter and 12,050 pounds during the fourth calendar quarter. [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.

14. The combined CO emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 74,864 pounds during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The combined VOC emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 13,920 pounds during the first calendar quarter, 13,920 pounds during the second calendar quarter, 13,920 pounds during the third calendar quarter and 13,921 pounds during the fourth calendar quarter. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The combined VOC emissions from units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 49,993 lb/yr, based on a 12-month rolling total. The start-up and shutdown period contributions shall be determined utilizing the number of start-up and shutdown hours in combination with the start-up and shutdown period emission limit. The steady-state contribution shall be determined utilizing the fuel usage during the previous 12 months and the VOC emission concentration determined during the most recent District approved source test or representative testing allowed by the District. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The combined SOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 9,600 pounds during any one calendar year. The SOx emissions shall be determined by applying the hourly emission limit of these permits to the combined number of operating hours of these engines. [District Rule 2201] Federally Enforceable Through Title V Permit
18. The combined PM10 emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 7,800 pounds during the first calendar quarter, 7,800 pounds during the second calendar quarter, 7,800 pounds during the third calendar quarter and 7,800 pounds during the fourth calendar quarter. The PM10 emissions shall be determined by applying the hourly emission limit of these permits to the combined number of operating hours of these engines. [District Rule 2201] Federally Enforceable Through Title V Permit
19. The facility-wide SOx emissions shall not exceed 54,750 pounds during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
20. The facility-wide CO emissions shall not exceed 199,999 pounds during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Source testing to determine compliance with the NOx, CO, VOC, PM10 and ammonia emission limits of this permit shall be conducted not less than once every 12 months. The filterable and condensable PM10 emissions shall be determined separately. Representative testing, as specified in Rule 4702, may be allowed provided prior written District authorization is received. [District Rule 4702] Federally Enforceable Through Title V Permit
22. 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
23. 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
24. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702] Federally Enforceable Through Title V Permit
25. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC emissions shall be reported as methane and the NOx emissions shall be reported as NO2. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
26. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 18, 25A or 25B, or ARB Method 100, SOx - CARB Method 100, PM10 - EPA Methods 201A and 202 and ammonia - BAAQMD Method ST-1B. Alternative source test methods are allowed provided prior written District authorization is received. [District Rules 1081, 2201 and 4702] 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.

27. The owner or operator shall install, certify, maintain, operate, and quality-assure a continuous emission monitor system (CEMS) on each engine exhaust that continuously measures and records the exhaust gas NO_x, CO, and O₂ concentrations. Continuous emissions monitors shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns. [District Rules 1080 and 4702 and 40 CFR 60.8 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
28. NO_x, CO and O₂ CEMS shall meet the requirements in 40 CFR Part 60, Appendix F and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
29. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
30. The CEMS data shall be reduced to hourly averages as specified in 40 CFR Part 60 section 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
31. In accordance with 40 CFR Part 60, Appendix F, each CEMS shall be audited at least once each calendar quarter. A CEMS audit is not required for the quarters in which both a relative accuracy test audit (RATA) and source testing were performed. The District shall be notified prior to completion of the audits. The audit reports and the quarterly compliance reports shall be submitted to the District. [District Rule 1080 and 40 CFR 60.8 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
32. The owner or operator shall perform a RATA for NO_x, CO and O₂ as specified by 40 CFR Part 60, Appendix F 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 monitoring equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
33. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CEMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit
34. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system and shall make CEMS data available to the District's automated polling system on a daily basis. Upon notice by the District that the facility's CEMS 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 CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
35. The owner or operator shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period that a continuous monitoring system or monitoring device was inoperative. [District Rule 1080 and 2201 and 40 CFR 60.7(f)] Federally Enforceable Through Title V Permit
36. The owner or operator shall submit a written report of CEMS operations for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NO_x emissions, nature and the cause of excess emissions (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEMS was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.7(c) and (d)] Federally Enforceable Through Title V Permit
37. Records of the facility-wide CO and SO_x emissions shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [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.

38. A record of the combined quarterly and annual NOx, VOC and PM10 emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar quarter and a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
39. A record of the combined VOC emissions from units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11, based on a 12 month rolling total, shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
40. A record of the combined annual CO and SOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
41. A record of the combined number of hours of operation of permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
42. A record of the daily number of hours of start-up and shutdown time for this unit shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
43. A record of the combined number of hours of start-up and shutdown time for units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
44. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
45. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit
46. All records shall be maintained and retained on-site for a minimum of five years, and shall be made available for District inspection upon request. [District Rule 4702] 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-3233-7-2

EXPIRATION DATE: 11/30/2015

EQUIPMENT DESCRIPTION:

11,667 BHP NATURAL GAS FIRED WARTSILA 20V34SG IC ENGINE POWERING AN 8.44 MW ELECTRICAL GENERATOR. THE ENGINE IS EQUIPPED WITH A TURBOCHARGER, AN INTERCOOLER, A SELECTIVE CATALYTIC REDUCTION SYSTEM WITH AMMONIA INJECTION AND AN OXIDATION CATALYST (MODESTO IRRIGATION DISTRICT DESIGNATION 3B).

PERMIT UNIT REQUIREMENTS

1. The unit shall be fueled solely with PUC quality natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The combined start-up and shutdown duration of this unit shall not exceed 2 hours during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The combined start-up and shutdown duration for permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 2010 hours during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The NOx emissions during steady state operation shall not exceed 5 ppmvd @15% O2, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
5. The NOx emissions during start-up and shutdown periods shall not exceed 9.48 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The CO emissions during steady state operation shall not exceed 13 ppmvd @ 15% O2, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
7. The CO emissions during start-up and shutdown periods shall not exceed 14.3 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The VOC emissions during steady state operation shall not exceed 20 ppmvd @ 15% O2 as methane, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
9. The VOC emissions during start-up and shutdown periods shall not exceed 7.53 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The SOx emissions shall not exceed 0.4 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The PM10 emissions shall not exceed 1.3 lb/hr. The filterable portion of the PM10 shall not exceed 0.02 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The ammonia emissions shall not exceed 10 ppmvd @ 15% O2 over a 24 hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The combined NOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 12,049 pounds during the first calendar quarter, 12,049 pounds during the second calendar quarter, 12,049 pounds during the third calendar quarter and 12,050 pounds during the fourth calendar quarter. [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.

14. The combined CO emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 74,864 pounds during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The combined VOC emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 13,920 pounds during the first calendar quarter, 13,920 pounds during the second calendar quarter, 13,920 pounds during the third calendar quarter and 13,921 pounds during the fourth calendar quarter. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The combined VOC emissions from units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 49,993 lb/yr, based on a 12-month rolling total. The start-up and shutdown period contributions shall be determined utilizing the number of start-up and shutdown hours in combination with the start-up and shutdown period emission limit. The steady-state contribution shall be determined utilizing the fuel usage during the previous 12 months and the VOC emission concentration determined during the most recent District approved source test or representative testing allowed by the District. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The combined SOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 9,600 pounds during any one calendar year. The SOx emissions shall be determined by applying the hourly emission limit of these permits to the combined number of operating hours of these engines. [District Rule 2201] Federally Enforceable Through Title V Permit
18. The combined PM10 emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 7,800 pounds during the first calendar quarter, 7,800 pounds during the second calendar quarter, 7,800 pounds during the third calendar quarter and 7,800 pounds during the fourth calendar quarter. The PM10 emissions shall be determined by applying the hourly emission limit of these permits to the combined number of operating hours of these engines. [District Rule 2201] Federally Enforceable Through Title V Permit
19. The facility-wide SOx emissions shall not exceed 54,750 pounds during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
20. The facility-wide CO emissions shall not exceed 199,999 pounds during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Source testing to determine compliance with the NOx, CO, VOC, PM10 and ammonia emission limits of this permit shall be conducted not less than once every 12 months. The filterable and condensable PM10 emissions shall be determined separately. Representative testing, as specified in Rule 4702, may be allowed provided prior written District authorization is received. [District Rule 4702] Federally Enforceable Through Title V Permit
22. 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
23. 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
24. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702] Federally Enforceable Through Title V Permit
25. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC emissions shall be reported as methane and the NOx emissions shall be reported as NO2. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
26. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 18, 25A or 25B, or ARB Method 100, SOx - CARB Method 100, PM10 - EPA Methods 201A and 202 and ammonia - BAAQMD Method ST-1B. Alternative source test methods are allowed provided prior written District authorization is received. [District Rules 1081, 2201 and 4702] 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.

27. The owner or operator shall install, certify, maintain, operate, and quality-assure a continuous emission monitor system (CEMS) on each engine exhaust that continuously measures and records the exhaust gas NO_x, CO, and O₂ concentrations. Continuous emissions monitors shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns. [District Rules 1080 and 4702 and 40 CFR 60.8 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
28. NO_x, CO and O₂ CEMS shall meet the requirements in 40 CFR Part 60, Appendix F and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
29. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
30. The CEMS data shall be reduced to hourly averages as specified in 40 CFR Part 60 section 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
31. In accordance with 40 CFR Part 60, Appendix F, each CEMS shall be audited at least once each calendar quarter. A CEMS audit is not required for the quarters in which both a relative accuracy test audit (RATA) and source testing were performed. The District shall be notified prior to completion of the audits. The audit reports and the quarterly compliance reports shall be submitted to the District. [District Rule 1080 and 40 CFR 60.8 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
32. The owner or operator shall perform a RATA for NO_x, CO and O₂ as specified by 40 CFR Part 60, Appendix F 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 monitoring equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
33. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CEMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit
34. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system and shall make CEMS data available to the District's automated polling system on a daily basis. Upon notice by the District that the facility's CEMS 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 CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
35. The owner or operator shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period that a continuous monitoring system or monitoring device was inoperative. [District Rule 1080 and 2201 and 40 CFR 60.7(f)] Federally Enforceable Through Title V Permit
36. The owner or operator shall submit a written report of CEMS operations for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NO_x emissions, nature and the cause of excess emissions (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEMS was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.7(c) and (d)] Federally Enforceable Through Title V Permit
37. Records of the facility-wide CO and SO_x emissions shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [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.

38. A record of the combined quarterly and annual NOx, VOC and PM10 emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar quarter and a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
39. A record of the combined VOC emissions from units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11, based on a 12 month rolling total, shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
40. A record of the combined annual CO and SOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
41. A record of the combined number of hours of operation of permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
42. A record of the daily number of hours of start-up and shutdown time for this unit shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
43. A record of the combined number of hours of start-up and shutdown time for units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
44. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
45. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit
46. All records shall be maintained and retained on-site for a minimum of five years, and shall be made available for District inspection upon request. [District Rule 4702] 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-3233-8-2

EXPIRATION DATE: 11/30/2015

EQUIPMENT DESCRIPTION:

11,667 BHP NATURAL GAS FIRED WARTSILA 20V34SG IC ENGINE POWERING AN 8.44 MW ELECTRICAL GENERATOR. THE ENGINE IS EQUIPPED WITH A TURBOCHARGER, AN INTERCOOLER, A SELECTIVE CATALYTIC REDUCTION SYSTEM WITH AMMONIA INJECTION AND AN OXIDATION CATALYST (MODESTO IRRIGATION DISTRICT DESIGNATION 3C).

PERMIT UNIT REQUIREMENTS

1. The unit shall be fueled solely with PUC quality natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The combined start-up and shutdown duration of this unit shall not exceed 2 hours during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The combined start-up and shutdown duration for permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 2010 hours during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The NOx emissions during steady state operation shall not exceed 5 ppmvd @15% O2, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
5. The NOx emissions during start-up and shutdown periods shall not exceed 9.48 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The CO emissions during steady state operation shall not exceed 13 ppmvd @ 15% O2, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
7. The CO emissions during start-up and shutdown periods shall not exceed 14.3 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The VOC emissions during steady state operation shall not exceed 20 ppmvd @ 15% O2 as methane, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
9. The VOC emissions during start-up and shutdown periods shall not exceed 7.53 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The SOx emissions shall not exceed 0.4 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The PM10 emissions shall not exceed 1.3 lb/hr. The filterable portion of the PM10 shall not exceed 0.02 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The ammonia emissions shall not exceed 10 ppmvd @ 15% O2 over a 24 hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The combined NOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 12,049 pounds during the first calendar quarter, 12,049 pounds during the second calendar quarter, 12,049 pounds during the third calendar quarter and 12,050 pounds during the fourth calendar quarter. [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.

14. The combined CO emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 74,864 pounds during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The combined VOC emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 13,920 pounds during the first calendar quarter, 13,920 pounds during the second calendar quarter, 13,920 pounds during the third calendar quarter and 13,921 pounds during the fourth calendar quarter. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The combined VOC emissions from units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 49,993 lb/yr, based on a 12-month rolling total. The start-up and shutdown period contributions shall be determined utilizing the number of start-up and shutdown hours in combination with the start-up and shutdown period emission limit. The steady-state contribution shall be determined utilizing the fuel usage during the previous 12 months and the VOC emission concentration determined during the most recent District approved source test or representative testing allowed by the District. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The combined SOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 9,600 pounds during any one calendar year. The SOx emissions shall be determined by applying the hourly emission limit of these permits to the combined number of operating hours of these engines. [District Rule 2201] Federally Enforceable Through Title V Permit
18. The combined PM10 emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 7,800 pounds during the first calendar quarter, 7,800 pounds during the second calendar quarter, 7,800 pounds during the third calendar quarter and 7,800 pounds during the fourth calendar quarter. The PM10 emissions shall be determined by applying the hourly emission limit of these permits to the combined number of operating hours of these engines. [District Rule 2201] Federally Enforceable Through Title V Permit
19. The facility-wide SOx emissions shall not exceed 54,750 pounds during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
20. The facility-wide CO emissions shall not exceed 199,999 pounds during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Source testing to determine compliance with the NOx, CO, VOC, PM10 and ammonia emission limits of this permit shall be conducted not less than once every 12 months. The filterable and condensable PM10 emissions shall be determined separately. Representative testing, as specified in Rule 4702, may be allowed provided prior written District authorization is received. [District Rule 4702] Federally Enforceable Through Title V Permit
22. 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
23. 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
24. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702] Federally Enforceable Through Title V Permit
25. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC emissions shall be reported as methane and the NOx emissions shall be reported as NO2. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
26. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 18, 25A or 25B, or ARB Method 100, SOx - CARB Method 100, PM10 - EPA Methods 201A and 202 and ammonia - BAAQMD Method ST-1B. Alternative source test methods are allowed provided prior written District authorization is received. [District Rules 1081, 2201 and 4702] 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.

27. The owner or operator shall install, certify, maintain, operate, and quality-assure a continuous emission monitor system (CEMS) on each engine exhaust that continuously measures and records the exhaust gas NO_x, CO, and O₂ concentrations. Continuous emissions monitors shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns. [District Rules 1080 and 4702 and 40 CFR 60.8 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
28. NO_x, CO and O₂ CEMS shall meet the requirements in 40 CFR Part 60, Appendix F and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
29. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
30. The CEMS data shall be reduced to hourly averages as specified in 40 CFR Part 60 section 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
31. In accordance with 40 CFR Part 60, Appendix F, each CEMS shall be audited at least once each calendar quarter. A CEMS audit is not required for the quarters in which both a relative accuracy test audit (RATA) and source testing were performed. The District shall be notified prior to completion of the audits. The audit reports and the quarterly compliance reports shall be submitted to the District. [District Rule 1080 and 40 CFR 60.8 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
32. The owner or operator shall perform a RATA for NO_x, CO and O₂ as specified by 40 CFR Part 60, Appendix F 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 monitoring equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
33. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CEMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit
34. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system and shall make CEMS data available to the District's automated polling system on a daily basis. Upon notice by the District that the facility's CEMS 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 CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
35. The owner or operator shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period that a continuous monitoring system or monitoring device was inoperative. [District Rule 1080 and 2201 and 40 CFR 60.7(f)] Federally Enforceable Through Title V Permit
36. The owner or operator shall submit a written report of CEMS operations for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NO_x emissions, nature and the cause of excess emissions (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEMS was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.7(c) and (d)] Federally Enforceable Through Title V Permit
37. Records of the facility-wide CO and SO_x emissions shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [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.

38. A record of the combined quarterly and annual NOx, VOC and PM10 emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar quarter and a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
39. A record of the combined VOC emissions from units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11, based on a 12 month rolling total, shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
40. A record of the combined annual CO and SOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
41. A record of the combined number of hours of operation of permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
42. A record of the daily number of hours of start-up and shutdown time for this unit shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
43. A record of the combined number of hours of start-up and shutdown time for units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
44. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
45. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit
46. All records shall be maintained and retained on-site for a minimum of five years, and shall be made available for District inspection upon request. [District Rule 4702] 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-3233-9-2

EXPIRATION DATE: 11/30/2015

EQUIPMENT DESCRIPTION:

11,667 BHP NATURAL GAS FIRED WARTSILA 20V34SG IC ENGINE POWERING AN 8.44 MW ELECTRICAL GENERATOR. THE ENGINE IS EQUIPPED WITH A TURBOCHARGER, AN INTERCOOLER, A SELECTIVE CATALYTIC REDUCTION SYSTEM WITH AMMONIA INJECTION AND AN OXIDATION CATALYST (MODESTO IRRIGATION DISTRICT DESIGNATION 3D).

PERMIT UNIT REQUIREMENTS

1. The unit shall be fueled solely with PUC quality natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The combined start-up and shutdown duration of this unit shall not exceed 2 hours during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The combined start-up and shutdown duration for permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 2010 hours during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The NOx emissions during steady state operation shall not exceed 5 ppmvd @15% O2, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
5. The NOx emissions during start-up and shutdown periods shall not exceed 9.48 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The CO emissions during steady state operation shall not exceed 13 ppmvd @ 15% O2, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
7. The CO emissions during start-up and shutdown periods shall not exceed 14.3 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The VOC emissions during steady state operation shall not exceed 20 ppmvd @ 15% O2 as methane, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
9. The VOC emissions during start-up and shutdown periods shall not exceed 7.53 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The SOx emissions shall not exceed 0.4 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The PM10 emissions shall not exceed 1.3 lb/hr. The filterable portion of the PM10 shall not exceed 0.02 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The ammonia emissions shall not exceed 10 ppmvd @ 15% O2 over a 24 hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The combined NOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 12,049 pounds during the first calendar quarter, 12,049 pounds during the second calendar quarter, 12,049 pounds during the third calendar quarter and 12,050 pounds during the fourth calendar quarter. [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.

14. The combined CO emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 74,864 pounds during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The combined VOC emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 13,920 pounds during the first calendar quarter, 13,920 pounds during the second calendar quarter, 13,920 pounds during the third calendar quarter and 13,921 pounds during the fourth calendar quarter. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The combined VOC emissions from units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 49,993 lb/yr, based on a 12-month rolling total. The start-up and shutdown period contributions shall be determined utilizing the number of start-up and shutdown hours in combination with the start-up and shutdown period emission limit. The steady-state contribution shall be determined utilizing the fuel usage during the previous 12 months and the VOC emission concentration determined during the most recent District approved source test or representative testing allowed by the District. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The combined SOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 9,600 pounds during any one calendar year. The SOx emissions shall be determined by applying the hourly emission limit of these permits to the combined number of operating hours of these engines. [District Rule 2201] Federally Enforceable Through Title V Permit
18. The combined PM10 emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 7,800 pounds during the first calendar quarter, 7,800 pounds during the second calendar quarter, 7,800 pounds during the third calendar quarter and 7,800 pounds during the fourth calendar quarter. The PM10 emissions shall be determined by applying the hourly emission limit of these permits to the combined number of operating hours of these engines. [District Rule 2201] Federally Enforceable Through Title V Permit
19. The facility-wide SOx emissions shall not exceed 54,750 pounds during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
20. The facility-wide CO emissions shall not exceed 199,999 pounds during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Source testing to determine compliance with the NOx, CO, VOC, PM10 and ammonia emission limits of this permit shall be conducted not less than once every 12 months. The filterable and condensable PM10 emissions shall be determined separately. Representative testing, as specified in Rule 4702, may be allowed provided prior written District authorization is received. [District Rule 4702] Federally Enforceable Through Title V Permit
22. 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
23. 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
24. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702] Federally Enforceable Through Title V Permit
25. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC emissions shall be reported as methane and the NOx emissions shall be reported as NO2. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
26. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 18, 25A or 25B, or ARB Method 100, SOx - CARB Method 100, PM10 - EPA Methods 201A and 202 and ammonia - BAAQMD Method ST-1B. Alternative source test methods are allowed provided prior written District authorization is received. [District Rules 1081, 2201 and 4702] 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.

27. The owner or operator shall install, certify, maintain, operate, and quality-assure a continuous emission monitor system (CEMS) on each engine exhaust that continuously measures and records the exhaust gas NO_x, CO, and O₂ concentrations. Continuous emissions monitors shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns. [District Rules 1080 and 4702 and 40 CFR 60.8 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
28. NO_x, CO and O₂ CEMS shall meet the requirements in 40 CFR Part 60, Appendix F and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
29. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
30. The CEMS data shall be reduced to hourly averages as specified in 40 CFR Part 60 section 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
31. In accordance with 40 CFR Part 60, Appendix F, each CEMS shall be audited at least once each calendar quarter. A CEMS audit is not required for the quarters in which both a relative accuracy test audit (RATA) and source testing were performed. The District shall be notified prior to completion of the audits. The audit reports and the quarterly compliance reports shall be submitted to the District. [District Rule 1080 and 40 CFR 60.8 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
32. The owner or operator shall perform a RATA for NO_x, CO and O₂ as specified by 40 CFR Part 60, Appendix F 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 monitoring equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
33. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CEMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit
34. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system and shall make CEMS data available to the District's automated polling system on a daily basis. Upon notice by the District that the facility's CEMS 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 CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
35. The owner or operator shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period that a continuous monitoring system or monitoring device was inoperative. [District Rule 1080 and 2201 and 40 CFR 60.7(f)] Federally Enforceable Through Title V Permit
36. The owner or operator shall submit a written report of CEMS operations for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NO_x emissions, nature and the cause of excess emissions (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEMS was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.7(c) and (d)] Federally Enforceable Through Title V Permit
37. Records of the facility-wide CO and SO_x emissions shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [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.

38. A record of the combined quarterly and annual NO_x, VOC and PM₁₀ emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar quarter and a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
39. A record of the combined VOC emissions from units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11, based on a 12 month rolling total, shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
40. A record of the combined annual CO and SO_x emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
41. A record of the combined number of hours of operation of permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
42. A record of the daily number of hours of start-up and shutdown time for this unit shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
43. A record of the combined number of hours of start-up and shutdown time for units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
44. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
45. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit
46. All records shall be maintained and retained on-site for a minimum of five years, and shall be made available for District inspection upon request. [District Rule 4702] 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-3233-10-2

EXPIRATION DATE: 11/30/2015

EQUIPMENT DESCRIPTION:

11,667 BHP NATURAL GAS FIRED WARTSILA 20V34SG IC ENGINE POWERING AN 8.44 MW ELECTRICAL GENERATOR. THE ENGINE IS EQUIPPED WITH A TURBOCHARGER, AN INTERCOOLER, A SELECTIVE CATALYTIC REDUCTION SYSTEM WITH AMMONIA INJECTION AND AN OXIDATION CATALYST (MODESTO IRRIGATION DISTRICT DESIGNATION 3E).

PERMIT UNIT REQUIREMENTS

1. The unit shall be fueled solely with PUC quality natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The combined start-up and shutdown duration of this unit shall not exceed 2 hours during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The combined start-up and shutdown duration for permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 2010 hours during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The NOx emissions during steady state operation shall not exceed 5 ppmvd @15% O2, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
5. The NOx emissions during start-up and shutdown periods shall not exceed 9.48 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The CO emissions during steady state operation shall not exceed 13 ppmvd @ 15% O2, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
7. The CO emissions during start-up and shutdown periods shall not exceed 14.3 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The VOC emissions during steady state operation shall not exceed 20 ppmvd @ 15% O2 as methane, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
9. The VOC emissions during start-up and shutdown periods shall not exceed 7.53 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The SOx emissions shall not exceed 0.4 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The PM10 emissions shall not exceed 1.3 lb/hr. The filterable portion of the PM10 shall not exceed 0.02 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The ammonia emissions shall not exceed 10 ppmvd @ 15% O2 over a 24 hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The combined NOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 12,049 pounds during the first calendar quarter, 12,049 pounds during the second calendar quarter, 12,049 pounds during the third calendar quarter and 12,050 pounds during the fourth calendar quarter. [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.

14. The combined CO emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 74,864 pounds during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The combined VOC emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 13,920 pounds during the first calendar quarter, 13,920 pounds during the second calendar quarter, 13,920 pounds during the third calendar quarter and 13,921 pounds during the fourth calendar quarter. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The combined VOC emissions from units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 49,993 lb/yr, based on a 12-month rolling total. The start-up and shutdown period contributions shall be determined utilizing the number of start-up and shutdown hours in combination with the start-up and shutdown period emission limit. The steady-state contribution shall be determined utilizing the fuel usage during the previous 12 months and the VOC emission concentration determined during the most recent District approved source test or representative testing allowed by the District. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The combined SOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 9,600 pounds during any one calendar year. The SOx emissions shall be determined by applying the hourly emission limit of these permits to the combined number of operating hours of these engines. [District Rule 2201] Federally Enforceable Through Title V Permit
18. The combined PM10 emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 7,800 pounds during the first calendar quarter, 7,800 pounds during the second calendar quarter, 7,800 pounds during the third calendar quarter and 7,800 pounds during the fourth calendar quarter. The PM10 emissions shall be determined by applying the hourly emission limit of these permits to the combined number of operating hours of these engines. [District Rule 2201] Federally Enforceable Through Title V Permit
19. The facility-wide SOx emissions shall not exceed 54,750 pounds during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
20. The facility-wide CO emissions shall not exceed 199,999 pounds during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Source testing to determine compliance with the NOx, CO, VOC, PM10 and ammonia emission limits of this permit shall be conducted not less than once every 12 months. The filterable and condensable PM10 emissions shall be determined separately. Representative testing, as specified in Rule 4702, may be allowed provided prior written District authorization is received. [District Rule 4702] Federally Enforceable Through Title V Permit
22. 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
23. 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
24. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702] Federally Enforceable Through Title V Permit
25. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC emissions shall be reported as methane and the NOx emissions shall be reported as NO2. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
26. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 18, 25A or 25B, or ARB Method 100, SOx - CARB Method 100, PM10 - EPA Methods 201A and 202 and ammonia - BAAQMD Method ST-1B. Alternative source test methods are allowed provided prior written District authorization is received. [District Rules 1081, 2201 and 4702] 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.

27. The owner or operator shall install, certify, maintain, operate, and quality-assure a continuous emission monitor system (CEMS) on each engine exhaust that continuously measures and records the exhaust gas NO_x, CO, and O₂ concentrations. Continuous emissions monitors shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns. [District Rules 1080 and 4702 and 40 CFR 60.8 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
28. NO_x, CO and O₂ CEMS shall meet the requirements in 40 CFR Part 60, Appendix F and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
29. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
30. The CEMS data shall be reduced to hourly averages as specified in 40 CFR Part 60 section 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
31. In accordance with 40 CFR Part 60, Appendix F, each CEMS shall be audited at least once each calendar quarter. A CEMS audit is not required for the quarters in which both a relative accuracy test audit (RATA) and source testing were performed. The District shall be notified prior to completion of the audits. The audit reports and the quarterly compliance reports shall be submitted to the District. [District Rule 1080 and 40 CFR 60.8 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
32. The owner or operator shall perform a RATA for NO_x, CO and O₂ as specified by 40 CFR Part 60, Appendix F 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 monitoring equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
33. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CEMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit
34. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system and shall make CEMS data available to the District's automated polling system on a daily basis. Upon notice by the District that the facility's CEMS 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 CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
35. The owner or operator shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period that a continuous monitoring system or monitoring device was inoperative. [District Rule 1080 and 2201 and 40 CFR 60.7(f)] Federally Enforceable Through Title V Permit
36. The owner or operator shall submit a written report of CEMS operations for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NO_x emissions, nature and the cause of excess emissions (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEMS was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.7(c) and (d)] Federally Enforceable Through Title V Permit
37. Records of the facility-wide CO and SO_x emissions shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [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.

38. A record of the combined quarterly and annual NOx, VOC and PM10 emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar quarter and a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
39. A record of the combined VOC emissions from units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11, based on a 12 month rolling total, shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
40. A record of the combined annual CO and SOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
41. A record of the combined number of hours of operation of permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
42. A record of the daily number of hours of start-up and shutdown time for this unit shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
43. A record of the combined number of hours of start-up and shutdown time for units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
44. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
45. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit
46. All records shall be maintained and retained on-site for a minimum of five years, and shall be made available for District inspection upon request. [District Rule 4702] 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-3233-11-2

EXPIRATION DATE: 11/30/2015

EQUIPMENT DESCRIPTION:

11,667 BHP NATURAL GAS FIRED WARTSILA 20V34SG IC ENGINE POWERING AN 8.44 MW ELECTRICAL GENERATOR. THE ENGINE IS EQUIPPED WITH A TURBOCHARGER, AN INTERCOOLER, A SELECTIVE CATALYTIC REDUCTION SYSTEM WITH AMMONIA INJECTION AND AN OXIDATION CATALYST (MODESTO IRRIGATION DISTRICT DESIGNATION 3F).

PERMIT UNIT REQUIREMENTS

1. The unit shall be fueled solely with PUC quality natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The combined start-up and shutdown duration of this unit shall not exceed 2 hours during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The combined start-up and shutdown duration for permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 2010 hours during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The NOx emissions during steady state operation shall not exceed 5 ppmvd @15% O2, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
5. The NOx emissions during start-up and shutdown periods shall not exceed 9.48 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The CO emissions during steady state operation shall not exceed 13 ppmvd @ 15% O2, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
7. The CO emissions during start-up and shutdown periods shall not exceed 14.3 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The VOC emissions during steady state operation shall not exceed 20 ppmvd @ 15% O2 as methane, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
9. The VOC emissions during start-up and shutdown periods shall not exceed 7.53 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The SOx emissions shall not exceed 0.4 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The PM10 emissions shall not exceed 1.3 lb/hr. The filterable portion of the PM10 shall not exceed 0.02 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The ammonia emissions shall not exceed 10 ppmvd @ 15% O2 over a 24 hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The combined NOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 12,049 pounds during the first calendar quarter, 12,049 pounds during the second calendar quarter, 12,049 pounds during the third calendar quarter and 12,050 pounds during the fourth calendar quarter. [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.

14. The combined CO emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 74,864 pounds during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The combined VOC emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 13,920 pounds during the first calendar quarter, 13,920 pounds during the second calendar quarter, 13,920 pounds during the third calendar quarter and 13,921 pounds during the fourth calendar quarter. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The combined VOC emissions from units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 49,993 lb/yr, based on a 12-month rolling total. The start-up and shutdown period contributions shall be determined utilizing the number of start-up and shutdown hours in combination with the start-up and shutdown period emission limit. The steady-state contribution shall be determined utilizing the fuel usage during the previous 12 months and the VOC emission concentration determined during the most recent District approved source test or representative testing allowed by the District. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The combined SOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 9,600 pounds during any one calendar year. The SOx emissions shall be determined by applying the hourly emission limit of these permits to the combined number of operating hours of these engines. [District Rule 2201] Federally Enforceable Through Title V Permit
18. The combined PM10 emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 7,800 pounds during the first calendar quarter, 7,800 pounds during the second calendar quarter, 7,800 pounds during the third calendar quarter and 7,800 pounds during the fourth calendar quarter. The PM10 emissions shall be determined by applying the hourly emission limit of these permits to the combined number of operating hours of these engines. [District Rule 2201] Federally Enforceable Through Title V Permit
19. The facility-wide SOx emissions shall not exceed 54,750 pounds during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
20. The facility-wide CO emissions shall not exceed 199,999 pounds during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Source testing to determine compliance with the NOx, CO, VOC, PM10 and ammonia emission limits of this permit shall be conducted not less than once every 12 months. The filterable and condensable PM10 emissions shall be determined separately. Representative testing, as specified in Rule 4702, may be allowed provided prior written District authorization is received. [District Rule 4702] Federally Enforceable Through Title V Permit
22. 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
23. 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
24. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702] Federally Enforceable Through Title V Permit
25. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC emissions shall be reported as methane and the NOx emissions shall be reported as NO2. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
26. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 18, 25A or 25B, or ARB Method 100, SOx - CARB Method 100, PM10 - EPA Methods 201A and 202 and ammonia - BAAQMD Method ST-1B. Alternative source test methods are allowed provided prior written District authorization is received. [District Rules 1081, 2201 and 4702] 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.

27. The owner or operator shall install, certify, maintain, operate, and quality-assure a continuous emission monitor system (CEMS) on each engine exhaust that continuously measures and records the exhaust gas NO_x, CO, and O₂ concentrations. Continuous emissions monitors shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns. [District Rules 1080 and 4702 and 40 CFR 60.8 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
28. NO_x, CO and O₂ CEMS shall meet the requirements in 40 CFR Part 60, Appendix F and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
29. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
30. The CEMS data shall be reduced to hourly averages as specified in 40 CFR Part 60 section 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
31. In accordance with 40 CFR Part 60, Appendix F, each CEMS shall be audited at least once each calendar quarter. A CEMS audit is not required for the quarters in which both a relative accuracy test audit (RATA) and source testing were performed. The District shall be notified prior to completion of the audits. The audit reports and the quarterly compliance reports shall be submitted to the District. [District Rule 1080 and 40 CFR 60.8 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
32. The owner or operator shall perform a RATA for NO_x, CO and O₂ as specified by 40 CFR Part 60, Appendix F 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 monitoring equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
33. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CEMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit
34. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system and shall make CEMS data available to the District's automated polling system on a daily basis. Upon notice by the District that the facility's CEMS 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 CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
35. The owner or operator shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period that a continuous monitoring system or monitoring device was inoperative. [District Rule 1080 and 2201 and 40 CFR 60.7(f)] Federally Enforceable Through Title V Permit
36. The owner or operator shall submit a written report of CEMS operations for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NO_x emissions, nature and the cause of excess emissions (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEMS was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.7(c) and (d)] Federally Enforceable Through Title V Permit
37. Records of the facility-wide CO and SO_x emissions shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [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.

38. A record of the combined quarterly and annual NOx, VOC and PM10 emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar quarter and a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
39. A record of the combined VOC emissions from units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11, based on a 12 month rolling total, shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
40. A record of the combined annual CO and SOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
41. A record of the combined number of hours of operation of permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
42. A record of the daily number of hours of start-up and shutdown time for this unit shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
43. A record of the combined number of hours of start-up and shutdown time for units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
44. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
45. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit
46. All records shall be maintained and retained on-site for a minimum of five years, and shall be made available for District inspection upon request. [District Rule 4702] 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-3233-13-0

EXPIRATION DATE: 11/30/2015

EQUIPMENT DESCRIPTION:

62 BHP CUMMINS CFP33-F25 (OR EQUIVALENT) TIER 2 CERTIFIED DIESEL FIRED IC ENGINE POWERING AN EMERGENCY FIRE PUMP.

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
3. 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]
4. 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] Federally Enforceable Through Title V Permit
5. The emissions from this engine shall not exceed any of the following limits: 4.24 g-NOx/bhp-hr, 0.82 g-CO/bhp-hr, 0.18 g-VOC/bhp-hr or 0.0053 g-SOx/bhp-hr. [District Rule 2201 and 13 CCR 2423 and 17 CCR 93115] Federally Enforceable Through Title V Permit
6. The emissions from this engine shall not exceed 0.17 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102 and 13 CCR 2423 and 17 CCR 93115] Federally Enforceable Through Title V Permit
7. 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
8. 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
9. 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
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 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.

11. All records shall be maintained and retained on-site for a minimum of five years, and shall be made available for District inspection upon request. [District Rule 4702 and 17 CCR 93115] 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-3233-14-1

EXPIRATION DATE: 11/30/2015

EQUIPMENT DESCRIPTION:

MODIFICATION OF 480 BHP CATERPILLAR MODEL C9 ATAAC TIER 3 CERTIFIED DIESEL FIRED IC ENGINE
POWERING AN EMERGENCY GENERATOR: TO ADD TO TITLE V PERMIT

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702 and 17 CCR 93115 and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
3. 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]
4. 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] Federally Enforceable Through Title V Permit
5. The emissions from this engine shall not exceed any of the following limits: 4.11 g-NOx/bhp-hr, 0.25 g-CO/bhp-hr, 0.06 g-VOC/bhp-hr or 0.0058 g-SOx/bhp-hr. [District Rule 2201 and 17 CCR 93115 and 40 CFR Part 60 Subpart IIII]] Federally Enforceable Through Title V Permit
6. The PM10 emissions from this engine shall not exceed 0.033 g/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102 and 17 CCR 93115 and 40 CFR Part 60 Subpart IIII]] Federally Enforceable Through Title V Permit
7. 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 and 40 CFR Part 60 Subpart IIII]] Federally Enforceable Through Title V Permit
8. Operation of this engine shall not exceed 12 hours for any purpose in any one day. [District Rule 2201] 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 41 hours per calendar year. [District Rule 4702 and 17 CCR 93115 and 40 CFR Part 60 Subpart IIII]] Federally Enforceable Through Title V Permit
10. 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
11. 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] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

12. 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
13. 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 and 17 CCR 93115 and 40 CFR Part 60 Subpart IIII]] Federally Enforceable Through Title V Permit
14. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702 and 17 CCR 93115 and 40 CFR Part 60 Subpart IIII]] Federally Enforceable Through Title V Permit

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

ATTACHMENT C

Detailed Facility List

Detailed Facility Report
For Facility=3233 and excluding Deleted Permits
Sorted by Facility Name and Permit Number

MODESTO IRRIGATION DISTRICT	FAC #	N 3233	TYPE:	Titleiv	EXPIRE ON:	11/30/2015
920 WOODLAND AVENUE	STATUS:	A	TOXIC ID:	51162	AREA:	5/
MODESTO, CA 95351	TELEPHONE:	2095267616	INSP DATE:	06/16		

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
N-3233-1-6	49,900 kW electrical generation	3020-08A G	1	10,706.00	10,706.00	A	ONE (1) GENERAL ELECTRIC LM6000 PD AERO-DERIVATIVE 480 MMBTU/HR (HHV) GAS TURBINE ENGINE WITH STEAM INJECTION, OXIDIZATION CATALYST, AMMONIA INJECTION, AND SELECTIVE CATALYTIC REDUCTION SERVING A 49.9 MW ELECTRICAL GENERATOR
N-3233-4-5	87,000 kW electrical generation	3020-08B G	1	10,706.00	10,706.00	A	87 MW LOAD FOLLOWING POWER PLANT SERVED BY A 466 MMBTU/HR GENERAL ELECTRIC LM6000 SPRINT MODEL NATURAL GAS FIRED TURBINE WITH WATER INJECTION, A 234 MMBTU/HR JOHN ZINK LDRW/LE OR EQUIVALENT DUCT BURNER, A HEAT RECOVERY STEAM GENERATOR, A CONDENSING STEAM TURBINE, AN INLET AIR COOLING/FILTERING SYSTEM, A SELECTIVE CATALYTIC REDUCTION SYSTEM, AN OXIDATION CATALYST AND A LUBE OIL COALESCER
N-3233-5-3	No applicable fee	999-99	1	0.00	0.00	A	27,000 GALLON PER MINUTE COOLING TOWER WITH A HIGH EFFICIENCY DRIFT ELIMINATOR
N-3233-6-2	8,440 kW	3020-08A D	1	3,209.00	3,209.00	A	11,667 BHP NATURAL GAS FIRED WARTSILA 20V34SG IC ENGINE POWERING AN 8.44 MW ELECTRICAL GENERATOR. THE ENGINE IS EQUIPPED WITH A TURBOCHARGER, AN INTERCOOLER, A SELECTIVE CATALYTIC REDUCTION SYSTEM WITH AMMONIA INJECTION AND AN OXIDATION CATALYST (MODESTO IRRIGATION DISTRICT DESIGNATION 3A).
N-3233-7-2	8,440 kW	3020-08A D	1	3,209.00	3,209.00	A	11,667 BHP NATURAL GAS FIRED WARTSILA 20V34SG IC ENGINE POWERING AN 8.44 MW ELECTRICAL GENERATOR. THE ENGINE IS EQUIPPED WITH A TURBOCHARGER, AN INTERCOOLER, A SELECTIVE CATALYTIC REDUCTION SYSTEM WITH AMMONIA INJECTION AND AN OXIDATION CATALYST (MODESTO IRRIGATION DISTRICT DESIGNATION 3B).
N-3233-8-2	8,440 kW	3020-08A D	1	3,209.00	3,209.00	A	11,667 BHP NATURAL GAS FIRED WARTSILA 20V34SG IC ENGINE POWERING AN 8.44 MW ELECTRICAL GENERATOR. THE ENGINE IS EQUIPPED WITH A TURBOCHARGER, AN INTERCOOLER, A SELECTIVE CATALYTIC REDUCTION SYSTEM WITH AMMONIA INJECTION AND AN OXIDATION CATALYST (MODESTO IRRIGATION DISTRICT DESIGNATION 3C).
N-3233-9-2	8,440 kW	3020-08A D	1	3,209.00	3,209.00	A	11,667 BHP NATURAL GAS FIRED WARTSILA 20V34SG IC ENGINE POWERING AN 8.44 MW ELECTRICAL GENERATOR. THE ENGINE IS EQUIPPED WITH A TURBOCHARGER, AN INTERCOOLER, A SELECTIVE CATALYTIC REDUCTION SYSTEM WITH AMMONIA INJECTION AND AN OXIDATION CATALYST (MODESTO IRRIGATION DISTRICT DESIGNATION 3D).

Detailed Facility Report

For Facility=3233 and excluding Deleted Permits
Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
N-3233-10-2	8,440 KW	3020-08A D	1	3,209.00	3,209.00	A	11,667 BHP NATURAL GAS FIRED WARTSILA 20V34SG IC ENGINE POWERING AN 8.44 MW ELECTRICAL GENERATOR. THE ENGINE IS EQUIPPED WITH A TURBOCHARGER, AN INTERCOOLER, A SELECTIVE CATALYTIC REDUCTION SYSTEM WITH AMMONIA INJECTION AND AN OXIDATION CATALYST (MODESTO IRRIGATION DISTRICT DESIGNATION 3E).
N-3233-11-2	8,440 KW	3020-08A D	1	3,209.00	3,209.00	A	11,667 BHP NATURAL GAS FIRED WARTSILA 20V34SG IC ENGINE POWERING AN 8.44 MW ELECTRICAL GENERATOR. THE ENGINE IS EQUIPPED WITH A TURBOCHARGER, AN INTERCOOLER, A SELECTIVE CATALYTIC REDUCTION SYSTEM WITH AMMONIA INJECTION AND AN OXIDATION CATALYST (MODESTO IRRIGATION DISTRICT DESIGNATION 3F).
N-3233-13-0	62 hp cummins engine	3020-10 A	1	84.00	84.00	A	62 BHP CUMMINS CFP33-F25 (OR EQUIVALENT) TIER 2 CERTIFIED DIESEL FIRED IC ENGINE POWERING AN EMERGENCY FIRE PUMP.
N-3233-14-1	480 bhp diesel-fired IC engine	3020-10 D	1	502.00	502.00	A	MODIFICATION OF 480 BHP CATERPILLAR MODEL C9 ATAAC TIER 3 CERTIFIED DIESEL FIRED IC ENGINE POWERING AN EMERGENCY GENERATOR. TO ADD TO TITLE V PERMIT

Number of Facilities Reported: 1

ATTACHMENT D

Major Source Determination for
Hazardous Air Pollutants

To be a major source of HAP emissions, a facility must have the potential to emit of 10 tons/year or more for any single HAP or 25 tons/year or more of all HAPs combined. Modesto Irrigation District is the type of source that would emit various HAPs as combustion contaminants. The table below shows the potential to emit from all sources is not greater than 25 tons/year and

Major Source Determination for Hazardous Air Pollutants			
Permit Unit #	Description	Total HAP Potential to Emit (lb/yr)	Source
N-3233-1	460 MMBtu/hr NG Turbine	6,320	*Permit for this unit pre-dates the District's Risk Management Review policy. Assume HAP PE for 'N-3233-1 is equal to N-3233-4. '-4 is a larger unit with the same controls.
N-3233-4	466 MMBtu/hr + 234 MMBtu/hr NG Turbine	6,320	Risk Management Review from ATC Project N-1010750
N-3233-5	Cooling Tower	0	
N-3233-6	11,667 hp NG ICE	3,133	Risk Management Review from ATC Project N-1083510
N-3233-7	11,667 hp NG ICE	3,133	
N-3233-8	11,667 hp NG ICE	3,133	
N-3233-9	11,667 hp NG ICE	3,133	
N-3233-10	11,667 hp NG ICE	3,133	
N-3233-11	11,667 hp NG ICE	3,133	
N-3233-13	62 hp Diesel EMG ICE	2	Risk Management Review from ATC Project N-1083510
N-3233-14	480 hp Diesel EMG ICE	1	Risk Management Review from ATC Project N-1110796
Total HAP (lb/yr)		31,441	

Print Worksheet

**INTERNAL COMBUSTION (NG)
EMISSION FACTORS
(LBS. / MMCF)**

N-3233-4

FACILITY NAME:
DATE:

Modesto Irrigation District
06/28/2001

Receptor Distance:

1

Priority Score

17.97446909

Total hrs. of
operation

8760.00

MMCF/HR

2.35E-01

MMCF/YR

2058.60

EMISSION FACTOR (MMCF/HR)

<1000 **>1000** **TURBINE**

POLLUTANT	<1000	>1000	TURBINE	Acute REL	Chronic REL	Cancer URF
Acetaldehyde	0.944	1.1328	0.037	0	9	2.70E-06
Acrolein	0.3783	0.454	0.009	0.19	2.00E-02	0
Benzene	3.257	3.9084	0.0113	1300	60	2.90E-05
Formaldehyde	32.4963	38.9956	0.094	94	3	6.00E-06
Naphthalene	0.1785	0.1785	0.0008	0	14	0
PAH's	0.0179	0.0179	0.0002	0	0	1.70E-03
Propylene	16.2259	19.4711	1.0522	0	0	0
Toluene	1.1145	1.3374	0.0726	37000	300	0
Xylenes	0.4048	0.4858	0.0289	22000	700	0
Ethyl Benzene	0.3257	0.3908	0.0132	0	2000	0
Hexane	0.7491	0.8989	1.75	0	7000	0

TURBINE

EMISSION FACTORS	LBS./HR.	G/SEC	LBS./YR.	G/SEC	Acute Score	Chronic Score	Carcinogenic Score	Non-Carcinogenic Score
Acetaldehyde	8.70E-03	1.10E-03	7.62E+01	1.10E-03	0	0.14491667	0.349612038	0.144916667
Acrolein	2.12E-03	2.67E-04	1.85E+01	2.67E-04	16.697368	15.8625	0	16.69736842
Benzene	2.66E-03	3.35E-04	2.33E+01	3.35E-04	0.003064	0.00663875	1.146825474	0.00663875
Formaldehyde	2.21E-02	2.79E-03	1.94E+02	2.79E-03	0.3525	1.1045	1.97378568	1.1045
Naphthalene	1.68E-04	2.37E-05	1.55E+00	2.37E-05	0	0.00201429	0	0.002014286
PAH's	4.70E-05	5.93E-06	4.12E-01	5.93E-06	0	0	1.1898708	0
Propylene	2.47E-01	3.12E-02	2.17E+03	3.12E-02	0	0	0	0
Toluene	1.71E-02	2.15E-03	1.48E+02	2.15E-03	0.0006917	0.0085305	0	0.0085305
Xylenes	6.78E-03	8.56E-04	5.95E+01	8.56E-04	0.0004631	0.00145532	0	0.001455321
Ethyl Benzene	3.10E-03	3.91E-04	2.72E+01	3.91E-04	0	0.00023265	0	0.00023265
Hexane	4.11E-01	5.19E-02	3.60E+03	5.19E-02	0	0.0088125	0	0.0088125

Total 6,320 lb/yr

**PRIORITIZATION
FOR**

**MODESTO IRRIGATION DISTRICT
Project # 1083510
Region (N) Facility (3233)**

N- 3233-6, 7, 8, 9, 10, 11

DEVICE NUMBERS 6 - 11
DEVICE NAME 11,667 BHP NATURAL GAS ICE

CAS NUMBER	POLLUTANT NAME	LBS/YEAR	LBS/HOUR	Emissions and Potency Method			Dispersion Adjustment Method		
				Cancer	CHRONIC	ACUTE	Cancer	CHRONIC	ACUTE
1150	PAHs, total, with individ. components also reported	3.04E+01	1.27E-03	1.25E-01	7.01E-02	8.12E-03	2.06E-03	1.17E-03	1.35E-04
50000	Formaldehyde	1.22E+01	5.09E-04	9.22E+00	5.35E-02	8.97E-03	1.52E-01	8.92E-04	1.50E-04
71432	Benzene	1.87E+02	7.78E-03	3.75E-02	1.56E-02		6.17E-04	2.59E-04	
75070	Acetaldehyde	8.16E+00	3.39E-04	1.75E+01	5.79E-01		2.89E-01	9.65E-03	
91203	Naphthalene	3.03E+02	1.26E-02	2.82E+00	5.70E-03		4.65E-02	9.51E-05	
100414	Ethyl benzene	6.64E+02	2.76E-02		4.67E+00	5.36E+00		7.78E-02	8.93E-02
107028	Acrolein	1.63E+01	6.79E-04		2.24E-03	6.59E-05		3.73E-05	1.10E-06
108883	Toluene	3.91E+01	1.63E-03		3.75E-03			6.25E-05	
110543	Hexane	1.53E+03	6.36E-02		1.56E-03			2.59E-05	
115071	Propylene	2.72E+02	1.13E-02		1.67E-03	1.93E-04		2.78E-05	3.21E-06
1330207	Xylenes (mixed)	6.80E+01	2.83E-03						
TOTALS FOR DEVICE 6				2.97E+01	5.40E+00	5.38E+00	4.90E-01	9.01E-02	8.96E-02

3133 lb/yr

ATTACHMENT E

Historical Source Test Results for CO and VOC from
Six Natural Gas Fired IC Engines N-3233-6-3
through '11-3

The following table shows results of the CO and VOC source tests conducted after the order of the oxidation catalyst and SCR were switched to their present configuration.

IC Engines CO and VOC Source Test Results						
Permit	Source Test Date	Measured CO (ppmv) at 15% O2	Measured VOC (ppmv) at 15% O2	Measured O ₂ (ppmv)	Permit Limit CO (ppmv) at 15% O ₃	Permit Limit VOC (ppmv) at 15% O ₃
N-3233-6-2	2/10/2015	3.3	1.1	11.2	13.0	20.0
	1/21/2014	3.4	1.9	11.2	13.0	20.0
	2/5/2013	3.1	3.0	11.2	13.0	20.0
	1/24/2012	3.1	< 0.2	11.2	13.0	20.0
N-3233-7-2	2/11/2015	3.2	1.1	11.5	13.0	20.0
	1/22/2014	3.2	2.5	11.1	13.0	20.0
	6/18/2013	3.3	3.2	10.7	13.0	20.0
	6/26/2012	4.1	2.7	11.1	13.0	20.0
N-3233-8-2	2/12/2015	3.5	1.1	11.5	13.0	20.0
	1/23/2014	3.6	2.2	11.2	13.0	20.0
	6/19/2013	3.6	3.5	11.1	13.0	20.0
	5/31/2012	2.7	1.7	11.1	13.0	20.0
N-3233-9-2	2/17/2015	5.5	1.2	11.8	13.0	20.0
	1/28/2014	4.7	2.0	11.2	13.0	20.0
	6/13/2013	4.1	3.6	11.1	13.0	20.0
	5/24/2012	6.3	2.0	11.3	13.0	20.0
N-3233-10-2	2/18/2015	4.6	1.1	11.7	13.0	20.0
	1/29/2014	4.3	2.2	11.0	13.0	20.0
	6/12/2013	3.6	4.6	11.1	13.0	20.0
	5/23/2012	6.2	2.0	11.3	13.0	20.0
N-3233-11-2	2/19/2015	5.3	1.1	11.1	13.0	20.0
	1/30/2014	5.3	1.9	11.0	13.0	20.0
	6/11/2013	4.9	6.0	10.1	13.0	20.0
	5/22/2012	5.6	1.7	11.2	13.0	20.0