



NOV 10 2011

Harry Scarborough
Pastoria Energy Facility, LLC.
P. O. Box 866
Lebec, CA 93243>

**Re: Notice of Preliminary Decision - Federally Mandated Operating Permit
District Facility # S-3636
Project # S-1060513**

Dear Mr. Scarborough:

Enclosed for your review and comment is the District's analysis of Pastoria application for the Federally Mandated Operating Permit for its power generation facility located at 39789 Edmondston Pumping Plant Road in Arvin in Kern County, California.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 30-day comment period which begins on the date of publication of the public notice.

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

Sincerely,

David Warner
Director of Permit Services

cc: Kamijit Sran, Permit Services Engineer

Attachments

Seyed Sadredin
Executive Director/Air Pollution Control Officer

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

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

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



NOV 10 2011

Gerardo C. Rios, Chief
Permits Office (AIR-3)
U.S. EPA - Region IX
75 Hawthorne St
San Francisco, CA 94105

**Re: Notice of Preliminary Decision - Federally Mandated Operating Permit
District Facility # S-3636
Project # S-1060513**

Dear Mr. Rios:

Enclosed for your review and comment is the District's analysis of Pastoia application for the Federally Mandated Operating Permit for its power generation facility located at 39789 Edmondston Pumping Plant Road in Arvin in Kern County, California.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 45-day comment period which begins on the date of publication of the public notice.

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

Sincerely,

David Warner
Director of Permit Services

cc: Kamjit Sran, Permit Services Engineer

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NOV 10 2011

Mike Tollstrup, Chief
Project Assessment Branch
Air Resources Board
P O Box 2815
Sacramento, CA 95812-2815

**Re: Notice of Preliminary Decision - Federally Mandated Operating Permit
District Facility # S-3636
Project # S-1060513**

Dear Mr. Tollstrup:

Enclosed for your review and comment is the District's analysis of Pastoia application for the Federally Mandated Operating Permit for its power generation facility located at 39789 Edmondston Pumping Plant Road in Arvin in Kern County, California.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 30-day comment period which begins on the date of publication of the public notice.

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

Sincerely,

David Warner
Director of Permit Services

cc: Kamjit Sran, Permit Services Engineer

Attachments

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**NOTICE OF PRELIMINARY DECISION
FOR THE PROPOSED ISSUANCE OF
FEDERALLY MANDATED OPERATING PERMITS**

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Air Pollution Control District solicits public comment on the proposed issuance of the Federally Mandated Operating permits to Pastoria Energy Facility, LLC. for its power generation facility located at 39789 Edmondston Pumping Plant Road in Arvin in Kern County, California.

The District's analysis of the legal and factual basis for this proposed action, project #S-1060513, is available for public inspection at http://www.valleyair.org/notices/public_notices_idx.htm and the District office at the address below. There are no emission changes associated with this proposed action. This will be the public's only opportunity to comment on the specific conditions of the proposed Federally Mandated Operating initial permits. If requested by the public, the District will hold a public hearing regarding issuance of this initial permit. For additional information, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900. Written comments on the proposed initial permit must be submitted within 30 days of the publication date of this notice to DAVID WARNER, DIRECTOR OF PERMIT SERVICES, SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT, 1990 E. GETTYSBURG AVE, FRESNO, CALIFORNIA 93726-0244.

SANJOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

**TITLE V APPLICATION REVIEW
PASTORIA ENERGY FACILITY
FACILITY # S-3636**

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Title V Application Review

Electric Generation Facility

Project #: 1060513

Deemed Complete: February 16, 2006

Engineer: Kamaljit Sran
Date: November 9, 2011

Facility Number: S-3636
Facility Name: Pastoria Energy Facility, LLC
Mailing Address: P. O. Box 866
Lebec, CA 93243

Contact Name: Harry Scarborough
Phone: (661) 864-3842

Responsible Official: Harry Scarborough
Title: Plant Manager

I. PROPOSAL

Pastoria Energy Facility, LLC is proposing that the initial Title V Operating Permit be issued for its existing power generation facility located in Kern County. The purpose of this engineering evaluation is to identify all applicable requirements, determine if the facility will comply with those applicable requirements, and to provide the legal and factual basis for proposed permit conditions.

This facility has been identified as a federal acid rain source, subject to the requirements of 40 CFR Part 72.

II. FACILITY LOCATION

This power generation facility is located at 39789 Edmondston Pumping Plant Road in Arvin in Kern County, California.

III. EQUIPMENT LISTING

A detailed facility printout listing all permitted equipment at the facility is shown in Attachment A.

A summary of the exempt equipment categories which describe the insignificant activities or equipment at the facility not requiring a permit is shown in Attachment B. This equipment is not exempt from facility-wide requirements.

IV. GENERAL PERMIT TEMPLATE USAGE

The applicant is not requesting to use the any model general permit templates:

V. SCOPE OF EPA AND PUBLIC REVIEW

Since applicant is not requested to use any model general permit templates, the proposed permit is in it's entirety is subject to EPA and public review.

VI. APPLICABLE REQUIREMENTS ADDRESSED BY GENERAL PERMIT TEMPLATES

The applicant has not proposed to utilize any model general permit templates. All applicable requirements are explicitly addressed in the permit outside of the general permit templates.

VII. APPLICABLE REQUIREMENTS NOT ADDRESSED BY GENERAL PERMIT TEMPLATES

District Rule 1070, Inspections, (as amended December 17, 1992)

District Rule 1080, Stack Monitoring, (as amended December 17, 1992)

District Rule 1081, Source Sampling, (as amended December 16, 1993)

District Rule 1100, Equipment Breakdown, (as amended December 17, 1992)

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

District Rule 2020, Exemptions, (as amended August 18, 2011)

District Rule 2031, Transfer of Permits (as amended December 17, 1992)

District Rule 2040, Applications, (as amended December 17, 1992)

District Rule 2070, Standards for Granting Applications (as amended December 17, 1992)

District Rule 2080, Conditional Approval, (as amended December 17, 1992)

District Rule 2201, District New and Modified Stationary Source Review Rule, (as amended April 21, 2011)

District Rule 2520, Federally Mandated Operating Permits, (as amended June 21, 2001)

- District Rule 2540, Acid Rain Program (Adopted November 13, 1997)
- District Rule 4101, Visible Emissions, (as amended December 17, 2005)
- District Rule 4201, Particulate Matter Concentration, (as amended December 17, 1992)
- District Rule 4601, Architectural Coatings, (as amended December 17, 2009)
- District Rule 4702, Internal Combustion Engines – Phase 2 (Amended August 18, 2011)
- District Rule 4703, Stationary Gas Turbines, (as amended September 20, 2007)
- District Rule 4801, Sulfur Compounds, (as amended December 17, 1992) (Non SIP replacement for Kern County Rule 407)
- District Rules 8021, 8031, 8041, 8051, and 8061, Fugitive Dust (PM₁₀) Emissions (as amended August 19, 2004)
- District Rule 8071, Fugitive Dust (PM₁₀) Emissions, (as amended Sept. 16, 2004)
- 40 CFR 61, Subpart M - Asbestos
- 40 CFR 82, Subpart F - Stratospheric Ozone
- 40 CFR 60 Subpart GG - Standards of Performance for Stationary Gas Turbines
- 40 CFR 60 Subpart KKKK - Standards of Performance for Stationary Combustion Turbines
- 40 CFR 63 Subpart Q - National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers
- 40 CFR 63 Subpart YYYY - National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines
- 40 CFR 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
- 40 CFR Part 64 - Compliance Assurance Monitoring (CAM)
- 40 CFR Part 72 - Acid Rain Program
- EPA (PSD) Permit (SJ 99-03) - Prevention of Significant Deterioration

VIII. 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 Permit. The terms and conditions that are part of the facility's Title V permit are designated as "Federally Enforceable Through the Title V Permit".

The facility is subject to the following District rules which are not currently Federally Enforceable:

1. District Rule 4102 - Nuisance

For this facility, condition 41 of the facility wide requirements is based on the rules identified above and is not Federally Enforceable Through the Title V Permit.

Condition 22 of the requirements for permit units S-3636-1-4, -2-4, & -3-4 is also based on the rules identified above and is not Federally Enforceable Through the Title V Permit

2. CH&SC § 41900 thru § 41905 California Health and Safety Code (Sand Blasting Operations)

Pursuant to the California Health & Safety Code § 41900 thru § 41905. Abrasive blasting operations are exempt from the requirements of specific District Rules (S-3636-13-1) are not Federally Enforceable Through the Title V Permit

IX. COMPLIANCE

A. Requirements Addressed by Model General Permit Templates

The applicant has chosen to not use any general permit templates; therefore, no requirements are addressed by model general permit templates.

B. Requirements Not Addressed by Model General Permit Templates

The applicant has not proposed to utilize any model general permit templates. All applicable requirements are explicitly addressed in the permit outside of the general permit templates

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

- a. 168 MW GE 7FA Natural Gas-Fired Combined Cycle Gas Turbine Engine/Electrical Generator (S-3636-1-4, -2-4, and -3-4)

These permit units were subject to the District NSR Rule at the time the applicant applied for an Authority to Construct. In accordance with the White Paper for Streamlined Development of Part 70 Permit Applications, dated July 10, 1995, conditions from the resulting PTO were addressed to define how NSR permit terms should be incorporated into the Title V permit.

- Condition 1 from the PTO was included as condition 39 of the facility wide requirements. This condition is not federally enforceable because it is based on the public nuisance requirements of the California Health and Safety Code rather than a federally applicable requirement.
- Conditions 2 through 30 from the PTO were included as conditions 1 through 29 of the requirements for these permit units.
- Condition 31 the PTO was not included in the requirements of these permit unit, since it requires notification of initial construction and startup date. This notification is no longer relevant.
- Conditions 32 through 38 from the PTO were included as conditions 30 through 36 of the requirements for these permit units.
- Conditions 39 & 40 from PTO were included as conditions 1 & 2 of facility-wide requirements. These conditions specify breakdown requirement of District Rule 1100.
- Conditions 41, 42, & 43 from PTO were included as conditions 37, 38, & 39 of the requirements for these permit units.

- b. Forced Draft Cooling Towers (S-3636-4-4 & -5-4)

These permit units were subject to the District NSR Rule at the time the applicant applied for an Authority to Construct. In accordance with the White Paper for Streamlined Development of Part 70 Permit Applications, dated July 10, 1995, conditions from the resulting PTO were addressed to define how NSR permit terms should be incorporated into the Title V permit.

- Condition 1 from the PTO was included as condition 39 of the facility wide requirements. This condition is not federally enforceable because it is based on the public nuisance requirements of the California Health and Safety Code rather than a federally applicable requirement.
- Conditions 2 through 7 from the PTO were included as conditions 1 through 6 of the requirements for these permit units.

- c. 814 HP Caterpillar Gas Fired Emergency IC Engine (S-3636-7-4)

c. 814 HP Caterpillar Gas Fired Emergency IC Engine (S-3636-7-4)

The permit unit was subject to the District NSR Rule upon application for Authority to Construct (ATC). In accordance with the White Paper for Streamlined Development of Part 70 Permit Applications, dated July 10, 1995, conditions from the resulting PTO were addressed to define how NSR permit terms should be incorporated into the Title V permit.

- Conditions 1 & 2 from the PTO were included as conditions 4 & 5 of the requirements for this permit unit.
- Condition 3 from the PTO was included as condition 39 of the facility wide requirements. This condition is not federally enforceable because it is based on the public nuisance requirements of the California Health and Safety Code rather than a federally applicable requirement.
- Condition 4 from the PTO was included as condition 6 of the requirements for this permit unit.
- Condition 5 from the PTO was included as condition 1 of the requirements for this permit unit.
- Condition 6 from the PTO was included as condition 22 of the facility wide requirements.
- Conditions 7 & 8 from the PTO were included as conditions 2 & 3 of the requirements for this permit unit.
- Condition 9 from the PTO was included as condition 10 of the requirements for this permit unit.
- Conditions 10, 11, & 12 from the PTO were included as conditions 7, 8, & 9 of the requirements for this permit unit.
- Conditions 13 & 14 from the PTO were included as conditions 11 & 12 of the requirements for this permit unit.

d. 360 John Deere Diesel Fired Emergency IC Engine (S-3636-12-1)

The permit unit was subject to the District NSR Rule upon application for Authority to Construct (ATC). In accordance with the White Paper for Streamlined Development of Part 70 Permit Applications, dated July 10, 1995, conditions from the resulting PTO were addressed to define how NSR permit terms should be incorporated into the Title V permit.

- Condition 1 from the PTO was included as condition 6 of the requirements for this permit unit.
- Condition 2 from the PTO was included as condition 1 of the requirements for this permit unit.
- Condition 3 from the PTO was included as condition 39 of the facility wide requirements. This condition is not federally enforceable because it is based on the public nuisance requirements of the California Health and Safety Code rather than a federally applicable requirement.

- Condition 4 from the PTO was included as condition 3 of the requirements for this permit unit.
- Conditions 5 & 6 from the PTO were included as conditions 8 & 9 of the requirements for this permit unit.
- Condition 7 from the PTO was included as condition 2 of the requirements for this permit unit.
- Condition 8 from the PTO was included as condition 22 of the facility wide requirements.
- Conditions 9 & 10 from the PTO were included as conditions 4 & 5 of the requirements for this permit unit.
- Condition 11 from the PTO was included as condition 10 of the requirements for this permit unit.
- Conditions 12 & 13 from the PTO were not included in the requirements for these permit units. These conditions specify requirements of State Diesel ATCM requirements that are not applicable to this unit or this facility.
- Condition 14 from the PTO was included as condition 11 of the requirements for this permit unit.

e. Confined Abrasive Blasting Unit(S-3636-13-1)

Pursuant to the California Health & Safety Code § 41900 thru § 41905. Abrasive blasting operations are exempt from the requirements of specific District Rules.

2. District Rule 1081 Source Monitoring

a. 168 MW GE 7FA Natural Gas-Fired Combined Cycle Gas Turbine Engine/Electrical Generator (S-3636-1-4, -2-4, and -3-4)

This rule grants the APCO the authority to request the installation, use maintenance, and inspection of continuous emission monitoring equipment. The general, source, and pollutant specific requirements for continuous emission monitoring equipment (CEM) are defined. This rule also specifies the performance standards for the equipment and administrative recordkeeping, reporting, and violation and equipment breakdown notification requirements.

Section 6.3 requires that calibration gas mixtures shall meet the specifications in 40 CFR, Part 51, Appendix P, Section 3.3, and Part 60, Appendix B, Performance Specification 2, Section 2.1, or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the Environmental Protection Agency.

Section 6.4 requires that cycling times shall be those specified in 40 CFR, Part 51, Appendix P, Sections 3.4, 3.4.1 and 3.4.2, or shall meet

equivalent specifications established by mutual agreement of the District, the ARB and the Environmental Protection Agency.

Section 6.5 requires that the continuous SO₂ and NO_x monitors meet the applicable performance specification requirements in 40 CFR, Part 51, Appendix P, and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the Environmental Protection Agency.

Section 6.6 requires that the continuous CO₂ and O₂ monitoring system shall meet the performance specification requirements in 40 CFR, Part 51, Appendix P, and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the Environmental Protection Agency.

Section 6.7 requires that the continuous opacity monitoring system shall meet the performance specification requirements in 40 CFR, Part 51, Appendix P, and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the Environmental Protection Agency.

Section 7.1 requires that a person operating or using a stack-monitoring system shall, upon written notice from the APCO, provide a summary of the data obtained from such systems. This summary of data shall be in the form and the manner prescribed by the APCO.

Section 7.2 requires that data shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement of the District, the ARB and the Environmental Protection Agency.

Section 7.3 requires that records from the monitoring equipment shall be kept by the owner for a period of two (2) years. The records shall be in permanent form, shall be suitable for inspection and shall be made available to the ARB and the District upon request. The records shall at a minimum include:

7.3.1 The occurrence and duration of any start-up, shutdown or malfunction in the operation of any affected facility;

7.3.2 Performance testing, evaluations, calibrations, checks, adjustments and maintenance of any continuous emission monitors that have been installed pursuant to this rule; and

7.3.3 Emission measurements.

Section 8.0 requires that owners or operators subject to Section 4.0 shall submit a written report for each calendar quarter to the APCO. The report is due by the 30th day following the end of the calendar quarter and shall include:

8.1 Time intervals, data and magnitude of excess emissions, nature and cause of the excess (if known), corrective actions taken and preventive measures adopted.

8.2 Averaging period used for data reporting corresponding to averaging period specified in the emission test period used to determine compliance with an emission standard for the pollutant/source category in question.

8.3 Time and date of each period during which the continuous monitoring system was inoperative, except for zero and span checks, and the nature of system repairs and adjustments.

8.4 A negative declaration when no excess emissions occurred.

8.5 Reports on opacity monitors giving the number of three (3) minute periods during which the average opacity exceeded the standard for each hour of operation. The averages may be obtained by integration over the averaging period or by arithmetically averaging a minimum of four (4) equally spaced instantaneous opacity measurements per minute. Any time period exempted shall be considered before determining the excess averages of opacity.

Section 9.0 requires that a violation of emission standards of these rules, as shown by the stack-monitoring system, shall be reported by such person to the Air Pollution Control Officer within 96 hours.

Section 10.0 requires that in the event of a breakdown of monitoring equipment, the owner shall notify the APCO as soon as reasonably possible, but no later than eight (8) hours after its detection, unless the owner or operator demonstrates to the APCO's satisfaction that a longer reporting period was necessary, and shall initiate repairs. The owner shall inform the APCO of the intent to shut down any monitoring equipment at least 24 hours prior to the event.

Section 11.0 requires that the APCO or an authorized representative shall inspect, as he determines to be necessary, the monitoring devices required by this rule to ensure that such devices are functioning properly.

Conditions 3, 36, 37, 38, and 39 of the requirements for permit units S-3636-1-4, -2-4, & -3-4 assure compliance with this rule.

3. District Rule 1081 Source Sampling

- a. 168 MW GE 7FA Natural Gas-Fired Combined Cycle Gas Turbine Engine/Electrical Generator (S-3636-1-4, -2-4, and -3-4)

Sections 3.0, 4.0, 5.0, 6.0, and 7.0 of the District Rule 1081 set forth requirements for sampling facilities, collection of samples, test methods, test procedures, and administrative requirements, respectively. These requirements are covered by conditions 23, 24, and 27 of the requirements for permit units S-3636-1-4, -2-4, & -3-4.

3. District Rule 1100 Equipment Breakdown - (Non SIP replacement for Kern County Rule 111)

- a. Facility-wide (S-3636-0-1)

District Rule 1100 has been submitted to the EPA to replace the SIP approved Kern County APCD Rule 111. District Rule 1100 is at least as stringent as the County Rule addressing breakdowns, as is evident in the comparison on below in table 1:

Table 1 - Comparison of District Rule 1100 to Kern County Rule 111

REQUIREMENT	District Rule 1100	Kern County Rule 111
A breakdown occurrence must be reported as soon as reasonably possible but no later than 1 hour after detection.	✓	✓ (2 hours)
A variance must be obtained if the occurrence will last longer than a production run or 24 hours, whichever is shorter (96 hours for CEM systems)	✓	✓
A report must be submitted to the APCO within 10 days of correction of a breakdown occurrence which includes the following:	✓	✓
1) A statement that the breakdown condition has been corrected together with the date of correction and proof of compliance.	✓	✓
2) A specific statement of the reason(s) or cause(s) for the occurrence sufficient to enable the APCO to determine whether the occurrence was a breakdown condition.	✓	✓
3) A description of corrective measures undertaken and/or be undertaken to avoid such an occurrence in the future.	✓	✓
4) Pictures of the equipment or controls which, failed if available.	✓	✓

Section 6.1 requires the owner or operator to notify the APCO of any occurrence which constitutes a breakdown condition; the notification should include time, location, and equipment involved and to the extent known the cause of the occurrence. Such notification should be a given as soon as reasonably possible, but no later than one hour after detection, unless the owner or operator demonstrates to the APCO that the longer reporting period was necessary. Condition 1 of facility-wide requirements (S-3636-0-1) assures compliance with this requirement.

Section 7.0 requires the owner or operator to submit the APCO a written report within ten days of any occurrence that constitutes a breakdown condition. The report should include time, location, equipment involved, cause of the occurrence, estimated emissions in excess of those allowed, and methods utilized to restore normal operation. Conditions 2 and 11 of facility-wide requirements (S-3636-0-1) assure compliance with this requirement.

4. District Rule 1130 Severability

a. Facility Wide (S-3636-0-1)

Section 2.0 requires that if any provision, clause, sentence, paragraph, section or part of these conditions for any reason be judged invalid, such judgment shall not affect or invalidate the remainder of conditions. Condition 12 of facility wide requirements (S-3636-0-1) assures compliance with this requirement.

5. District Rule 1160 Emission Standards

a. Facility-wide (S-3636-0-1)

Section 5.0 requires the owner or operator of any stationary source to provide the District with a written emission statement showing actual emissions of reactive organic gases (ROGs) and nitrogen oxides (NO_x) from that source. The District waives this requirement for sources emitting less than 25 tons per year of these pollutants if the District provides the Air Resources Board (ARB) with an emission inventory of sources emitting greater than 10 tons per year of NO_x or ROGs based on the use of emission factors acceptable to the ARB. See condition 3 of the facility-wide requirements (S-3636-0-1).

**6. District Rule 2010 Permits Required,
District Rule 2020 Exemptions**

a. Facility Wide (S-3636-0-1)

District Rule 2010 sections 3.0 and 4.0 require any person building, modifying or replacing any operation that may cause the issuance of air contaminants to apply for an Authority to Construct (ATC) from the District in advance. The ATC will remain in effect until the Permit to Operate (PTO) is granted.

District Rule 2020 lists equipment which are specifically exempt from obtaining permits and specifies recordkeeping requirements as stated in condition 4 of the facility wide requirements (S-3636-0-1).

**7. District Rule 2031 Transfer of Permits;
District Rule 2070, Standards for Granting Applications; and
District Rule 2080, Conditional Approval**

a. Facility Wide (S-3636-0-1)

These rules set forth requirements to comply with all conditions of the Permit to Operate. Permits to Operate or Authorities to Construct are not transferable unless a new application is filed with and approval by the District. All source operations must be constructed and operated as specified in the Authority to Construct. See conditions 5 and 6 of the facility wide requirements (S-3636-0-1).

8. District Rule 2040 Applications

a. Facility Wide (S-3636-0-1)

Section 3.0 requires that every application for a permit shall be filed in a manner and form prescribed by the District. See condition 7 of the facility wide requirements (S-3636-0-1).

9. District Rule 2520 Federally Mandated Operating Permits

a. Facility Wide (S-3636-0-1)

Section 5.2 requires that permittees submit applications for Title V permit renewal at least six months prior to permit expiration. Condition 36 of the facility wide requirements (S-3636-0-1) assures compliance with this requirement.

Section 9.3.2 states that periodic monitoring be required if none is associated with a given emission limit to assure compliance. Monitoring is required for the permit units.

Sections 9.4.1 and 9.4.2 contain requirements to incorporate all applicable record keeping requirements into the Title V permit, specific records of any required monitoring, and the retention of all required monitoring data and support information for five years. The requirements to keep specific monitoring records and retain records for five years are stated in condition 8 and 9 of the facility wide requirements (S-3636-0-1).

Section 9.5 contains requirements for the submittal of reports for monitoring results at least every six months and prompt recording of deviations from permitting requirements, including those attributable to upset conditions. All required reports must be certified by the responsible official. These requirements are stated in conditions 10 and 11 of the facility wide requirements (S-3636-0-1).

Section 9.7 states that the Title V permit also must contain a severability clause in case of a court challenge; the severability clause is in condition 12 of the facility wide requirements (S-3636-0-1).

Section 9.8 contains following provisions for the Title V permit: 1) the permittee must comply with all permit conditions; 2) that the permitted activity would have to be reduced to comply with the permit conditions should not be a defense in an enforcement action, 3) that the permit may be revoked, modified, reissued, or reopened for cause, 4) that the Title V permit does not reflect any property rights, and 5) that the permittee will furnish the District with any requested information to determine compliance. Compliance with this section will be assured by conditions 5 and 13 through 16 of the facility wide requirements S-3636-0-1.

Section 9.9 requires the permittee to pay annual permit fees and applicable fees described in District Rules 3010, 3030, 3050, 3080, 3090, 3110, and 3120. This requirement is stated in condition 17 of the facility wide requirements (S-3636-0-1).

Section 9.12.1 states that all terms and conditions of a permit are required pursuant to the CAA, including provisions designed to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. This requirement is stated in condition 5 of the facility wide (S-3636-0-1).

Section 9.13.1 requires that any report or document submitted under a permit requirement or following a request for information by the District or EPA to contain certification by a responsible official to its truth, accuracy, and completeness. Compliance with this section will be assured by condition 28 of the facility wide requirements (S-3636-0-1).

Section 9.13.2 presents inspection and entry requirements that allow an authorized representative of the District to enter a permittee's premises to inspect equipment, operations, work practices, permits on file, and to sample substances or monitor parameters for the purpose of assuring compliance with the permit requirements. Compliance with these requirements will be assured by conditions 18, 19, 20, and 21 of the facility wide requirements (S-3636-0-1).

Section 9.16 requires the permittee to submit certification of compliance with the terms and standards of Title V permits to the EPA and the District annually (or more frequently as required by the applicable requirement of the District). Condition 36 of the facility wide requirements (S-3636-0-1) assures compliance with this requirement.

Section 10.0 requires that any application form, report or compliance certification submitted pursuant to these regulations to contain certification of truth, accuracy, and completeness by a responsible official. Compliance with this section will be assured by condition 26 of the facility wide requirements (S-3636-0-1).

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

10. District Rule 4101 Visible Emissions

a. Facility Wide (S-3636-0-1)

Section 5.0 prohibits the discharge of any air contaminant for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker in shade as that designated as No.1 on the Ringlemann Chart; or is of such opacity as to obscure an observer's view to a degree equal to or greater than 20% opacity. This requirement is stated in condition 22 of the facility wide requirements (S-3636-0-1).

11. District Rule 4201 Particulate Matter Concentration

Section 3.0 prohibits the discharge into the atmosphere of dust, fumes, or total suspended particulate matter from any single source operation in excess of 0.1 grain per cubic foot of gas at dry standard conditions.

a. 168 MW GE 7FA Natural Gas-Fired Combined Cycle Gas Turbine Engine/Electrical Generator (S-3636-1-4, -2-4, and -3-4)

Compliance with the Particulate Matter (PM) emission limit of 0.1 gr/dscf is expected because the gas turbines are fired on pipeline quality (low-sulfur) natural gas. Results from source tests of natural gas fired-turbines in the San Joaquin Valley indicate emission rates of approximately 0.001 gr/dscf of PM. AP-42 (4/00), Table 3.1-2a lists a total PM emission rate of 6.6×10^{-3} lb/MMbtu (6.6 lb/scf assuming 1,000 btu per scf). This rate will be used to show compliance in the equation below.

The expected concentration of PM emitted from the natural gas-fired turbines is shown by the following equation:

$$\left(\frac{6.6lb - PM}{10^6 scf}\right) \times \left(\frac{1,000scf}{10^6 Btu}\right) \times \left(\frac{7,000grains}{lb}\right) \times \left(\frac{10^6 Btu}{8,710dscf}\right) = 0.0053 \frac{grain}{dscf}$$

Where:

$$\frac{6.6lb - PM}{10^6 scf} = \text{Emission Factor (AP-42 (4/00), Table 3.1-2a)}$$

$$\frac{10^6 Btu}{8,710dscf} = \text{F Factor (40 CFR 60, Appendix A-7, Table 19-1)}$$

0.0053 gr/dscf < 0.1gr/dscf; therefore natural gas-fired turbines will be in compliance with the emission limit of this rule.

b. Emergency IC Engines S-3636-7-4 & -12-1

Per the CAPCOA/CARB/EPA IX Title V Periodic Monitoring Recommendations memo, dated July 2001, diesel-fired emergency IC engines do not need to be source tested for compliance with the District's grain loading limit of 0.1 grain/dscf as long as the following conditions are in the Permit to Operate:

- 1) Engine usage is limited to maintenance, testing, and time of actual unforeseen emergencies.
- 2) Usage for maintenance and testing is not to exceed 200 hours per year.
- 3) Maintain records of all engine usage and maintenance.

12. District Rule 4702 Internal Combustion Engines – Phase 2

a. Emergency IC Engines S-3636-7-4 & -12-1

The purpose of this rule is to limit the emissions of nitrogen oxides (NO_x), carbon monoxide (CO), and volatile organic compounds (VOC) from internal combustion engines. This rule applies to any internal combustion engine with a rated brake horsepower greater than 50 horsepower. Section 4.3 provides that except for the administrative requirements of section 6.2.3, the requirements of this rule shall not apply to an engine that is: (a) operated exclusively to preserve or protect property, human life, or public health during a disaster or state of emergency, such as a fire or flood; (b) except for operations associated with (a), limited to operate no more than 100 hours per calendar year as determined by an operational nonresettable elapsed operating time meter, for periodic

maintenance, periodic readiness testing, and readiness testing during and after repair work of the engine, and (c) operated with a nonresettable elapsed operating time meter. In lieu of installing a nonresettable time meter, the owner of an engine may use an alternative device, method, or technique, in determining operating time provided that the alternative is approved by the APCO. The owner of the engine shall properly maintain and operate the time meter or alternative device in accordance with the manufacturer's instructions.

Section 6.2.3 requires that an owner claiming an exemption under section 4.3 shall maintain annual operating records. This information shall be retained for at least five years, shall be readily available, and provided to the APCO upon request. The records shall include, but are not limited to, the following: total hours of operation, the type of fuel used, the purpose for operating the engine, for emergency standby engines, all hours of nonemergency and emergency operation shall be reported, and other support documentation necessary to demonstrate claim to the exemption.

Conditions 5 through 12 of permit unit S-3636-7-4, conditions 6 through 11 of permit unit S-3636-12-1 ensure compliance with requirements of this rule.

13. District Rule 4703 Stationary Gas Turbines

- a. 168 MW GE 7FA Natural Gas-Fired Combined Cycle Gas Turbine Engine/Electrical Generator (S-3636-1-4, -2-4, and -3-4)

The purpose of this rule is to limit NO_x emissions from stationary gas turbine systems. Pursuant to Section 2.0, this rule applies to all stationary gas turbine systems, which are subject to District permitting requirements, and with ratings equal to or greater than 0.3 megawatt (MW) and/or a maximum heat input rating of more than 3,000,000 Btu per hour.

Emissions during periods of thermal stabilization and reduced load are not subject to the emissions requirements of this rule, as exempted by Sections 5.1 and 5.2.

Section 5.1.2 of this rule specifies the NO_x limits that the turbines must meet. The turbines at the facility must meet Tier 2 emission limits. If facility would have chosen the enhanced option for compliance. Table 5-2 specifies the standard NO_x limit for turbines greater than 10 MW as:

Maximum NO_x = 3 ppmv @ 15% O₂

Condition 15 of the permits for units S-3636-1-4, -2-4, and -3-4 limits emissions to a maximum of 2.5 ppmv NO_x @ 15% O₂, therefore compliance with the section 5.1.2 is assured.

This section also requires that NO_x emissions concentrations measured for compliance with Section 5.0 shall be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance with either the applicable test method in Section 6.4, or, if continuous emission monitors are used, all applicable requirements of 40 CFR Part 60, as detailed in Section 6.2. The units are required to measure NO_x over a one-hour period, which is more stringent than the requirement of the section. Therefore compliance is expected.

Section 5.2 requires that the owner or operator of any stationary gas turbine system shall not operate such unit under load conditions, excluding the thermal stabilization period and the reduced load period, which results in the measured CO emissions concentration exceeding the compliance 200 ppmv CO @ 15% O₂.

Section 6.1 requires that the owner or operator of any existing stationary gas turbine system, unless exempted in Section 6.1.5, shall submit, to the APCO for approval, an emissions control plan of all actions, including a schedule of increments of progress, which will be taken to comply with the requirements of the applicable NO_x Compliance Limit in Section 5.0 and Compliance Schedule in Section 7.0.

Section 6.2.3 requires that for units 10 MW and greater that operated an average of more than 4,000 hours per year over the last three years before August 18, 1994, the owner or operator shall monitor the exhaust gas NO_x emissions. The NO_x monitoring system shall meet EPA requirements as specified in 40 CFR Part 60 App. B, Spec. 2, 40 CFR Part 60 App. F, and 40 CFR Part 60.7 (c), 60.7 (d), and 60.13, or other systems that are acceptable to the EPA. The owner or operator shall submit to the APCO information demonstrating that the emission monitoring system has data gathering and retrieval capability. Gas turbines at this facility are equipped with CEMS system.

Section 6.2.4 requires that the owner or operator shall maintain all records for a period of five years from the date of data entry and shall make such records available to the APCO upon request.

Section 6.2.6 requires that 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, type and quantity of fuel used (liquid/gas).

Section 6.3.1 requires that the owner or operator of any stationary gas turbine systems subject to the provisions of Section 5.0 of this rule shall provide source test information annually regarding the exhaust gas NO_x and CO concentrations.

Section 6.4 requires that the specific test methods shall be used unless otherwise approved by the APCO and EPA. Since the combustion turbines comply with the Tier 2 NO_x emissions limits and CEMS are installed and operated, the determination of turbines' EFF to demonstrate compliance with NO_x emissions level of Tier 1 will not be required.

Section 7.0 specifies compliance schedule for the turbines subject to the requirement of section 5.0. These turbines are currently in compliance with the Tier 2 emissions limit requirements.

Conditions 15, 29, 32, and 33 of the requirements for permit units S-3636-1-4, -2-4, & -3-4 assure compliance with this rule

14. District Rule 4601 Architectural Coatings

a. Facility Wide (S-3636-0-1)

The latest version of District Rule 4601 has not been SIP approved. Attachment D contains the streamlining of the SIP approved District Rule 4601 (10/31/01) to the current District Rule 4601 to show the current rule is as stringent if not more than the SIP approved version. Conditions 23 through 25 on the facility-wide permit (S-3636-0-1) demonstrate compliance with the requirements of the latest version of this rule.

15. District Rule 4801 - Sulfur Compounds

District Rule 4801 has been submitted to the EPA to replace Kern County Rule 407, which is in the SIP. District Rule 4801 is as stringent as Kern County Rule 407, as shown below in Table 2.

Table 2 - Comparison of District Rule 4801 and Kern County Rule 407

REQUIREMENTS	District Rule 4801	Kern County Rule 407
a person shall not discharge into the atmosphere sulfur compounds exceeding in concentration at the point of discharge 0.2 percent by volume calculated as sulfur dioxide on a dry basis averaged over 15 consecutive minutes.	✓	✓
EPA Method 8 and ARB Method 1-100 shall be used to determine such emissions.	✓	

A person shall not discharge into the atmosphere sulfur compounds, which would exist as a liquid or gas at standard conditions, exceeding in concentration at the point of discharge: 0.2 % by volume calculated as SO₂, on a dry basis averaged over 15 consecutive minutes.

- a. 168 MW GE 7FA Natural Gas-Fired Combined Cycle Gas Turbine Engine/Electrical Generator (S-3636-1-4, -2-4, and -3-4) and Emergency IC Engine S-3636-7-4

The following analysis shows that these turbines comply with the sulfur compound emissions limit. The combustion equation for natural gas is (neglecting NO_x and SO_x relative to O₂ in the exhaust):

Using the ideal gas equation and the emission factors presented in Section VII, the sulfur compound emissions are calculated as follows:

$$\text{Volume SO}_2 = \frac{n RT}{P}$$

With:

N = moles SO₂

T (Standard Temperature) = 60°F = 520°R

P (Standard Pressure) = 14.7 psi

R (Universal Gas Constant) = $\frac{10.73 \text{ psi} \cdot \text{ft}^3}{\text{lb} \cdot \text{mol} \cdot \text{°R}}$

SO_x emissions from the turbines are based on combusting the fuel with a total fuel sulfur (S) content of 0.75 grain per 100 scf, which results in a SO_x emission rate of 0.002 lb/MMBtu

$$\frac{0.002 \text{ lb SO}_x}{\text{MMBtu}} \times \frac{\text{MMBtu}}{8,578 \text{ dscf}} \times \frac{1 \text{ lb} \cdot \text{mol}}{64 \text{ lb}} \times \frac{10.73 \text{ psi} \cdot \text{ft}^3}{\text{lb} \cdot \text{mol} \cdot \text{°R}} \times \frac{520 \text{°R}}{14.7 \text{ psi}} \times \frac{1,000,000 \text{ parts}}{\text{million}} = 1.48 \frac{\text{parts}}{\text{million}}$$

$$\text{Sulfur Concentration} = 1.97 \frac{\text{parts}}{\text{million}} < 2,000 \text{ ppmv (or 0.2\%)}$$

Condition 9 of permit units S-3636-1-4, -2-4, & -3-4 and Condition 2 of permit unit S-3636-7-4 ensure compliance with requirements of this rule.

- b. Emergency ICE Engine S-3636-12-1

Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used in this engine. Using the ideal gas equation, the sulfur compound emissions are calculated as follows:

$$\text{Volume SO}_2 = (n \times R \times T) \div P$$

$n = \text{moles SO}_2$

$T (\text{standard temperature}) = 60\text{ }^\circ\text{F or } 520\text{ }^\circ\text{R}$

$R (\text{universal gas constant}) = \frac{10.73 \text{ psi} \cdot \text{ft}^3}{\text{lb} \cdot \text{mol} \cdot \text{ }^\circ\text{R}}$

$$\frac{0.000015 \text{ lb} - \text{S}}{\text{lb} - \text{fuel}} \times \frac{7.1 \text{ lb}}{\text{gal}} \times \frac{64 \text{ lb} - \text{SO}_2}{32 \text{ lb} - \text{S}} \times \frac{1 \text{ MMBtu}}{9,051 \text{ scf}} \times \frac{1 \text{ gal}}{0.137 \text{ MMBtu}} \times \frac{\text{lb} - \text{mol}}{64 \text{ lb} - \text{SO}_2} \times \frac{10.73 \text{ psi} \cdot \text{ft}^3}{\text{lb} - \text{mol} \cdot \text{ }^\circ\text{R}} \times \frac{520^\circ\text{R}}{14.7 \text{ psi}} \times 1,000,000 = 1.0 \text{ ppmv}$$

Since 1.0 ppmv is $\leq 2,000$ ppmv, this engine is expected to comply with Rule 4801. Therefore, the following condition will be listed on the ATC to ensure compliance:

Condition 3 of permit unit S-3636-12-1 ensures compliance with requirements of this rule.

16. District Rules 8021, 8031, 8041, 8051, 8061, and 8071 Fugitive Dust (PM₁₀) Emissions

a. Facility Wide (S-3636-0-1)

These rules contain requirements for the control of fugitive dust. These requirements apply to a variety of sources, including: construction, demolition, excavation, extraction, and water mining activities; outdoor storage piles; paved and unpaved roads. Conditions 29, 30, 31, 32, 33, and 34 of the facility wide requirements (S-3636-0-1) assure compliance with these rules.

17. 40 CFR 60 Subpart GG

Compliance with Standards for NOx Emission Concentration Limit - 60.332, 60.334, and 60.335:

The gas turbines at this facility are subject to the requirements of this subpart. Section §60.332(a), Standard for nitrogen oxides, requires that NOx emissions from any turbine with rate heat greater than 100 MMBtu/hr be less than the standards calculated as:

$$\text{STD} = 0.0075 \times (14.4)/(Y) + F$$

where:

- STD = allowable NOx emissions (percent by volume at 15 percent oxygen and on a dry basis).
- Y = manufacturer's rated heat rate at manufacturer's rated peak load (kilojoules per watt hour), or actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour.
- F = NOx emission allowance for fuel-bound nitrogen as defined in paragraph (a)(3) of this section.

The lowest STD value calculated is when Y is equal to 14.4 and F is equal to 0. Under this condition, the STD calculated to be 0.0075% by volume @ 15% O₂ or 75 ppmvd @ 15% O₂. The NO_x emissions from the turbines are limited to 2.5 ppmvd @ 15% O₂. Therefore, compliance with NO_x emissions standards of this subpart is expected.

Section 60.334 specifies monitoring and reporting requirements. The turbines are not equipped with water injection system; therefore, the water injection system monitoring requirements from sections 60.334(a), (b), (d), and (g) are not applicable.

Section 60.334(c) states that for any turbine that commenced construction, reconstruction, or modification after October 3, 1977, but before July 8, 2004, and which does not use steam or water injection to control NO_x emissions, the owner or operator may, for purposes of determining excess emissions, use a CEMS that meets the requirements of paragraph (b) of the section. All turbines at the facility are equipped with CEMS for NO_x, CO, and O₂. Therefore, the requirements of the section are met.

The construction of the turbines did not commence after July 8, 2004; therefore, requirements from sections 60.334(d), (e), and (f) are not applicable.

Compliance with Standard for SO_x Emission Concentration Limit - 60.333, 60.334, and 60.335:

60.333(a) No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine any gases which contain sulfur dioxide in excess of 0.015% by volume at 15% oxygen and on a dry basis.

60.333(b) No owner or operator subject to the provisions of this subpart shall burn in any stationary gas turbine any fuel, which contains sulfur in excess of 0.8% by weigh (8000 ppmw).

60.334(h)(3) The sulfur content of each fuel source shall be: (i) documented in a valid purchase contract, a supplier certification, a tariff sheet or transportation contract or (ii) demonstrated by representative fuel sampling data which shows that sulfur content of gas does not exceed 1.0 gr/100 scf. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of Appendix D of 40 CFR part 75 is required.

Because turbines are required to combust natural gas with fuel sulfur content of 0.75 gr/100 scf or less, compliance is assured with the 60.333(a) emission limit of 150 ppmv SO₂ (dry std. conditions at 15% O₂),

60.333(b) fuel sulfur limit of 0.8% by weight. Therefore, as demonstrated below, the proposed requirements of 0.75 gr/100 scf, assure compliance with all otherwise applicable requirements.

Compliance is expected as shown by the following calculations at 0.75 grain of total sulfur per 100 standard cubic feet of gas, assuming all sulfur is converted to SO₂.

$$\begin{aligned} \%S(\text{lb/lbNG}) &= \left(\frac{0.75 \text{ gr}}{100 \text{ scf}}\right) \left(\frac{1 \text{ lb}}{7000 \text{ gr}}\right) \left(\frac{24.5 \text{ L}}{\text{mol NG}}\right) \left(\frac{1 \text{ mol}}{16 \text{ g}}\right) \left(\frac{454 \text{ g}}{1 \text{ lb}}\right) \left(\frac{0.035 \text{ scf}}{1 \text{ L}}\right) (100) \\ &= 0.00261\% \text{ sulfur by weight} \end{aligned}$$

$$\begin{aligned} \text{lb SO}_2/\text{scf gas} &= (0.0000261)(1 \text{ lb}/23.8 \text{ scf gas})(64 \text{ lb SO}_2/32 \text{ lb S}) \\ &= 2.19 \text{ E-}6 \text{ lb SO}_2/\text{scf gas} \end{aligned}$$

$$\text{lb SO}_2/V_{\text{exhaust}} = (\text{lb SO}_2/\text{scf gas}) \div (\text{F factor}) (\text{Btu content of natural gas})$$

$$\left(\frac{\text{lb SO}_2}{V_{\text{exhaust}}}\right) = \frac{\left(2.19 \text{ E-}6 \frac{\text{lb SO}_2}{\text{scf gas}}\right) \left(\frac{10^6 \text{ Btu}}{\text{MMBtu}}\right)}{\left(8710 \frac{\text{dscf}}{\text{MMBtu}}\right) \left(1000 \frac{\text{Btu}}{\text{scf}}\right)} = 2.5 \text{ E-}7 \frac{\text{lb SO}_2}{\text{dscf exhaust}}$$

$$V_{\text{SO}_2}/V_{\text{exhaust}} = nRT/P$$

where,

$$n = \text{moles SO}_2 = (3.35 \text{ E-}7 \text{ lb SO}_2/\text{dscf exhaust}) / (64 \text{ lb SO}_2/\text{lb-mol})$$

$$R = \text{universal gas constant} = 10.73 \text{ psi-ft}^3/\text{lb-mol-R}$$

$$T = \text{standard temperature} = 60^\circ \text{F} = 520^\circ \text{R}$$

$$P = \text{standard pressure} = 14.7 \text{ psi}$$

$$\begin{aligned} \text{Therefore, } \left(\frac{V_{\text{SO}_2}}{V_{\text{exhaust}}}\right) &= \frac{\left(\frac{2.5 \text{ E-}6 \text{ lb SO}_2}{\text{dscf exhaust}}\right) \left(\frac{10.73 \text{ psi-ft}^3}{\text{lb-mole-R}}\right) (520^\circ \text{R})}{\left(\frac{64 \text{ lb SO}_2}{\text{lb-mol}}\right) (14.7 \text{ psi})} = 1.49 \text{ E-}6 \frac{\text{dscf}}{\text{dscf exhaust}} \\ &= 1.49 \text{ ppmv dry} \end{aligned}$$

Diluting it to 15% O₂

$$\text{ppmv} \cdot \cdot \cdot = \text{ppmv dry} \times \left(\frac{20.9 - 15}{20.9}\right) \ll 0.42 \text{ ppmv}$$

0.42 ppmv << 150 ppmv.

Therefore, compliance with SO_x emissions standards of this subpart is expected

18. 40 CFR 60 Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

The EPA promulgated this new NSPS that would apply to new stationary combustion turbines greater than or equal to 1 MW that commence construction, modification or reconstruction after February 18, 2005. These gas turbines were initially constructed before February 18, 2005 and not been modified or reconstructed since. Therefore requirements of this NSPS are not applicable.

19. 40 CFR 61, Subpart M - Asbestos

a. Facility Wide (S-3636-0-1)

These are applicable requirements from the National Emissions Standards for Hazardous Air Pollutants, which apply to all sources. The requirements pertain to asbestos removal and disposal from renovated or demolished structures. Compliance with these requirements is assured by condition 35 of the facility wide requirements (S-3636-0-1).

20. 40 CFR 63 Subpart Q—National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers

Per § 63.402, no owner or operator of shall use chromium-based water treatment chemicals in any cooling tower.

Condition 2 of the requirements for permit unit S-3636-4-4 & -5-4 ensure compliance this requirement.

21. 40 CFR 63 Subpart YYYY - National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines

This subpart applies to stationary combustion turbines that are located at a major source of HAP emissions is a contiguous site under common control that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year.

Per condition 25 of the requirements of permit units S-3636-1-4, -2-4, & -3-4, this facility is not major source of HAP emissions, requirements of this subpart does not apply.

22. 40 CFR Part 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

- a. S-3636-147-4, 814 HP NG Fired Emergency IC Engine
- b. S-3636-12-1, 360 HP Diesel Fired Emergency IC Engine

The requirements of 40 CFR Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, are applicable to owners and operators of a stationary RICE located at a major or area source of HAP emissions. This facility is not a major source of HAP emissions and is therefore, by definition, and area source of HAP emissions. Therefore, the requirements of this subpart are applicable to these engines.

The subject engines were installed before 2006; therefore, as defined by Section 63.65.90(iii), these engines can be classified as existing stationary RICE. In accordance with Section 63.6595, the emission limitations and operating limits for existing stationary RICE at an area source of HAP emissions do not become applicable until May 1, 2013 for compression ignited engines and October 19, 2013 for spark ignited engines. However, the requirements of this regulation will be included in this project for future reference.

§63.6603(a), states the owner or operator of an existing emergency stationary RICE located at an area source of HAP emissions must comply with the requirements listed in Table 2(d)(4) & (d)(5).

Table 2d - Requirements for Existing Stationary RICE Located at Area Sources:

For each	You must meet the following requirements, except during periods of startup	During periods of startup you must
4. Emergency stationary CI RICE and black start stationary CI RICE. ²	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;	N/A
5. Emergency stationary SI RICE; black start stationary SI RICE; non-emergency, non-black start 4SLB stationary RICE >500 HP that operate 24 hours or less per calendar year; non-emergency, non-black start 4SRB stationary RICE >500 HP that operate 24 hours or less per calendar year. ²	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and	N/A
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	N/A

²If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

The following conditions ensure compliance with the requirements of this section:

Permit units S-3636-12-1

- {Effective May 3, 2013} The permittee shall change oil and filter every 500 hours of operation or annually, whichever comes first; inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. [40 CFR Part 63.6603(a)]

Permit unit S-3636-7-4

- {Effective October 19, 2013} The permittee shall change oil and filter every 500 hours of operation or annually, whichever comes first; inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. [40 CFR Part 63.6603(a)]

§63.6625(f), states the owner or operator of an existing emergency CI stationary RICE located at an area source of HAP emissions must install a non-resettable hour meter if one is not already installed.

Existing condition 5 of the requirements for permit units S-3636-7-4 and condition 6 of the requirements for permit unit S-3636-12-1 ensure compliance with requirements of this section.

§63.6625(f)(ii), states the owner or operator of an existing emergency CI stationary RICE located at an area source of HAP emissions may operate the emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year.

Existing condition 7 of the requirements for permit units S-3636-7-4 and condition 8 of the requirements for permit unit S-3636-12-1 ensure compliance with requirements of this section.

§63.6625(h), states the owner or operator of an existing stationary RICE must minimize the engine's time spent at idle during start and minimize the

engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all time other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply.

The Table 2d applicable to existing stationary RICE located at area sources of HAP emissions does not specify any startup requirements for emergency engines.

§63.6640(f) applies to emergency stationary RICE. The facility shall operate the emergency stationary RICE according to the requirements in paragraphs (f)(1)(i) through (iii) of this section. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1)(i) through (iii) of this section, is prohibited. If the facility does not operate the engine according to the requirements in paragraphs (f)(1)(i) through (iii) of this section, the engine will not be considered an emergency engine under this subpart and will need to meet all requirements for non-emergency engines.

Operation of these engines is restricted by District Rule 4702 to maintenance, testing, and required regulatory purposes, and during emergency situations. Therefore requirement of this section is pre-empted by requirements of District Rule 4702.

The operator must continuously comply with the emissions and operating limitations and work or management practices as required by the following:

Table 6 to Subpart ZZZZ of Part 63 - Continuous Compliance With Emission Limitations, Operating Limitations, Work Practices, and Management Practices

For each	Complying with the requirement to	You must demonstrate continuous compliance by
9. Existing emergency and black start stationary RICE located at an area source of HAP	a. Work or Management practices	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

Existing condition 6 of the requirements for permit units S-3636-7-4 and condition 7 of the requirements for permit unit S-3636-12-1 2 ensure compliance with requirements of this section.

§63.6655(a) states, the operator must keep the records described belows:

- (4) Records of all required maintenance performed on the air pollution control and monitoring equipment.
- (5) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

§63.6655(d) states the operator must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies.

§63.6655(e) states the operator shall keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the facility operated and maintained the stationary RICE and after-treatment control device (if any) according to the facility's own maintenance plan if the following stationary RICE are owned or operated:

- (2) An existing stationary emergency RICE.
- (3) An existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart.

§63.6655(f) states that an owner or operator of any of an existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.

Existing condition 11 of the requirements for permit units S-3636-7-4 and condition 10 of the requirements for permit unit S-3636-12-1 ensure compliance with requirements of this section.

23. 40 CFR Part 64, Compliance Assurance Monitoring (CAM)

This facility is subject to acid rain requirement of 40 CFR 72. Per § 40 CFR 64.2(b)(iii) units subject to acid rain requirements are exempt from CAM requirements.

24. 40 CFR 72, Acid Rain Program

Because the natural gas-fired turbines are "new unit" as defined in 40CFR 72.3, they are subject to the provisions of the Title IV, Acid Rain Program of the Clean Air Act (40 CFR Part 72). Conditions 41 through 54 of the facility-wide permit (S-3636-0-1) assure compliance with these requirements.

25. EPA PSD Permit (SJ 99-03)

In compliance with the provisions of the Clean Air Act, EPA issued Pastoria an Authority to Construct permit on December 23, 2004 in accordance with Federal regulations governing the Prevention of Significant Air Quality Deterioration. The provisions of this PSD Authority to Construct permit have been incorporated into the Title V permit.

a. Facility-Wide Permit (S-3636-0-1)

Conditions 12, 18 through 21, and 55 through 61 of the requirements for the facility-wide permit (S-3636-0-1) incorporate requirements of the PSD permit.

b. 168 MW GE 7FA Natural Gas-Fired Combined Cycle Gas Turbine Engine/Electrical Generator (S-3636-1-4, -2-4, and -3-4)

Conditions 2, 3, 6, 9, 10, 11, 13, 15, 16, 23, 26, 27, 29, 31, 33, and 39 - 47 of the requirements for these permit units incorporate requirements of the PSD permit.

c. 814 HP Caterpillar Emergency IC Engine.

Conditions 8, 12, and 13 of the requirements for this permit unit incorporate requirements of the PSD permit.

d. 360 HP John Deere Emergency IC Engine

Conditions 2, 7, 9, 13, and 14 of the requirements for this permit unit incorporate requirements of the PSD permit.

26. 40 CFR 82 Subpart B & F - Stratospheric Ozone

a. Facility Wide (S-3636-0-1)

These are applicable requirements from Title VI of the CAA (Stratospheric Ozone) which apply to all sources. The requirements pertain to air

conditioners, chillers, and refrigerators located at a Title V source and to disposal of air conditioners or maintenance/recharging/disposal of motor vehicle air conditioners. Conditions 27 & 28 of the facility wide requirements (S-3636-0-1) address these requirements.

27. 40 CFR 68 Risk Management Plans

a. Facility Wide (S-3636-0-1)

This rule sets forth planning and reporting requirements for preventing possible accidental release of regulated substances or other extremely hazardous substances. This includes the preparation and implementation of a Risk Management Plan by June 21, 1999, if the facility stores substances listed in 40 CFR 68.130 in quantities above threshold levels. Condition 40 of the facility wide requirements (S-3636-0-1) assures compliance with this requirement.

X. 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 Operating Permit. Compliance with the terms and conditions of the Operating Permit is considered compliance with all applicable requirements upon which those conditions are based, including those that have been subsumed.

A. Requirements Addressed by Model General Permit Templates

The applicant has not requested to utilize any model general permit templates.

B. Requirements not Addressed by Model General Permit Templates

The applicant has requested a broad permit shield for all of requirements the facility is subject. Per District policy such broad permit shields can not be granted.

XI. PERMIT CONDITIONS

See attached draft Operating Permits.

San Joaquin Valley Air Pollution Control District

FACILITY: S-3636-0-0

EXPIRATION DATE: 02/28/2015

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 and Kern County Rule 111] 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 and Kern County Rule 111] 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. {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
9. {4370} The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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: PASTORIA ENERGY FACILITY, LLC

Location: TEJON RANCH 30 MILES S OF BAKERSFIELD, AND 6.5 MILES E OF GRAPEVINE, RANCHO EL TEJON, CA

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10. {4371} The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.5.1] Federally Enforceable Through Title V Permit
11. {4372} Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520 (6/21/01). [District Rules 2520, 9.5.2 and 1100, 7.0] Federally Enforceable Through Title V Permit
12. 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 and PSD Permit (99-03), VII] Federally Enforceable Through Title V Permit
13. {4374} It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.8.2] Federally Enforceable Through Title V Permit
14. {4375} The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.8.3] Federally Enforceable Through Title V Permit
15. {4376} The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.8.4] Federally Enforceable Through Title V Permit
16. {4377} The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.8.5] Federally Enforceable Through Title V Permit
17. {4378} The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.9] Federally Enforceable Through Title V Permit
18. 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 and PSD Permit (99-03), V] 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 and PSD Permit (99-03), V] 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 and PSD Permit (99-03), V] 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 and PSD Permit (99-03), V] Federally Enforceable Through Title V Permit

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

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

34. {4395} Any unpaved vehicle/equipment area that anticipates more than 50 Average annual daily Trips (AADT) shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 150 vehicle trips per day (VDT) shall comply with the requirements of Section 5.1.2 of District Rule 8071. On each day that 25 or more VDT with 3 or more axles will occur on an unpaved vehicle/equipment traffic area, the owner/operator shall comply with the requirements of Section 5.1.3 of District Rule 8071. On each day when a special event will result in 1,000 or more vehicles that will travel/park on an unpaved area, the owner/operator shall comply with the requirements of Section 5.1.4 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (9/16/2004) or Rule 8011 (8/19/2004). [District Rule 8071 and Rule 8011] Federally Enforceable Through Title V Permit
35. {4396} Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M] Federally Enforceable Through Title V Permit
36. {4397} The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.16] Federally Enforceable Through Title V Permit
37. {4398} The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2] Federally Enforceable Through Title V Permit
38. {4399} When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permits shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit
39. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
40. When applicable to 40 CFR Part 68, a subject facility shall submit to the proper authority a Risk Management Plan when mandated by the regulation. [40 CFR Part 68] 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. The Title V permit shall serve as the facility's Acid Rain permit. [40 CFR 72.9] 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 72.9 & 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. [40 CFR 72.9 & 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 72.9 & 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 72.9] Federally Enforceable Through Title V Permit
46. Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program. [40 CFR 72.9] 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.

47. An allowance shall not be deducted in order to comply with the requirements under 40 CFR part 72.9(c)(1)(i), prior to the calendar year for which the allowance was allocated. [40 CFR 72.9] Federally Enforceable Through Title V Permit
48. 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 72.9] Federally Enforceable Through Title V Permit
49. An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right. [40 CFR 72.9] Federally Enforceable Through Title V Permit
50. 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. For the purposes of this condition, the term "excess emissions" is defined in 40 CFR 72.2. [40 CFR 72.9 & 40 CFR 77] Federally Enforceable Through Title V Permit
51. 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. For the purposes of this condition, the term "excess emissions" is defined in 40 CFR 72.2. [40 CFR 72.9 & 40 CFR 77] Federally Enforceable Through Title V Permit
52. The owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority: (i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR part 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative; (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 under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program. [40 CFR 72.9 & 40 CFR 75] Federally Enforceable Through Title V Permit
53. 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 72.9 & 40 CFR 75] Federally Enforceable Through Title V Permit
54. Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source. [40 CFR 72.9] Federally Enforceable Through Title V Permit
55. FACILITY OPERATION: All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of the permit shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD Permit (SJ 99-03), III] Federally Enforceable Through Title V Permit
56. MALFUNCTION: A. Reporting: The EPA Regional Administrator shall be notified by telephone, facsimile, or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the PSD permit for units S-3636-1, S-3636-2, or S-3636-3. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include all information required by Section IV.A of the PSD permit. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violation of this permit or of any law or regulation that such malfunction may cause, except as provided for in Section IV.B of the PSD permit. [PSD Permit (SJ SJ 99-03), IV.A] 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.

57. **MALFUNCTION: B. Treatment of Emissions:** 1. Definition of malfunction: A malfunction means a sudden and reasonably unforeseeable breakdown of equipment or of a process beyond the control of the source requiring immediate corrective action to restore normal operation. 2. Emissions in excess of the limits in the PSD permit conditions for permit units S-3636-1, S-3636-2, or S-3636-3 shall constitute a violation and may be the subject of enforcement proceedings. 3. Affirmative defense: In the context of an enforcement proceeding, excess emissions shall not be subject to penalty if the permittee demonstrates compliance with all of the requirements of Section IV.B.3 of the PSD permit. 4. All emissions, including those associated with a malfunction which may be eligible for an affirmative defense, must be included in all emissions calculations and demonstrations of compliance with annual emission limits specified in PSD permit. [PSD Permit (SJ SJ 99-03), IV.B] Federally Enforceable Through Title V Permit
58. **TRANSFER OF OWNERSHIP:** In the event of any changes in control or ownership of the facilities to be constructed, the PSD permit shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of the PSD permit and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency. [PSD Permit (SJ 99-03), VI] Federally Enforceable Through Title V Permit
59. **OTHER APPLICABLE REGULATIONS:** The owner and operator of the facility shall construct and operate the stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, and 61 and all other applicable federal, state, and local air quality regulations. [PSD Permit (SJ 99-03), VIII] Federally Enforceable Through Title V Permit
60. Any requirements established by PSD permit for the gathering and reporting of information are not subject to review by the Office of Management and Budget (OMB) under the Paperwork Reduction Act because PSD permit is not an "information collection request" within the meaning of 44 U.S.C. §§ 3502(4), 3502 (11), 3507, 3512, and 3518. Furthermore, PSD permit and any information gathering and reporting requirements established by PSD permit are exempt from OMB review under the Paperwork Reduction Act because it is directed to fewer than ten persons, 44 U.S.C. § 3502(4) and § 3502(11); 5 CFR Part 1320.5(a). [PSD Permit (SJ 99-03), IX] Federally Enforceable Through Title V Permit
61. **Agency Notification:** All correspondence as required by the PSD permit shall be forwarded to EPA at the following address: Director, Air Division (Attn: Air-1), U. S. Environmental Protection Agency, Region 9, 75 Hawthorne Street San Francisco, CA 94105-3901. [PSD Permit (SJ 99-03), XI] Federally Enforceable Through Title V Permit
62. On {MONTH DAY, YEAR}, the initial Title V permit was issued. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report are based upon this initial permit issuance date, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days after the end of the reporting period. [District Rule 2520] Federally Enforceable Through Title V Permit

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

DRAFT

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-3636-1-4

EXPIRATION DATE: 02/28/2015

EQUIPMENT DESCRIPTION:

168 MW NOMINALLY RATED GENERAL ELECTRIC 7FA NATURAL GAS FIRED GAS TURBINE ENGINE/ELECTRICAL GENERATOR #1 WITH DRY LOW NOX COMBUSTORS AND SELECTIVE CATALYTIC REDUCTION, WITH HRSG #1 AND 185 MW STEAM TURBINE #1 IN A TWO ON ONE COMBINED CYCLE WITH GAS TURBINE ENGINE S-3636-2

PERMIT UNIT REQUIREMENTS

1. Combustion turbine and electrical generator lube oil vents shall be equipped with mist eliminators to maintain visible emissions from lube oil vents no greater than 5% opacity, except for three minutes in any hour. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Combustion turbine engine(GTE) shall be equipped with continuously recording fuel gas flowmeter. [District Rule 2201 and PSD Permit (SJ 99-03) X.K] Federally Enforceable Through Title V Permit
3. Heat recovery steam generator (HRSG) exhaust duct downstream of the SCR unit shall be equipped with continuously recording emissions monitors (CEM) for NO_x, CO, and O₂. All CEMs shall be dedicated to this unit and shall meet the requirements of 40 CFR Part 60 Appendices B & F (for CO), and 40 CFR Part 75 (for NO_x and O₂), and shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns, provided the CEM(s) pass the relative accuracy requirements for startups and shutdown specified herein. If relative accuracy of CEM(s) cannot be certified during startup conditions, CEM results during startup and shutdown events shall be replaced with startup emission rates obtained during source testing to determine compliance with emission limits in conditions 13, 17 and 18. [District Rule 2201 and PSD Permit (SJ 99-03) X.H.1] Federally Enforceable Through Title V Permit
4. HRSG exhaust duct shall be equipped with a continuously recording emission monitor upstream of the SCR unit for measuring the NO_x concentration for the purposes of calculating ammonia slip. Permittee shall check, record, and quantify the calibration drift (CD) at two concentration values at least once daily (approximately 24 hours). The calibration shall be adjusted whenever the daily zero or high-level CD exceeds 5%. If either the zero or high-level CD exceeds 5% for five consecutive daily periods, the analyzer shall be deemed out-of-control. If either the zero or high-level CD exceeds 10% during any CD check, analyzer shall be deemed out-of-control. If the analyzer is out-of-control, the permittee shall take appropriate corrective action and then repeat the CD check. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Ammonia injection grid shall be equipped with operational ammonia flowmeter and injection pressure indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods. [District Rule 1081 and PSD Permit (SJ 99-03) X.C.3] Federally Enforceable Through Title V Permit
7. Heat recovery steam generator design shall provide space for additional selective catalytic reduction catalyst and oxidation catalyst if required to meet NO_x and CO emission limits. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Permittee shall monitor and record exhaust gas temperature at selective catalytic reduction and oxidation catalyst inlets. [District Rule 2201] Federally Enforceable Through Title V Permit

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

9. GTE shall be fired exclusively on natural gas, consisting primarily of methane and ethane, with a sulfur content no greater than 0.75 grains of sulfur compounds (as S) per 100 dry scf of natural gas. [District Rule 2201 and PSD Permit (SJ 99-03) X.K.] Federally Enforceable Through Title V Permit
10. Cold startup is defined as the period beginning with turbine initial firing until the unit meets the lb/hr and ppmv emission limits in condition 15. Cold startup means a startup when the combustion turbine has not been in operation during the preceding 72 hours. Duration of the cold startups shall not exceed 3 hours. [District Rule 2201 and PSD Permit (SJ 99-03) X.G.5] Federally Enforceable Through Title V Permit
11. Only one of GTEs S-3636-1, '2 or '3 shall be in startup at any one time. [District Rule 2201 and PSD Permit (SJ 99-03) X.G.2] Federally Enforceable Through Title V Permit
12. Ammonia shall be injected when the selective catalytic reduction system catalyst temperature exceeds 500 degrees F. Permittee shall monitor and record catalyst temperature during periods of startup. [District Rule 2201] Federally Enforceable Through Title V Permit
13. During the cold startup GTE exhaust emissions shall not exceed any of the following: NOx (as NO2) - 130 lb, VOC - 273 lb or CO - 1235 lb, in any one hour. [District Rule 2201 and PSD Permit (SJ 99-03) X.G.1] Federally Enforceable Through Title V Permit
14. By two hours after turbine initial firing, GTE exhaust emissions shall not exceed any of the following: NOx (as NO2) - 12.2 ppmv @ 15% O2 or CO - 25 ppmv @ 15% O2. [District Rule 4703] Federally Enforceable Through Title V Permit
15. Emission rates from GTE, except during startup and/or shutdown, shall not exceed any of the following: NOx (as NO2) - 17.03 lb/hr and 2.5 ppmvd @ 15% O2, VOC - 2.0 ppmvd @ 15% O2, CO - 24.92 lb/hr and 6 ppmvd @ 15% O2 or ammonia - 10 ppmvd @ 15% O2. NOx (as NO2) emission limit is a one-hour average. Ammonia emission limit is a twenty-four hour rolling average. All other emission limits are three-hour rolling averages. [District Rules 2201, 4703 and PSD Permit (SJ 99-03) X.D & .E] Federally Enforceable Through Title V Permit
16. Emission rates from the GTE shall not exceed either of the following: PM10 - 9.0 lb/hr and SOx (as SO2) - 3.495 lb/hr. Emission limits are three-hour rolling averages. [District Rules 2201, 4001, and PSD Permit (SJ 99-03) X.F] Federally Enforceable Through Title V Permit
17. On any day when a startup or shutdown occurs, emission rates from GTE shall not exceed any of the following: PM10 - 216 lb/day, SOx (as SO2) - 84 lb/day, NOx (as NO2) - 450 lb/day, VOC - 355 lb/day or CO - 2,113 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Combined annual emissions from GTEs S-3636-1, '2 and '3, calculated on a twelve consecutive month rolling basis, shall not exceed any of the following: PM10 - 224,343 lb/year, SOx (as SO2) - 84,780 lb/year, NOx (as NO2) - 344,484 lb/year, VOC - 227,619 lb/year or CO - 1,220,166 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Combined annual emissions of all hazardous air pollutants (HAPS) from GTEs S-3636-1, '2 and '3, calculated on a twelve consecutive month rolling basis, shall not exceed 25 tons/year. Combined annual emissions of any single HAP from GTEs S-3636-1, '2 and '3, calculated on a twelve consecutive month rolling basis, shall not exceed 10 tons/year. [District Rule 4002] Federally Enforceable Through Title V Permit
20. Each one-hour period shall commence on the hour. Each one-hour period in a three-hour rolling average will commence on the hour. The three-hour average will be compiled from the three most recent one-hour periods. Each one-hour period in a twenty-four-hour average for ammonia slip will commence on the hour. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Daily emissions will be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each month in the twelve-consecutive-month rolling average emissions shall commence at the beginning of the first day of the month. The twelve-consecutive-month rolling average emissions to determine compliance with annual emissions limitations shall be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
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22. Compliance with ammonia slip limit shall be demonstrated by using the following calculation procedure: ammonia slip ppmv @ 15% O₂ = ((a-(bxc/1,000,000)) x 1,000,000 / b) x d, where a = ammonia injection rate(lb/hr)/17(lb/lb. mol), b = dry exhaust gas flow rate (lb/hr)/(29(lb/lb. mol), c = change in measured NO_x concentration ppmv at 15% O₂ across catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip. Alternatively, permittee may utilize a continuous in-stack ammonia monitor, acceptable to the District, to monitor compliance. At least 60 days prior to using a NH₃ CEM, the permittee must submit a monitoring plan for District review and approval. [District Rule 4102]
23. Compliance with the short term emission limits (ppmv @ 15% O₂ and lb/hr) shall be demonstrated annually by District witnessed in situ sampling of exhaust gases by a qualified independent source test firm at full load conditions as follows - NO_x: ppmvd @ 15% O₂ and lb/hr, CO: ppmvd @ 15% O₂ and lb/hr, VOC: ppmvd @ 15% O₂ and lb/hr, PM₁₀: lb/hr, and ammonia: ppmvd @ 15% O₂. Sample collection to demonstrate compliance with ammonia emission limit shall be based on three consecutive test runs of thirty minutes each. [District Rule 1081 and PSD Permit (SJ 99-03) X.C.1] Federally Enforceable Through Title V Permit
24. Compliance with the startup NO_x, CO, and VOC mass emission limits shall be demonstrated for one of the GTEs (S-3636-1, '2, or '3) at least once every seven years by District witnessed in situ sampling of exhaust gases by a qualified independent source test firm. CEM relative accuracy shall be determined during startup source testing in accordance with methodology approved by the District. If CEM data is not certifiable to determine compliance with NO_x and CO startup emissions limits, then source testing to measure startup NO_x and CO mass emissions rates shall be conducted at least once every 12 months. [District Rule 1081] Federally Enforceable Through Title V Permit
25. Based on the initial speciated HAPS and total VOC source test conducted for one of the GTEs (S-3636-1, '2 or '3), Pastoria shall correlate the total HAPS emissions rate and the single highest HAP emission rate to the VOC mass emission determined during the speciated HAPS source test. Annual compliance with the HAPS emissions limit (25 tpy all HAPS or 10 tpy any single HAP) shall be by the combined VOC emissions rates for the GTEs (S-3636-1, '2 and '3) determined during annual compliance source testing and the correlation between VOC emissions and HAP(S). [District Rule 4002] Federally Enforceable Through Title V Permit
26. Compliance with natural gas sulfur content limit shall be demonstrated periodically as required by 40 CFR 60 Subpart GG and 40 CFR 75. [District Rules 2540 and PSD Permit (SJ 99-03) X.K] Federally Enforceable Through Title V Permit
27. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. Official test results and field data collected by source tests required by conditions on this permit shall be submitted to the District within 60 days of testing. [District Rule 1081 and PSD Permit (SJ 99-03) X.C.2] Federally Enforceable Through Title V Permit
28. Source test plans for seven-year source tests shall include a method for measuring the VOC/CO surrogate relationship that will be used to demonstrate compliance with VOC lb/hr, lb/day, and lb/twelve month rolling emission limits. [District Rule 2201] Federally Enforceable Through Title V Permit
29. The following test methods shall be used PM₁₀: EPA method 5 (front half and back half), NO_x: EPA Method 7E or 20, CO: EPA method 10 or 10B, O₂: EPA Method 3, 3A, or 20, VOC: EPA method 18 or 25, ammonia: BAAQMD ST-1B, and fuel gas sulfur content: ASTM D3246. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081, 4001, 4703, and PSD Permit (SJ 99-03) X.C.2] Federally Enforceable Through Title V Permit
30. The permittee shall maintain hourly records of NO_x, CO, and ammonia emission concentrations (ppmv @ 15% O₂), and hourly, daily, and twelve month rolling average records of NO_x and CO emissions. Compliance with the hourly, daily, and twelve month rolling average VOC emission limits shall be demonstrated by the CO CEM data and the VOC/CO relationship determined by annual CO and VOC source tests. [District Rule 2201] Federally Enforceable Through Title V Permit
31. The permittee shall maintain records of SO_x lb/hr, lb/day, and lb/twelve month rolling average emission. SO_x emissions shall be based on fuel use records, natural gas sulfur content, and mass balance calculations. [District Rule 2201 and PSD Permit (SJ 99-03) X.K] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
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32. Permittee shall maintain the following records for the GTE: occurrence, duration, and type of any startup, shutdown, or malfunction; performance testing; emission measurements; total daily and rolling twelve month average hours of operation; hourly quantity of fuel used and gross three hour average operating load. [District Rules 2201 & 4703] Federally Enforceable Through Title V Permit
33. Permittee shall maintain the following records for the continuous emissions monitoring system (CEMS): performance testing, evaluations, calibrations, checks, maintenance, adjustments, and any period during which a CEMS was inoperative. [District Rules 2201 & 4703, and PSD Permit (SJ 99-03) X.I.1] Federally Enforceable Through Title V Permit
34. Permittee shall provide notification and record keeping as required under 40 CFR, Part 60, Subpart A, 60.7. [District Rule 4001] Federally Enforceable Through Title V Permit
35. All records required to be maintained by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
36. Results of continuous emissions monitoring shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3. 3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080] Federally Enforceable Through Title V Permit
37. Audits of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and total accuracy testing is performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
38. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
39. The permittee shall submit a written report to the APCO for each calendar quarter, within 30 days of the end of the quarter, including: time intervals, data and magnitude of excess emissions, nature and cause of excess (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting shall correspond to the averaging period for each respective emission standard; applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred. [District Rule 1080 and PSD Permit (SJ 99-03) X.I.3] Federally Enforceable Through Title V Permit
40. The combined annual emissions rate from all three CTGs and emergency engines S-3636-7-4 & -12-1, based on 12-month rolling average, must not exceed 344,485 lbs NO_x and 1,140,000 lbs CO. [PSD Permit (SJ 99-03) X.D & .E] Federally Enforceable Through Title V Permit
41. The annual SO_x emissions from each CTG, based on 12-month rolling average, must not exceed 28,170 lbs. [PSD Permit (SJ 99-03) X.F] Federally Enforceable Through Title V Permit
42. During the hot startup of any CTG, the combined emissions from any one CTG and HRSG exhausts must not exceed 107 lbs of NO_x or 903 lbs of CO in any one hour. Hot startup means a startup when the combustion turbine has been in operation during the preceding 8 hours and duration of hot start-ups shall not exceed 1 hour. [PSD Permit (SJ 99-03) X.G.1] Federally Enforceable Through Title V Permit
43. During the warm startup of any CTG, the combined emissions from any one CTG and HRSG exhausts must not exceed 119 lbs of NO_x or 1021 lbs of CO in any one hour. Warm startup means a startup that is not a hot or cold startup and duration of warm startups shall not exceed 2.5 hours. [PSD Permit (SJ 99-03) X.G.1] Federally Enforceable Through Title V Permit
44. During the Shutdown of any CTG, the combined emissions from any one CTG and HRSG exhausts must not exceed 58.5 lbs of NO_x or 222.5 lbs of CO in any one hour. Shutdown shall be defined as the period beginning with the lowering of equipment from base load and lasting until fuel flow is completely off and combustion has ceased and duration of shutdowns shall not exceed one half hour. [PSD Permit (SJ 99-03) X.G.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
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45. Total number of start-ups and shut-downs for the facility shall not exceed 674 events per year. [PSD Permit (SJ 99-03) X.G.6] Federally Enforceable Through Title V Permit
46. Any excess emission indicated by the CEM system must be considered a violation of the applicable emission limit in the PSD permit. [PSD Permit (SJ 99-03) X.I.4] Federally Enforceable Through Title V Permit
47. The quality assurance project plan used by the Permittee for the certification and operation of the continuous emissions monitors, which meets the requirements of 40 CFR Part 60, Appendix F, must be available upon request to EPA. [PSD Permit (SJ 99-03) X.I.5] Federally Enforceable Through Title V Permit

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Facility Name: PASTORIA ENERGY FACILITY, LLC

Location: TEJON RANCH 30 MILES S OF BAKERSFIELD, AND 6.5 MILES E OF GRAPEVINE, RANCHO EL TEJON, CA

S-3636-1-4 : Nov 1 2011 9:01AM - SRANK

DRAFT

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-3636-2-4

EXPIRATION DATE: 02/28/2015

EQUIPMENT DESCRIPTION:

168 MW NOMINALLY RATED GENERAL ELECTRIC 7FA NATURAL GAS FIRED GAS TURBINE ENGINE/ELECTRICAL GENERATOR #2 WITH DRY LOW NOX COMBUSTORS, SELECTIVE CATALYTIC REDUCTION, HRSG #2, AND A SINGLE 185 MW STEAM TURBINE #1 SHARED WITH GAS TURBINE ENGINE S-3636-1

PERMIT UNIT REQUIREMENTS

1. Combustion turbine and electrical generator lube oil vents shall be equipped with mist eliminators to maintain visible emissions from lube oil vents no greater than 5% opacity, except for three minutes in any hour. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Combustion turbine engine(GTE) shall be equipped with continuously recording fuel gas flowmeter. [District Rule 2201 and PSD Permit (SJ 99-03) X.K.] Federally Enforceable Through Title V Permit
3. Heat recovery steam generator (HRSG) exhaust duct downstream of the SCR unit shall be equipped with continuously recording emissions monitors (CEM) for NO_x, CO, and O₂. All CEMs shall be dedicated to this unit and shall meet the requirements of 40 CFR Part 60 Appendices B & F (for CO), and 40 CFR Part 75 (for NO_x and O₂), and shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns, provided the CEM(s) pass the relative accuracy requirements for startups and shutdown specified herein. If relative accuracy of CEM(s) cannot be certified during startup conditions, CEM results during startup and shutdown events shall be replaced with startup emission rates obtained during source testing to determine compliance with emission limits in conditions 13, 17 and 18. [District Rule 2201 and PSD Permit (SJ 99-03) X.H.1] Federally Enforceable Through Title V Permit
4. HRSG exhaust duct shall be equipped with a continuously recording emission monitor upstream of the SCR unit for measuring the NO_x concentration for the purposes of calculating ammonia slip. Permittee shall check, record, and quantify the calibration drift (CD) at two concentration values at least once daily (approximately 24 hours). The calibration shall be adjusted whenever the daily zero or high-level CD exceeds 5%. If either the zero or high-level CD exceeds 5% for five consecutive daily periods, the analyzer shall be deemed out-of-control. If either the zero or high-level CD exceeds 10% during any CD check, analyzer shall be deemed out-of-control. If the analyzer is out-of-control, the permittee shall take appropriate corrective action and then repeat the CD check. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Ammonia injection grid shall be equipped with operational ammonia flowmeter and injection pressure indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods. [District Rule 1081 and PSD Permit (SJ 99-03) X.C.3] Federally Enforceable Through Title V Permit
7. Heat recovery steam generator design shall provide space for additional selective catalytic reduction catalyst and oxidation catalyst if required to meet NO_x and CO emission limits. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Permittee shall monitor and record exhaust gas temperature at selective catalytic reduction and oxidation catalyst inlets. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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9. GTE shall be fired exclusively on natural gas, consisting primarily of methane and ethane, with a sulfur content no greater than 0.75 grains of sulfur compounds (as S) per 100 dry scf of natural gas. [District Rule 2201 and PSD Permit (SJ 99-03) X.K.] Federally Enforceable Through Title V Permit
10. Cold startup is defined as the period beginning with turbine initial firing until the unit meets the lb/hr and ppmv emission limits in condition 15. Cold startup means a startup when the combustion turbine has not been in operation during the preceding 72 hours. Duration of the cold startups shall not exceed 3 hours. [District Rule 2201 and PSD Permit (SJ 99-03) X.G.5] Federally Enforceable Through Title V Permit
11. Only one of GTEs S-3636-1, '2 or '3 shall be in startup at any one time. [District Rule 2201 and PSD Permit (SJ 99-03) X.G.2] Federally Enforceable Through Title V Permit
12. Ammonia shall be injected when the selective catalytic reduction system catalyst temperature exceeds 500 degrees F. Permittee shall monitor and record catalyst temperature during periods of startup. [District Rule 2201] Federally Enforceable Through Title V Permit
13. During the cold startup GTE exhaust emissions shall not exceed any of the following: NOx (as NO2) - 130 lb, VOC - 273 lb or CO - 1235 lb, in any one hour. [District Rule 2201 and PSD Permit (SJ 99-03) X.G.1] Federally Enforceable Through Title V Permit
14. By two hours after turbine initial firing, GTE exhaust emissions shall not exceed any of the following: NOx (as NO2) - 12.2 ppmv @ 15% O2 or CO - 25 ppmv @ 15% O2. [District Rule 4703] Federally Enforceable Through Title V Permit
15. Emission rates from GTE, except during startup and/or shutdown, shall not exceed any of the following: NOx (as NO2) - 17.03 lb/hr and 2.5 ppmvd @ 15% O2, VOC - 2.0 ppmvd @ 15% O2, CO - 24.92 lb/hr and 6 ppmvd @ 15% O2 or ammonia - 10 ppmvd @ 15% O2. NOx (as NO2) emission limit is a one-hour average. Ammonia emission limit is a twenty-four hour rolling average. All other emission limits are three-hour rolling averages. [District Rules 2201, 4703 and PSD Permit (SJ 99-03) X.D & .E] Federally Enforceable Through Title V Permit
16. Emission rates from the GTE shall not exceed either of the following: PM10 - 9.0 lb/hr and SOx (as SO2) - 3.495 lb/hr. Emission limits are three-hour rolling averages. [District Rules 2201, 4001, and PSD Permit (SJ 99-03) X.F] Federally Enforceable Through Title V Permit
17. On any day when a startup or shutdown occurs, emission rates from GTE shall not exceed any of the following: PM10 - 216 lb/day, SOx (as SO2) - 84 lb/day, NOx (as NO2) - 450 lb/day, VOC - 355 lb/day or CO - 2,113 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Combined annual emissions from GTEs S-3636-1, '2 and '3, calculated on a twelve consecutive month rolling basis, shall not exceed any of the following: PM10 - 224,343 lb/year, SOx (as SO2) - 84,780 lb/year, NOx (as NO2) - 344,484 lb/year, VOC - 227,619 lb/year or CO - 1,220,166 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Combined annual emissions of all hazardous air pollutants (HAPS) from GTEs S-3636-1, '2 and '3, calculated on a twelve consecutive month rolling basis, shall not exceed 25 tons/year. Combined annual emissions of any single HAP from GTEs S-3636-1, '2 and '3, calculated on a twelve consecutive month rolling basis, shall not exceed 10 tons/year. [District Rule 4002] Federally Enforceable Through Title V Permit
20. Each one-hour period shall commence on the hour. Each one-hour period in a three-hour rolling average will commence on the hour. The three-hour average will be compiled from the three most recent one-hour periods. Each one-hour period in a twenty-four-hour average for ammonia slip will commence on the hour. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Daily emissions will be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each month in the twelve-consecutive-month rolling average emissions shall commence at the beginning of the first day of the month. The twelve-consecutive-month rolling average emissions to determine compliance with annual emissions limitations shall be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit

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22. Compliance with ammonia slip limit shall be demonstrated by using the following calculation procedure: ammonia slip ppmv @ 15% O₂ = ((a-(bxc/1,000,000)) x 1,000,000 / b) x d, where a = ammonia injection rate(lb/hr)/17(lb/lb. mol), b = dry exhaust gas flow rate (lb/hr)/(29(lb/lb. mol), c = change in measured NO_x concentration ppmv at 15% O₂ across catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip. Alternatively, permittee may utilize a continuous in-stack ammonia monitor, acceptable to the District, to monitor compliance. At least 60 days prior to using a NH₃ CEM, the permittee must submit a monitoring plan for District review and approval. [District Rule 4102]
23. Compliance with the short term emission limits (ppmv @ 15% O₂ and lb/hr) shall be demonstrated annually by District witnessed in situ sampling of exhaust gases by a qualified independent source test firm at full load conditions as follows - NO_x: ppmvd @ 15% O₂ and lb/hr, CO: ppmvd @ 15% O₂ and lb/hr, VOC: ppmvd @ 15% O₂ and lb/hr, PM₁₀: lb/hr, and ammonia: ppmvd @ 15% O₂. Sample collection to demonstrate compliance with ammonia emission limit shall be based on three consecutive test runs of thirty minutes each. [District Rule 1081 and PSD Permit (SJ 99-03) X.C.1] Federally Enforceable Through Title V Permit
24. Compliance with the startup NO_x, CO, and VOC mass emission limits shall be demonstrated for one of the GTEs (S-3636-1, '2, or '3) at least once every seven years by District witnessed in situ sampling of exhaust gases by a qualified independent source test firm. CEM relative accuracy shall be determined during startup source testing in accordance with methodology approved by the District. If CEM data is not certifiable to determine compliance with NO_x and CO startup emissions limits, then source testing to measure startup NO_x and CO mass emissions rates shall be conducted at least once every 12 months. [District Rule 1081] Federally Enforceable Through Title V Permit
25. Based on the initial speciated HAPS and total VOC source test conducted for one of the GTEs (S-3636-1, '2 or '3), Pastoria shall correlate the total HAPS emissions rate and the single highest HAP emission rate to the VOC mass emission determined during the speciated HAPs source test. Annual compliance with the HAPS emissions limit (25 tpy all HAPS or 10 tpy any single HAP) shall be by the combined VOC emissions rates for the GTEs (S-3636-1, '2 and '3) determined during annual compliance source testing and the correlation between VOC emissions and HAP(S). [District Rule 4002] Federally Enforceable Through Title V Permit
26. Compliance with natural gas sulfur content limit shall be demonstrated periodically as required by 40 CFR 60 Subpart GG and 40 CFR 75. [District Rules 2540 and PSD Permit (SJ 99-03) X.K] Federally Enforceable Through Title V Permit
27. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. Official test results and field data collected by source tests required by conditions on this permit shall be submitted to the District within 60 days of testing. [District Rule 1081 and PSD Permit (SJ 99-03) X.C.2] Federally Enforceable Through Title V Permit
28. Source test plans for seven-year source tests shall include a method for measuring the VOC/CO surrogate relationship that will be used to demonstrate compliance with VOC lb/hr, lb/day, and lb/twelve month rolling emission limits. [District Rule 2201] Federally Enforceable Through Title V Permit
29. The following test methods shall be used PM₁₀: EPA method 5 (front half and back half), NO_x: EPA Method 7E or 20, CO: EPA method 10 or 10B, O₂: EPA Method 3, 3A, or 20, VOC: EPA method 18 or 25, ammonia: BAAQMD ST-1B, and fuel gas sulfur content: ASTM D3246. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081, 4001, 4703, and PSD Permit (SJ 99-03) X.C.2] Federally Enforceable Through Title V Permit
30. The permittee shall maintain hourly records of NO_x, CO, and ammonia emission concentrations (ppmv @ 15% O₂), and hourly, daily, and twelve month rolling average records of NO_x and CO emissions. Compliance with the hourly, daily, and twelve month rolling average VOC emission limits shall be demonstrated by the CO CEM data and the VOC/CO relationship determined by annual CO and VOC source tests. [District Rule 2201] Federally Enforceable Through Title V Permit
31. The permittee shall maintain records of SO_x lb/hr, lb/day, and lb/twelve month rolling average emission. SO_x emissions shall be based on fuel use records, natural gas sulfur content, and mass balance calculations. [District Rule 2201 and PSD Permit (SJ 99-03) X.K] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
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32. Permittee shall maintain the following records for the GTE: occurrence, duration, and type of any startup, shutdown, or malfunction; performance testing; emission measurements; total daily and rolling twelve month average hours of operation; hourly quantity of fuel used and gross three hour average operating load. [District Rules 2201 & 4703] Federally Enforceable Through Title V Permit
33. Permittee shall maintain the following records for the continuous emissions monitoring system (CEMS): performance testing, evaluations, calibrations, checks, maintenance, adjustments, and any period during which a CEMS was inoperative. [District Rules 2201 & 4703, and PSD Permit (SJ 99-03) X.I.1] Federally Enforceable Through Title V Permit
34. Permittee shall provide notification and record keeping as required under 40 CFR, Part 60, Subpart A, 60.7. [District Rule 4001] Federally Enforceable Through Title V Permit
35. All records required to be maintained by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
36. Results of continuous emissions monitoring shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3. 3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080] Federally Enforceable Through Title V Permit
37. Audits of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and total accuracy testing is performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
38. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
39. The permittee shall submit a written report to the APCO for each calendar quarter, within 30 days of the end of the quarter, including: time intervals, data and magnitude of excess emissions, nature and cause of excess (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting shall correspond to the averaging period for each respective emission standard; applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred. [District Rule 1080 and PSD Permit (SJ 99-03) X.I.3] Federally Enforceable Through Title V Permit
40. The combined annual emissions rate from all three CTGs and emergency engines S-3636-7-4 & -12-41 based on 12-month rolling average, must not exceed 344,485 lbs NOx and 1,140,000 lbs CO. [PSD Permit (SJ 99-03) X.D & .E] Federally Enforceable Through Title V Permit
41. The annual SOx emissions from each CTG, based on 12-month rolling average, must not exceed 28,170 lbs. [PSD Permit (SJ 99-03) X.F] Federally Enforceable Through Title V Permit
42. During the hot startup of any CTG, the combined emissions from any one CTG and HRSG exhausts must not exceed 107 lbs of NOx or 903 lbs of CO in any one hour. Hot startup means a startup when the combustion turbine has been in operation during the preceding 8 hours and duration of hot start-ups shall not exceed 1 hour. [PSD Permit (SJ 99-03) X.G.1] Federally Enforceable Through Title V Permit
43. During the warm startup of any CTG, the combined emissions from any one CTG and HRSG exhausts must not exceed 119 lbs of NOx or 1021 lbs of CO in any one hour. Warm startup means a startup that is not a hot or cold startup and duration of warm startups shall not exceed 2.5 hours. [PSD Permit (SJ 99-03) X.G.1] Federally Enforceable Through Title V Permit
44. During the Shutdown of any CTG, the combined emissions from any one CTG and HRSG exhausts must not exceed 58.5 lbs of NOx or 222.5 lbs of CO in any one hour. Shutdown shall be defined as the period beginning with the lowering of equipment from base load and lasting until fuel flow is completely off and combustion has ceased and duration of shutdowns shall not exceed one half hour. [PSD Permit (SJ 99-03) X.G.1] Federally Enforceable Through Title V Permit

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

45. Total number of start-ups and shut-downs for the facility shall not exceed 674 events per year. [PSD Permit (SJ 99-03) X.G.6] Federally Enforceable Through Title V Permit
46. Any excess emission indicated by the CEM system must be considered a violation of the applicable emission limit in the PSD permit. [PSD Permit (SJ 99-03) X.I.4] Federally Enforceable Through Title V Permit
47. The quality assurance project plan used by the Permittee for the certification and operation of the continuous emissions monitors, which meets the requirements of 40 CFR Part 60, Appendix F, must be available upon request to EPA. [PSD Permit (SJ 99-03) X.I.5] Federally Enforceable Through Title V Permit

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

Facility Name: PASTORIA ENERGY FACILITY, LLC

Location: TEJON RANCH 30 MILES S OF BAKERSFIELD, AND 6.5 MILES E OF GRAPEVINE, RANCHO EL TEJON, CA

S-3636-2-4 : Nov 12 2011 9:01AM - SRANK

DRAFT

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-3636-3-4

EXPIRATION DATE: 02/28/2015

EQUIPMENT DESCRIPTION:

168 MW NOMINALLY RATED GENERAL ELECTRIC 7FA NATURAL GAS FIRED GAS TURBINE ENGINE/ELECTRICAL GENERATOR #3 WITH DRY LOW NOX COMBUSTORS, SELECTIVE CATALYTIC REDUCTION, HRSG #1 AND 90 MW STEAM TURBINE #2

PERMIT UNIT REQUIREMENTS

1. Combustion turbine and electrical generator lube oil vents shall be equipped with mist eliminators to maintain visible emissions from lube oil vents no greater than 5% opacity, except for three minutes in any hour. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Combustion turbine engine(GTE) shall be equipped with continuously recording fuel gas flowmeter. [District Rule 2201 and PSD Permit (SJ 99-03) X.K.] Federally Enforceable Through Title V Permit
3. Heat recovery steam generator (HRSG) exhaust duct downstream of the SCR unit shall be equipped with continuously recording emissions monitors (CEM) for NO_x, CO, and O₂. All CEMs shall be dedicated to this unit and shall meet the requirements of 40 CFR Part 60 Appendices B & F (for CO), and 40 CFR Part 75 (for NO_x and O₂), and shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns, provided the CEM(s) pass the relative accuracy requirements for startups and shutdown specified herein. If relative accuracy of CEM(s) cannot be certified during startup conditions, CEM results during startup and shutdown events shall be replaced with startup emission rates obtained during source testing to determine compliance with emission limits in conditions 13, 17 and 18. [District Rule 2201 and PSD Permit (SJ 99-03) X.H.1] Federally Enforceable Through Title V Permit
4. HRSG exhaust duct shall be equipped with a continuously recording emission monitor upstream of the SCR unit for measuring the NO_x concentration for the purposes of calculating ammonia slip. Permittee shall check, record, and quantify the calibration drift (CD) at two concentration values at least once daily (approximately 24 hours). The calibration shall be adjusted whenever the daily zero or high-level CD exceeds 5%. If either the zero or high-level CD exceeds 5% for five consecutive daily periods, the analyzer shall be deemed out-of-control. If either the zero or high-level CD exceeds 10% during any CD check, analyzer shall be deemed out-of-control. If the analyzer is out-of-control, the permittee shall take appropriate corrective action and then repeat the CD check. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Ammonia injection grid shall be equipped with operational ammonia flowmeter and injection pressure indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods. [District Rule 1081 and PSD Permit (SJ 99-03) X.C.3] Federally Enforceable Through Title V Permit
7. Heat recovery steam generator design shall provide space for additional selective catalytic reduction catalyst and oxidation catalyst if required to meet NO_x and CO emission limits. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Permittee shall monitor and record exhaust gas temperature at selective catalytic reduction and oxidation catalyst inlets. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
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9. GTE shall be fired exclusively on natural gas, consisting primarily of methane and ethane, with a sulfur content no greater than 0.75 grains of sulfur compounds (as S) per 100 dry scf of natural gas. [District Rule 2201 and PSD Permit (SJ 99-03) X.K.] Federally Enforceable Through Title V Permit
10. Cold startup is defined as the period beginning with turbine initial firing until the unit meets the lb/hr and ppmv emission limits in condition 15. Cold startup means a startup when the combustion turbine has not been in operation during the preceding 72 hours. Duration of the cold startups shall not exceed 3 hours. [District Rule 2201 and PSD Permit (SJ 99-03) X.G.5] Federally Enforceable Through Title V Permit
11. Only one of GTEs S-3636-1, '2 or '3 shall be in startup at any one time. [District Rule 2201 and PSD Permit (SJ 99-03) X.G.2] Federally Enforceable Through Title V Permit
12. Ammonia shall be injected when the selective catalytic reduction system catalyst temperature exceeds 500 degrees F. Permittee shall monitor and record catalyst temperature during periods of startup. [District Rule 2201] Federally Enforceable Through Title V Permit
13. During the cold startup GTE exhaust emissions shall not exceed any of the following: NOx (as NO₂) - 130 lb, VOC - 273 lb or CO - 1235 lb, in any one hour. [District Rule 2201 and PSD Permit (SJ 99-03) X.G.1] Federally Enforceable Through Title V Permit
14. By two hours after turbine initial firing, GTE exhaust emissions shall not exceed any of the following: NOx (as NO₂) - 12.2 ppmv @ 15% O₂ or CO - 25 ppmv @ 15% O₂. [District Rule 4703] Federally Enforceable Through Title V Permit
15. Emission rates from GTE, except during startup and/or shutdown, shall not exceed any of the following: NOx (as NO₂) - 17.03 lb/hr and 2.5 ppmvd @ 15% O₂, VOC - 2.0 ppmvd @ 15% O₂, CO - 24.92 lb/hr and 6 ppmvd @ 15% O₂ or ammonia - 10 ppmvd @ 15% O₂. NOx (as NO₂) emission limit is a one-hour average. Ammonia emission limit is a twenty-four hour rolling average. All other emission limits are three-hour rolling averages. [District Rules 2201, 4703 and PSD Permit (SJ 99-03) X.D & .E] Federally Enforceable Through Title V Permit
16. Emission rates from the GTE shall not exceed either of the following: PM₁₀ - 9.0 lb/hr and SOx (as SO₂) - 3.495 lb/hr. Emission limits are three-hour rolling averages. [District Rules 2201, 4001, and PSD Permit (SJ 99-03) X.F] Federally Enforceable Through Title V Permit
17. On any day when a startup or shutdown occurs, emission rates from GTE shall not exceed any of the following: PM₁₀ - 216 lb/day, SOx (as SO₂) - 84 lb/day, NOx (as NO₂) - 450 lb/day, VOC - 355 lb/day or CO - 2,113 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Combined annual emissions from GTEs S-3636-1, '2 and '3, calculated on a twelve consecutive month rolling basis, shall not exceed any of the following: PM₁₀ - 224,343 lb/year, SOx (as SO₂) - 84,780 lb/year, NOx (as NO₂) - 344,484 lb/year, VOC - 227,619 lb/year or CO - 1,220,166 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Combined annual emissions of all hazardous air pollutants (HAPS) from GTEs S-3636-1, '2 and '3, calculated on a twelve consecutive month rolling basis, shall not exceed 25 tons/year. Combined annual emissions of any single HAP from GTEs S-3636-1, '2 and '3, calculated on a twelve consecutive month rolling basis, shall not exceed 10 tons/year. [District Rule 4002] Federally Enforceable Through Title V Permit
20. Each one-hour period shall commence on the hour. Each one-hour period in a three-hour rolling average will commence on the hour. The three-hour average will be compiled from the three most recent one-hour periods. Each one-hour period in a twenty-four-hour average for ammonia slip will commence on the hour. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Daily emissions will be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each month in the twelve-consecutive-month rolling average emissions shall commence at the beginning of the first day of the month. The twelve-consecutive-month rolling average emissions to determine compliance with annual emissions limitations shall be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
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22. Compliance with ammonia slip limit shall be demonstrated by using the following calculation procedure: ammonia slip ppmv @ 15% O₂ = ((a-(bxc/1,000,000)) x 1,000,000 / b) x d, where a = ammonia injection rate(lb/hr)/17(lb/lb. mol), b = dry exhaust gas flow rate (lb/hr)/(29(lb/lb. mol), c = change in measured NO_x concentration ppmv at 15% O₂ across catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip. Alternatively, permittee may utilize a continuous in-stack ammonia monitor, acceptable to the District, to monitor compliance. At least 60 days prior to using a NH₃ CEM, the permittee must submit a monitoring plan for District review and approval. [District Rule 4102]
23. Compliance with the short term emission limits (ppmv @ 15% O₂ and lb/hr) shall be demonstrated annually by District witnessed in situ sampling of exhaust gases by a qualified independent source test firm at full load conditions as follows - NO_x: ppmvd @ 15% O₂ and lb/hr, CO: ppmvd @ 15% O₂ and lb/hr, VOC: ppmvd @ 15% O₂ and lb/hr, PM₁₀: lb/hr, and ammonia: ppmvd @ 15% O₂. Sample collection to demonstrate compliance with ammonia emission limit shall be based on three consecutive test runs of thirty minutes each. [District Rule 1081 and PSD Permit (SJ 99-03) X.C.1] Federally Enforceable Through Title V Permit
24. Compliance with the startup NO_x, CO, and VOC mass emission limits shall be demonstrated for one of the GTEs (S-3636-1, '2, or '3) at least once every seven years by District witnessed in situ sampling of exhaust gases by a qualified independent source test firm. CEM relative accuracy shall be determined during startup source testing in accordance with methodology approved by the District. If CEM data is not certifiable to determine compliance with NO_x and CO startup emissions limits, then source testing to measure startup NO_x and CO mass emissions rates shall be conducted at least once every 12 months. [District Rule 1081] Federally Enforceable Through Title V Permit
25. Based on the initial speciated HAPS and total VOC source test conducted for one of the GTEs (S-3636-1, '2 or '3), Pastoria shall correlate the total HAPS emissions rate and the single highest HAP emission rate to the VOC mass emission determined during the speciated HAPs source test. Annual compliance with the HAPS emissions limit (25 tpy all HAPS or 10 tpy any single HAP) shall be by the combined VOC emissions rates for the GTEs (S-3636-1, '2 and '3) determined during annual compliance source testing and the correlation between VOC emissions and HAP(S). [District Rule 4002] Federally Enforceable Through Title V Permit
26. Compliance with natural gas sulfur content limit shall be demonstrated periodically as required by 40 CFR 60 Subpart GG and 40 CFR 75. [District Rules 2540 and PSD Permit (SJ 99-03) X.K.] Federally Enforceable Through Title V Permit
27. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. Official test results and field data collected by source tests required by conditions on this permit shall be submitted to the District within 60 days of testing. [District Rule 1081 and PSD Permit (SJ 99-03) X.C.2] Federally Enforceable Through Title V Permit
28. Source test plans for seven-year source tests shall include a method for measuring the VOC/CO surrogate relationship that will be used to demonstrate compliance with VOC lb/hr, lb/day, and lb/twelve month rolling emission limits. [District Rule 2201] Federally Enforceable Through Title V Permit
29. The following test methods shall be used PM₁₀: EPA method 5 (front half and back half), NO_x: EPA Method 7E or 20, CO: EPA method 10 or 10B, O₂: EPA Method 3, 3A, or 20, VOC: EPA method 18 or 25, ammonia: BAAQMD ST-1B, and fuel gas sulfur content: ASTM D3246. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081, 4001, 4703, and PSD Permit (SJ 99-03) X.C.2] Federally Enforceable Through Title V Permit
30. The permittee shall maintain hourly records of NO_x, CO, and ammonia emission concentrations (ppmv @ 15% O₂), and hourly, daily, and twelve month rolling average records of NO_x and CO emissions. Compliance with the hourly, daily, and twelve month rolling average VOC emission limits shall be demonstrated by the CO CEM data and the VOC/CO relationship determined by annual CO and VOC source tests. [District Rule 2201] Federally Enforceable Through Title V Permit
31. The permittee shall maintain records of SO_x lb/hr, lb/day, and lb/twelve month rolling average emission. SO_x emissions shall be based on fuel use records, natural gas sulfur content, and mass balance calculations. [District Rule 2201 and PSD Permit (SJ 99-03) X.K.] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
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32. Permittee shall maintain the following records for the GTE: occurrence, duration, and type of any startup, shutdown, or malfunction; performance testing; emission measurements; total daily and rolling twelve month average hours of operation; hourly quantity of fuel used and gross three hour average operating load. [District Rules 2201 & 4703] Federally Enforceable Through Title V Permit
33. Permittee shall maintain the following records for the continuous emissions monitoring system (CEMS): performance testing, evaluations, calibrations, checks, maintenance, adjustments, and any period during which a CEMS was inoperative. [District Rules 2201 & 4703, and PSD Permit (SJ 99-03) X.I.1] Federally Enforceable Through Title V Permit
34. Permittee shall provide notification and record keeping as required under 40 CFR, Part 60, Subpart A, 60.7. [District Rule 4001] Federally Enforceable Through Title V Permit
35. All records required to be maintained by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
36. Results of continuous emissions monitoring shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3. 3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080] Federally Enforceable Through Title V Permit
37. Audits of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and total accuracy testing is performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
38. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
39. The permittee shall submit a written report to the APCO for each calendar quarter, within 30 days of the end of the quarter, including: time intervals, data and magnitude of excess emissions, nature and cause of excess (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting shall correspond to the averaging period for each respective emission standard; applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred. [District Rule 1080 and PSD Permit (SJ 99-03) X.I.3] Federally Enforceable Through Title V Permit
40. The combined annual emissions rate from all three CTGs and emergency engines S-3636-7-4 & -12-1, based on 12-month rolling average, must not exceed 344,485 lbs NOx and 1,140,000 lbs CO. [PSD Permit (SJ 99-03) X.D & .E] Federally Enforceable Through Title V Permit
41. The annual SOx emissions from each CTG, based on 12-month rolling average, must not exceed 28,170 lbs. [PSD Permit (SJ 99-03) X.F] Federally Enforceable Through Title V Permit
42. During the hot startup of any CTG, the combined emissions from any one CTG and HRSG exhausts must not exceed 107 lbs of NOx or 903 lbs of CO in any one hour. Hot startup means a startup when the combustion turbine has been in operation during the preceding 8 hours and duration of hot start-ups shall not exceed 1 hour. [PSD Permit (SJ 99-03) X.G.1] Federally Enforceable Through Title V Permit
43. During the warm startup of any CTG, the combined emissions from any one CTG and HRSG exhausts must not exceed 119 lbs of NOx or 1021 lbs of CO in any one hour. Warm startup means a startup that is not a hot or cold startup and duration of warm startups shall not exceed 2.5 hours. [PSD Permit (SJ 99-03) X.G.1] Federally Enforceable Through Title V Permit
44. During the Shutdown of any CTG, the combined emissions from any one CTG and HRSG exhausts must not exceed 58.5 lbs of NOx or 222.5 lbs of CO in any one hour. Shutdown shall be defined as the period beginning with the lowering of equipment from base load and lasting until fuel flow is completely off and combustion has ceased and duration of shutdowns shall not exceed one half hour. [PSD Permit (SJ 99-03) X.G.1] Federally Enforceable Through Title V Permit

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

45. Total number of start-ups and shut-downs for the facility shall not exceed 674 events per year. [PSD Permit (SJ 99-03) X.G.6] Federally Enforceable Through Title V Permit
46. Any excess emission indicated by the CEM system must be considered a violation of the applicable emission limit in the PSD permit. [PSD Permit (SJ 99-03) X.I.4] Federally Enforceable Through Title V Permit
47. The quality assurance project plan used by the Permittee for the certification and operation of the continuous emissions monitors, which meets the requirements of 40 CFR Part 60, Appendix F, must be available upon request to EPA. [PSD Permit (SJ 99-03) X.I.5] Federally Enforceable Through Title V Permit

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

DRAFT

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-3636-4-4

EXPIRATION DATE: 02/28/2015

EQUIPMENT DESCRIPTION:

FORCED DRAFT COOLING TOWER WITH 8 CELLS AND HIGH EFFICIENCY DRIFT ELIMINATOR

PERMIT UNIT REQUIREMENTS

1. Permittee shall maintain and make available to the District upon request vendor supplied justification for the correction factor used to correlate blowdown TDS to drift TDS and correct for the amount of drift that stays suspended in the atmosphere. Correction factor is used in the equation below to calculate cooling tower PM10 emissions rate. [District Rule 2201] Federally Enforceable Through Title V Permit
2. No hexavalent chromium containing compounds shall be added to cooling tower circulating water. [District Rule 7012 and 40 CFR 63.402] Federally Enforceable Through Title V Permit
3. Drift eliminator drift rate shall not exceed 0.0005%. [District Rule 2201] Federally Enforceable Through Title V Permit
4. PM10 emission rate shall not exceed 22.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Compliance with the PM10 daily emission limit shall be demonstrated as follows: $PM10 \text{ lb/day} = \text{circulating water recirculation rate} \times \text{total dissolved solids concentration in the blowdown water} \times \text{design drift rate} \times \text{correction factor}$. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Compliance with PM10 emission limit shall be determined by blowdown water sample analysis by independent laboratory at least weekly. [District Rule 1081] Federally Enforceable Through Title V Permit

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-3636-5-4

EXPIRATION DATE: 02/28/2015

EQUIPMENT DESCRIPTION:

4 CELL FORCED DRAFT COOLING TOWER WITH HIGH EFFICIENCY CELLULAR DRIFT ELIMINATOR

PERMIT UNIT REQUIREMENTS

1. Permittee shall maintain and make available to the District upon request vendor supplied justification for the correction factor used to correlate blowdown TDS to drift TDS and correct for the amount of drift that stays suspended in the atmosphere. Correction factor is used in the equation below to calculate cooling tower PM10 emissions rate. [District Rule 2201] Federally Enforceable Through Title V Permit
2. No hexavalent chromium containing compounds shall be added to cooling tower circulating water. [District Rule 7012 and 40 CFR 63.402] Federally Enforceable Through Title V Permit
3. Drift eliminator drift rate shall not exceed 0.0005%. [District Rule 2201] Federally Enforceable Through Title V Permit
4. PM10 emission rate shall not exceed 11.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Compliance with the PM10 daily emission limit shall be demonstrated as follows: $PM10 \text{ lb/day} = \text{circulating water recirculation rate} * \text{total dissolved solids concentration in the blowdown water} * \text{design drift rate} * \text{correction factor}$. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Compliance with PM10 emission limit shall be determined by blowdown water sample analysis by independent laboratory at least weekly. [District Rule 1081] Federally Enforceable Through Title V Permit

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

Facility Name: PASTORIA ENERGY FACILITY, LLC

Location: TEJON RANCH 30 MILES S OF BAKERSFIELD, AND 6.9 MILES E OF GRAPEVINE, RANCHO EL TEJON, CA

S-3636-5-4 : Nov 1 2011 9:01AM -- SRANK

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-3636-7-4

EXPIRATION DATE: 02/28/2015

EQUIPMENT DESCRIPTION:

814 HP CATERPILLAR MODEL G3512 SC TA NATURAL GAS FIRED IC ENGINE DRIVING AN EMERGENCY ELECTRICAL GENERATOR WITH THREE-WAY EXHAUST CATALYST

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 sulfur content of the natural gas fuel shall not exceed 0.75 grain/100 scf. [District Rule 2201 and PSD Permit (SJ 99-03) X.K] Federally Enforceable Through Title V Permit
3. Emissions from this IC engine shall not exceed any of the following limits: 1.84 lb NOx/hr, 3.62 lb CO/hr, 0.11 lb PM10/hr or 0.23 lb VOC/hr. [District Rules 2201] Federally Enforceable Through Title V Permit
4. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with a nonresettable elapsed operating time meter. [District Rules 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
6. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system manufacturer. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
7. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 100 hours per year, as determined by an operational nonresettable elapsed operating time meter. [District Rule 2201, 4702, PSD Permit (SJ 99-03) X.L.2, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
8. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit
9. This engine shall 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. The engines shall not be used to increase the quantity of electricity generated for sale. [District Rule 4702 and PSD Permit (SJ 99-03) X.L.2] Federally Enforceable Through Title V Permit
10. During periods of 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 (e.g. oil pressure, exhaust gas temperature, etc.). [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.

11. The permittee shall maintain records of hours of emergency and non-emergency operation. Records shall include the date, the number of hours of operation, the purpose of the operation (e.g., load testing, weekly testing, rolling blackout, general area power outage, etc.), the type of fuel used, and records of operational characteristics monitoring. Such records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
12. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702] Federally Enforceable Through Title V Permit
13. This engine shall be equipped with a three-way catalyst. [PSD Permit (SJ 99-03) X.L.5] Federally Enforceable Through Title V Permit
14. The facility shall not operate the engine during start-up or shut-down of a turbine, except during emergency situations. [PSD Permit (SJ 99-03) X.L.3] Federally Enforceable Through Title V Permit
15. Effective October 19, 2013, The permittee shall change oil and filter every 500 hours of operation or annually, whichever comes first; inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. [40 CFR Part 63.6603(a)] Federally Enforceable Through Title V Permit

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

Facility Name: PASTORIA ENERGY FACILITY, LLC

Location: TEJON RANCH 30 MILES S OF BAKERSFIELD, AND 6.5 MILES E OF GRAPEVINE, RANCHO EL TEJON, CA

S-3636-7-4 : Nov 12 2011 9:01AM - SRANK

DRAFT

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-3636-12-1

EXPIRATION DATE: 02/28/2015

EQUIPMENT DESCRIPTION:

360 HP JOHN DEERE COMPANY MODEL JW6H-UF-60 DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIRE WATER PUMP

PERMIT UNIT REQUIREMENTS

1. {1898} The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801, and 17 CCR 93115] Federally Enforceable Through Title V Permit
4. Emissions from this engine shall not exceed any of the following limits: 5.6 g-NOx/hp-hr, 0.29 g-CO/hp-hr or 0.11 g-VOC/hp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The PM10 emissions rate shall not exceed 0.07 g/hp-hr based on US EPA certification using ISO 8178 test procedure. [District Rule 2201 and District Rule 4102] Federally Enforceable Through Title V Permit
6. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
7. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] 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. For testing purposes, the engine shall only be operated the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 - "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems", 1998 edition. Total hours of operation for all maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rule 4702, 17 CCR 93115, PSD Permit (SJ 99-03) X.L.2, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
9. An emergency situation is an unscheduled event 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
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, and the purpose of the operation (for example: load testing, weekly testing, emergency fire fighting, etc.). For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] 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 (5) years, and shall be made available for District inspection upon request. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
12. The diesel fire pump engine shall be equipped with a turbocharger and intercooler/aftercooler. [PSD Permit (SJ 99-03) X.L.4] Federally Enforceable Through Title V Permit
13. The facility shall not operate the engine during start-up or shut-down of a turbine, except during emergency situations. [PSD Permit (SJ 99-03) X.L.3] Federally Enforceable Through Title V Permit
14. Effective May 3, 2013, The permittee shall change oil and filter every 500 hours of operation or annually, whichever comes first; inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. [40 CFR Part 63.6603(a)] Federally Enforceable Through Title V Permit

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

Facility Name: PASTORIA ENERGY FACILITY, LLC

Location: TEJON RANCH 30 MILES S OF BAKERSFIELD, AND 6.5 MILES E OF GRAPEVINE, RANCHO EL TEJON, CA

S-3636-12-1 : Nov 1 2011 8:01AM - SRANK

DRAFT

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-3636-13-1

EXPIRATION DATE: 02/28/2015

EQUIPMENT DESCRIPTION:

CONFINED ABRASIVE BLASTING OPERATION WITH A 50 LB ECONOLINE ABRASIVE PRODUCTS RA 60 X 48 CB
BLASTING UNIT SERVED BY A ECONOLINE ABRASIVE PRODUCTS RA 400-60 DUST COLLECTOR

PERMIT UNIT REQUIREMENTS

1. {52} The blasting operations shall be carried out in a manner to prevent any nuisances. [District Rule 4102]
2. {1475} All abrasive blasting shall be conducted in accordance with California Code of Regulations Title 17, Subchapter 6, Sections 92000 through 92540. [92000 through 92540 CCR]
3. {1483} A used certified abrasive shall not be considered certified for reuse unless the abrasive conforms to its original cut-point fineness. [92530 CCR]
4. {1474} Abrasive blasting operations conducted within a permanent building shall not discharge air contaminants into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark or darker than Ringelmann 1 or equivalent to 20% opacity. [92200 CCR]

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

Attachment A

Equipment Listing

Permit#	Equipment Description
S-3636-1-3	168 MW NOMINALLY RATED GENERAL ELECTRIC 7FA NATURAL GAS FIRED GAS TURBINE ENGINE/ELECTRICAL GENERATOR #1 WITH DRY LOW NOX COMBUSTORS AND SELECTIVE CATALYTIC REDUCTION, WITH HRSG #1 AND 185 MW STEAM TURBINE #1 IN A TWO ON ONE COMBINED CYCLE WITH GAS TURBINE ENGINE S-3636-2
S-3636-2-3	168 MW NOMINALLY RATED GENERAL ELECTRIC 7FA NATURAL GAS FIRED GAS TURBINE ENGINE/ELECTRICAL GENERATOR #2 WITH DRY LOW NOX COMBUSTORS, SELECTIVE CATALYTIC REDUCTION, HRSG #2, AND A SINGLE 185 MW STEAM TURBINE #1 SHARED WITH GAS TURBINE ENGINE S-3636-1
S-3636-3-3	168 MW NOMINALLY RATED GENERAL ELECTRIC 7FA NATURAL GAS FIRED GAS TURBINE ENGINE/ELECTRICAL GENERATOR #3 WITH DRY LOW NOX COMBUSTORS, SELECTIVE CATALYTIC REDUCTION, HRSG #1 AND 90 MW STEAM TURBINE #2
S-3636-4-3	FORCED DRAFT COOLING TOWER WITH 8 CELLS AND HIGH EFFICIENCY DRIFT ELIMINATOR
S-3636-5-3	4 CELL FORCED DRAFT COOLING TOWER WITH HIGH EFFICIENCY CELLULAR DRIFT ELIMINATOR
S-3636-7-3	814 BHP CATERPILLAR MODEL G3512 SC TA NATURAL GAS-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR WITH THREE-WAY EXHAUST CATALYST
S-3636-12-0	360 BHP JOHN DEERE COMPANY MODEL 6081HF001 DIESEL-FIRED EMERGENCY IC ENGINE (SN PG6081H156175X) POWERING A FIREWATER PUMP
S-3636-13-0	CONFINED ABRASIVE BLASTING OPERATION WITH A 50 LB ECONOLINE ABRASIVE PRODUCTS RA 60 X 48 CB BLASTING UNIT SERVED BY A ECONOLINE ABRASIVE PRODUCTS RA 400-60 DUST COLLECTOR

Attachment B

Exempt Equipment

The following exempt equipment was identified by the applicant on TVFORM-003, Insignificant Activities

Exemption Category	Rule 2020 Citation	✓
Structure or incinerator assoc. with a structure designed as a dwelling for 4 families or less	4.1	
Locomotives, airplanes, and watercraft used to transport passengers or freight	4.4	
Natural gas or LPG-fired boilers or other indirect heat transfer units of 5 MMBtu/hr or less	6.1.1	
Piston-type i.c. engine with maximum continuous rating of 50 braking horsepower (bhp) or less	6.1.2	✓
Gas turbine engines with maximum heat input rating of 3 MMBtu/hr or less	6.1.3	
Space heating equipment other than boilers	6.1.4	✓
Cooling towers with a circulation rate less than 10,000 gal/min, and that are not used for cooling of process water, or water from barometric jets or condensers++	6.2	
Use of less than 2 gal/day of graphic arts materials	6.3	
Equipment at retail establishments used to prepare food for human consumption	6.4.1	
Ovens at bakeries with total daily production less than 1,000 pounds and exempt by sec. 6.1.1	6.4.3	
Equipment used exclusively for extruding or compression molding of rubber or plastics, where no plastisizer or blowing agent is used	6.5	
Containers used to store clean produced water	6.6.1	
Containers ≤100 bbl used to store oil with specific gravity ≥ 0.8762	6.6.2	
Containers ≤ 100 bbl installed prior to 6/1/89 used to store oil with specific gravity ≥ 0.8762	6.6.3	
Containers with a capacity ≤ 250 gallons used to store org-anic material where the actual storage temperature <150 F	6.6.4	
Containers used to store unheated organic material with an initial boiling point ≥ 302 F	6.6.5	✓
Containers used to store fuel oils or non-air-blown asphalt with specific gravity ≥0.9042	6.6.6	
Containers used to store petroleum distillates used as motor fuel with specific gravity ≥ 0.8251	6.6.7	✓

Exemption Category	Rule 2020 Citation	✓
Containers used to store refined lubricating oils	6.6.8	✓
Unvented pressure vessels used exclusively to store liquified gases or assoc with exempt equipment	6.6.9 or 6.13	✓
Portable tanks used exclusively to store produced fluids for ≤ six months	6.6.10	
Mobile transport tanks on delivery vehicles of VOCs	6.6.11	
Loading racks used for the transfer of less than 4,000 gal/day of unheated organic material with initial boiling point ≥ 302 F or of fuel oil with specific gravity ≥0.8251	6.7.1.1	
Loading racks used for the transfer of asphalt, crude or residual oil stored in exempt tanks, or crude oil with specific gravity ≥ 0.8762	6.7.1.2	
Equipment used exclusively for the transfer of refined lubricating oil	6.7.2	✓
Equipment used to apply architectural coatings	6.8.1	
Unheated, non-conveyorized cleaning equipment with < 10 ft ² open area; using solvents with initial boiling point ≥ 248 F; and < 25 gal/yr. evaporative losses	6.9	
Brazing, soldering, or welding equipment	6.10	✓
Equipment used to compress natural gas	6.11	
Fugitive emissions sources assoc. with exempt equipment	6.12	✓
Pits and Ponds as defined in Rule 1020	6.15	
On-site roadmix manufacturing and the application of roadmix as a road base material	6.17	
Emissions less than 2 lb/day from units not included above	6.19	✓
Venting PUC quality natural gas from for sole purpose of pipeline and compressor repair and or maintenance	7.2	✓
Non-structural repairs & maintenance to permitted equipment	7.3	✓
Detonation of explosives ≤ 100 lb/day and 1,000 lb/year	7.4	

ATTACHMENT C

PERMITS TO OPERATE (PTOs)

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-3636-1-3

EXPIRATION DATE: 02/28/2015

EQUIPMENT DESCRIPTION:

168 MW NOMINALLY RATED GENERAL ELECTRIC 7FA NATURAL GAS FIRED GAS TURBINE ENGINE/ELECTRICAL GENERATOR #1 WITH DRY LOW NOX COMBUSTORS AND SELECTIVE CATALYTIC REDUCTION, WITH HRSG #1 AND 185 MW STEAM TURBINE #1 IN A TWO ON ONE COMBINED CYCLE WITH GAS TURBINE ENGINE S-3636-2

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Combustion turbine and electrical generator lube oil vents shall be equipped with mist eliminators to maintain visible emissions from lube oil vents no greater than 5% opacity, except for three minutes in any hour. [District Rule 2201]
3. Combustion turbine engine(GTE) shall be equipped with continuously recording fuel gas flowmeter. [District Rule 2201]
4. Heat recovery steam generator (HRSG) exhaust duct downstream of the SCR unit shall be equipped with continuously recording emissions monitors (CEM) for NO_x, CO, and O₂. All CEMs shall be dedicated to this unit and shall meet the requirements of 40 CFR Part 60 Appendices B & F (for CO), and 40 CFR Part 75 (for NO_x and O₂), and shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns, provided the CEM(s) pass the relative accuracy requirements for startups and shutdown specified herein. If relative accuracy of CEM(s) cannot be certified during startup conditions, CEM results during startup and shutdown events shall be replaced with startup emission rates obtained during source testing to determine compliance with emission limits in conditions 14, 18 and 19. [District Rule 2201]
5. HRSG exhaust duct shall be equipped with a continuously recording emission monitor upstream of the SCR unit for measuring the NO_x concentration for the purposes of calculating ammonia slip. Permittee shall check, record, and quantify the calibration drift (CD) at two concentration values at least once daily (approximately 24 hours). The calibration shall be adjusted whenever the daily zero or high-level CD exceeds 5%. If either the zero or high-level CD exceeds 5% for five consecutive daily periods, the analyzer shall be deemed out-of-control. If either the zero or high-level CD exceeds 10% during any CD check, analyzer shall be deemed out-of-control. If the analyzer is out-of-control, the permittee shall take appropriate corrective action and then repeat the CD check. [District Rule 2201]
6. Ammonia injection grid shall be equipped with operational ammonia flowmeter and injection pressure indicator. [District Rule 2201]
7. Exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods. [District Rule 1081]
8. Heat recovery steam generator design shall provide space for additional selective catalytic reduction catalyst and oxidation catalyst if required to meet NO_x and CO emission limits. [District Rule 2201]
9. Permittee shall monitor and record exhaust gas temperature at selective catalytic reduction and oxidation catalyst inlets. [District Rule 2201]
10. GTE shall be fired exclusively on natural gas, consisting primarily of methane and ethane, with a sulfur content no greater than 0.75 grains of sulfur compounds (as S) per 100 dry scf of natural gas. [District Rule 2201]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

11. Startup is defined as the period beginning with turbine initial firing until the unit meets the lb/hr and ppmv emission limits in condition 16. Shutdown is defined the period beginning with initiation of turbine shutdown sequence and ending with cessation of firing of the gas turbine engine. Startup and shutdown durations shall not exceed three hours and one hour, respectively, per occurrence. [District Rule 2201 and 4001]
12. Only one of GTEs S-3636-1, '2 or '3 shall be in startup at any one time. [District Rule 2201]
13. Ammonia shall be injected when the selective catalytic reduction system catalyst temperature exceeds 500 degrees F. Permittee shall monitor and record catalyst temperature during periods of startup. [District Rule 2201]
14. During startup or shutdown GTE exhaust emissions shall not exceed any of the following: NOx (as NO2) - 130 lb, VOC - 273 lb or CO - 1235 lb, in any one hour. [CEQA]
15. By two hours after turbine initial firing, GTE exhaust emissions shall not exceed any of the following: NOx (as NO2) - 12.2 ppmv @ 15% O2 or CO - 25 ppmv @ 15% O2. [District Rule 4703]
16. Emission rates from GTE, except during startup and/or shutdown, shall not exceed any of the following: NOx (as NO2) - 17.03 lb/hr and 2.5 ppmvd @ 15% O2, VOC - 2.0 ppmvd @ 15% O2, CO - 24.92 lb/hr and 6 ppmvd @ 15% O2 or ammonia - 10 ppmvd @ 15% O2. NOx (as NO2) emission limit is a one-hour average. Ammonia emission limit is a twenty-four hour rolling average. All other emission limits are three-hour rolling averages. [District Rules 2201, 4001, and 4703]
17. Emission rates from the GTE shall not exceed either of the following: PM10 - 9.0 lb/hr and SOx (as SO2) - 3.495 lb/hr. Emission limits are three-hour rolling averages. [District Rules 2201 and 4001]
18. On any day when a startup or shutdown occurs, emission rates from GTE shall not exceed any of the following: PM10 - 216 lb/day, SOx (as SO2) - 84 lb/day, NOx (as NO2) - 450 lb/day, VOC - 355 lb/day or CO - 2,113 lb/day. [District Rule 2201]
19. Combined annual emissions from GTEs S-3636-1, '2 and '3, calculated on a twelve consecutive month rolling basis, shall not exceed any of the following: PM10 - 224,343 lb/year, SOx (as SO2) - 84,780 lb/year, NOx (as NO2) - 344,484 lb/year, VOC - 227,619 lb/year or CO - 1,220,166 lb/year. [District Rule 2201]
20. Combined annual emissions of all hazardous air pollutants (HAPS) from GTEs S-3636-1, '2 and '3, calculated on a twelve consecutive month rolling basis, shall not exceed 25 tons/year. Combined annual emissions of any single HAP from GTEs S-3636-1, '2 and '3, calculated on a twelve consecutive month rolling basis, shall not exceed 10 tons/year. [District Rule 4002]
21. Each one-hour period shall commence on the hour. Each one-hour period in a three-hour rolling average will commence on the hour. The three-hour average will be compiled from the three most recent one-hour periods. Each one-hour period in a twenty-four-hour average for ammonia slip will commence on the hour. [District Rule 2201]
22. Daily emissions will be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each month in the twelve-consecutive-month rolling average emissions shall commence at the beginning of the first day of the month. The twelve-consecutive-month rolling average emissions to determine compliance with annual emissions limitations shall be compiled from the twelve most recent calendar months. [District Rule 2201]
23. Compliance with ammonia slip limit shall be demonstrated by using the following calculation procedure: ammonia slip ppmv @ 15% O2 = $((a - (b \times c / 1,000,000)) \times 1,000,000 / b) \times d$, where a = ammonia injection rate (lb/hr) / 17 (lb/lb. mol), b = dry exhaust gas flow rate (lb/hr) / (29 (lb/lb. mol)), c = change in measured NOx concentration ppmv at 15% O2 across catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip. Alternatively, permittee may utilize a continuous in-stack ammonia monitor, acceptable to the District, to monitor compliance. At least 60 days prior to using a NH3 CEM, the permittee must submit a monitoring plan for District review and approval [District Rule 4102]
24. Compliance with the short term emission limits (ppmv @ 15% O2 and lb/hr) shall be demonstrated annually by District witnessed in situ sampling of exhaust gases by a qualified independent source test firm at full load conditions as follows - NOx: ppmvd @ 15% O2 and lb/hr, CO: ppmvd @ 15% O2 and lb/hr, VOC: ppmvd @ 15% O2 and lb/hr, PM10: lb/hr, and ammonia: ppmvd @ 15% O2. Sample collection to demonstrate compliance with ammonia emission limit shall be based on three consecutive test runs of thirty minutes each. [District Rule 1081]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

25. Compliance with the startup NO_x, CO, and VOC mass emission limits shall be demonstrated for one of the GTEs (S-3636-1, '2, or '3) at least once every seven years by District witnessed in situ sampling of exhaust gases by a qualified independent source test firm. CEM relative accuracy shall be determined during startup source testing in accordance with methodology approved by the District. If CEM data is not certifiable to determine compliance with NO_x and CO startup emissions limits, then source testing to measure startup NO_x and CO mass emissions rates shall be conducted at least once every 12 months. [District Rule 1081]
26. Based on the initial speciated HAPS and total VOC source test conducted for one of the GTEs (S-3636-1, '2 or '3), Pastoria shall correlate the total HAPS emissions rate and the single highest HAP emission rate to the VOC mass emission determined during the speciated HAPS source test. Annual compliance with the HAPS emissions limit (25 tpy all HAPS or 10 tpy any single HAP) shall be by the combined VOC emissions rates for the GTEs (S-3636-1, '2 and '3) determined during annual compliance source testing and the correlation between VOC emissions and HAP(S). [District Rule 4002]
27. Compliance with natural gas sulfur content limit shall be demonstrated periodically as required by 40 CFR 60 Subpart GG and 40 CFR 75. [District Rules 1081, 2540, and 4001]
28. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. Official test results and field data collected by source tests required by conditions on this permit shall be submitted to the District within 60 days of testing. [District Rule 1081]
29. Source test plans for seven-year source tests shall include a method for measuring the VOC/CO surrogate relationship that will be used to demonstrate compliance with VOC lb/hr, lb/day, and lb/twelve month rolling emission limits. [District Rule 2201]
30. The following test methods shall be used PM₁₀: EPA method 5 (front half and back half), NO_x: EPA Method 7E or 20, CO: EPA method 10 or 10B, O₂: EPA Method 3, 3A, or 20, VOC: EPA method 18 or 25, ammonia: BAAQMD ST-1B, and fuel gas sulfur content: ASTM D3246. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081, 4001, and 4703]
31. The permittee shall notify District of date of initiation of construction no later than 30 days after such date, date of anticipated startup not more than 60 days nor less than 30 days prior to such date, and date of actual startup within 15 days after such date. [District Rule 4001]
32. The permittee shall maintain hourly records of NO_x, CO, and ammonia emission concentrations (ppmv @ 15% O₂), and hourly, daily, and twelve month rolling average records of NO_x and CO emissions. Compliance with the hourly, daily, and twelve month rolling average VOC emission limits shall be demonstrated by the CO CEM data and the VOC/CO relationship determined by annual CO and VOC source tests. [District Rule 2201]
33. The permittee shall maintain records of SO_x lb/hr, lb/day, and lb/twelve month rolling average emission. SO_x emissions shall be based on fuel use records, natural gas sulfur content, and mass balance calculations. [District Rule 2201]
34. Permittee shall maintain the following records for the GTE: occurrence, duration, and type of any startup, shutdown, or malfunction; performance testing; emission measurements; total daily and rolling twelve month average hours of operation; hourly quantity of fuel used and gross three hour average operating load. [District Rules 2201 & 4703]
35. Permittee shall maintain the following records for the continuous emissions monitoring system (CEMS): performance testing, evaluations, calibrations, checks, maintenance, adjustments, and any period during which a CEMS was inoperative. [District Rules 2201 & 4703]
36. Permittee shall provide notification and record keeping as required under 40 CFR, Part 60, Subpart A, 60.7. [District Rule 4001]
37. All records required to be maintained by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rule 2201]
38. Results of continuous emissions monitoring shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3, 3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

39. The permittee 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 Districts satisfaction that the longer reporting period was necessary. [District Rule 1100]
40. 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]
41. Audits of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and total accuracy testing is performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080]
42. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F . [District Rule 1080]
43. The permittee shall submit a written report to the APCO for each calendar quarter, within 30 days of the end of the quarter, including: time intervals, data and magnitude of excess emissions, nature and cause of excess (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting shall correspond to the averaging period for each respective emission standard; applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred . [District Rule 1080]

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-3636-2-3

EXPIRATION DATE: 02/28/2015

EQUIPMENT DESCRIPTION:

168 MW NOMINALLY RATED GENERAL ELECTRIC 7FA NATURAL GAS FIRED GAS TURBINE ENGINE/ELECTRICAL GENERATOR #2 WITH DRY LOW NOX COMBUSTORS, SELECTIVE CATALYTIC REDUCTION, HRSG #2, AND A SINGLE 185 MW STEAM TURBINE #1 SHARED WITH GAS TURBINE ENGINE S-3636-1

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Combustion turbine engine(GTE) shall be equipped with continuously recording fuel gas flowmeter. [District Rule 2201]
3. Combustion turbine and electrical generator lube oil vents shall be equipped with mist eliminators to maintain visible emissions from lube oil vents no greater than 5% opacity, except for three minutes in any hour. [District Rule 2201]
4. Heat recovery steam generator (HRSG) exhaust duct downstream of the SCR unit shall be equipped with continuously recording emissions monitors (CEM) for NO_x, CO, and O₂. All CEMs shall be dedicated to this unit and shall meet the requirements of 40 CFR Part 60 Appendices B & F (for CO), and 40 CFR Part 75 (for NO_x and O₂), and shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns, provided the CEM(s) pass the relative accuracy requirements for startups and shutdown specified herein. If relative accuracy of CEM(s) cannot be certified during startup conditions, CEM results during startup and shutdown events shall be replaced with startup emission rates obtained during source testing to determine compliance with emission limits in conditions 14, 18 and 19. [District Rule 2201]
5. HRSG exhaust duct shall be equipped with a continuously recording emission monitor upstream of the SCR unit for measuring NO_x concentration for the purposes of calculating ammonia slip. Permittee shall check, record, and quantify the calibration drift (CD) at two concentration values at least once daily (approximately 24 hours). The calibration shall be adjusted whenever the daily zero or high-level CD exceeds 5%. If either the zero or high-level CD exceeds 5% for five consecutive daily periods, the analyzer shall be deemed out-of-control. If either the zero or high-level CD exceeds 10% during any CD check, analyzer shall be deemed out-of-control. If the analyzer is out-of-control, the permittee shall take appropriate corrective action and then repeat the CD check. [District Rule 2201]
6. Ammonia injection grid shall be equipped with operational ammonia flowmeter and injection pressure indicator. [District Rule 2201]
7. Exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods. [District Rule 1081]
8. Heat recovery steam generator design shall provide space for additional selective catalytic reduction catalyst if required to meet NO_x emission limits. [District Rule 2201]
9. Permittee shall monitor and record exhaust gas temperature at selective catalytic reduction and oxidation catalyst inlets. [District Rule 2201]
10. GTE shall be fired exclusively on natural gas, consisting primarily of methane and ethane, with a sulfur content no greater than 0.75 grains of sulfur compounds (as S) per 100 dry scf of natural gas. [District Rule 2201]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

Facility Name: PASTORIA ENERGY FACILITY, LLC

Location: TEJON RANCH 30 MILES S OF BAKERSFIELD, AND 6.5 MILES E OF GRAPEVINE, RANCHO EL TEJON, CA

S-3636-2-3, Nov 1 2011 9:06AM - SRANK

11. Startup is defined as the period beginning with turbine initial firing until the unit meets the lb/hr and ppmv emission limits in condition 16. Shutdown is defined the period beginning with initiation of turbine shutdown sequence and ending with cessation of firing of the gas turbine engine. Startup and shutdown durations shall not exceed three hours and one hour, respectively, per occurrence. [District Rule 2201 and 4001]
12. Only one of GTEs S-3636-1, '2 or '3 shall be in startup at any one time. [District Rule 2201]
13. Ammonia shall be injected when the selective catalytic reduction system catalyst temperature exceeds 500 degrees F. Permittee shall monitor and record catalyst temperature during periods of startup. [District Rule 2201]
14. During startup or shutdown GTE exhaust emissions shall not exceed any of the following: NOx (as NO2) - 130 lb, VOC - 273 lb or CO - 1235 lb, in any one hour. [CEQA]
15. By two hours after turbine initial firing, GTE exhaust emissions shall not exceed any of the following: NOx (as NO2) - 12.2 ppmv @ 15% O2 or CO - 25 ppmv @ 15% O2. [District Rule 4703]
16. Emission rates from GTE, except during startup and/or shutdown, shall not exceed any of the following: NOx (as NO2) - 17.03 lb/hr and 2.5 ppmvd @ 15% O2, VOC - 2.0 ppmvd @ 15% O2, CO - 24.92 lb/hr and 6 ppmvd @ 15% O2 or ammonia - 10 ppmvd @ 15% O2. NOx (as NO2) emission limit is a one-hour average. Ammonia emission limit is a twenty-four hour rolling average. All other emission limits are three-hour rolling averages. [District Rules 2201, 4001, and 4703]
17. Emission rates from the GTE shall not exceed either of the following: PM10 - 9.0 lb/hr and SOx (as SO2) - 3.495 lb/hr. Emission limits are three-hour rolling averages. [District Rules 2201 and 4001]
18. On any day when a startup or shutdown occurs, emission rates from GTE shall not exceed any of the following: PM10 - 216 lb/day, SOx (as SO2) - 84 lb/day, NOx (as NO2) - 450 lb/day, VOC - 355 lb/day or CO - 2,113 lb/day. [District Rule 2201]
19. Combined annual emissions from GTEs S-3636-1, '2 and '3, calculated on a twelve consecutive month rolling basis, shall not exceed any of the following: PM10 - 224,343 lb/year, SOx (as SO2) - 84,780 lb/year, NOx (as NO2) - 344,484 lb/year, VOC - 227,619 lb/year or CO - 1,220,166 lb/year. [District Rule 2201]
20. Combined annual emissions of all hazardous air pollutants (HAPS) from GTEs S-3636-1, '2 and '3, calculated on a twelve consecutive month rolling basis, shall not exceed 25 tons/year. Combined annual emissions of any single HAP from GTEs S-3636-1, '2 and '3, calculated on a twelve consecutive month rolling basis, shall not exceed 10 tons/year. [District Rule 4002]
21. Each one-hour period shall commence on the hour. Each one-hour period in a three-hour rolling average will commence on the hour. The three-hour average will be compiled from the three most recent one-hour periods. Each one-hour period in a twenty-four-hour average for ammonia slip will commence on the hour. [District Rule 2201]
22. Daily emissions will be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each month in the twelve-consecutive-month rolling average emissions shall commence at the beginning of the first day of the month. The twelve-consecutive-month rolling average emissions to determine compliance with annual emissions limitations shall be compiled from the twelve most recent calendar months. [District Rule 2201]
23. Compliance with ammonia slip limit shall be demonstrated by using the following calculation procedure: ammonia slip ppmv @ 15% O2 = $((a-(bcx/1,000,000)) \times 1,000,000 / b) \times d$, where a = ammonia injection rate(lb/hr)/17(lb/lb. mol), b = dry exhaust gas flow rate (lb/hr)/(29(lb/lb. mol), c = change in measured NOx concentration ppmv at 15% O2 across catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip. Alternatively, permittee may utilize a continuous in-stack ammonia monitor, acceptable to the District, to monitor compliance. At least 60 days prior to using a NH3 CEM, the permittee must submit a monitoring plan for District review and approval [District Rule 4102]
24. Compliance with the short term emission limits (ppmv @ 15% O2 and lb/hr) shall be demonstrated annually by District witnessed in situ sampling of exhaust gases by a qualified independent source test firm at full load conditions as follows - NOx: ppmvd @ 15% O2 and lb/hr, CO: ppmvd @ 15% O2 and lb/hr, VOC: ppmvd @ 15% O2 and lb/hr, PM10: lb/hr, and ammonia: ppmvd @ 15% O2. Sample collection to demonstrate compliance with ammonia emission limit shall be based on three consecutive test runs of thirty minutes each. [District Rule 1081]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

25. Compliance with the startup NO_x, CO, and VOC mass emission limits shall be demonstrated for one of the GTEs (S-3636-1, '2, or '3) at least once every seven years by District witnessed in situ sampling of exhaust gases by a qualified independent source test firm. CEM relative accuracy shall be determined during startup source testing in accordance with methodology approved by the District. If CEM data is not certifiable to determine compliance with NO_x and CO startup emissions limits, then source testing to measure startup NO_x and CO mass emissions rates shall be conducted at least once every 12 months. [District Rule 1081]
26. Based on the initial speciated HAPS and total VOC source test conducted for one of the GTEs (S-3636-1, '2 or '3), Pastoria shall correlate the total HAPS emissions rate and the single highest HAP emission rate to the VOC mass emission determined during the speciated HAPS source test. Annual compliance with the HAPS emissions limit (25 tpy all HAPS or 10 tpy any single HAP) shall be by the combined VOC emissions rates for the GTEs (S-3636-1, '2 and '3) determined during annual compliance source testing and the correlation between VOC emissions and HAP(S). [District Rule 4002]
27. Compliance with natural gas sulfur content limit shall be demonstrated periodically as required by 40 CFR 60 Subpart GG and 40 CFR 75. [District Rules 1081, 2540, and 4001]
28. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. Official test results and field data collected by source tests required by conditions on this permit shall be submitted to the District within 60 days of testing. [District Rule 1081]
29. Source test plans for seven-year source tests shall include a method for measuring the VOC/CO surrogate relationship that will be used to demonstrate compliance with VOC lb/hr, lb/day, and lb/twelve month rolling emission limits. [District Rule 2201]
30. The following test methods shall be used PM10: EPA method 5 (front half and back half), NO_x: EPA Method 7E or 20, CO: EPA method 10 or 10B, O₂: EPA Method 3, 3A, or 20, VOC: EPA method 18 or 25, ammonia: BAAQMD ST-1B, and fuel gas sulfur content: ASTM D3246. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081, 4001, and 4703]
31. The permittee shall notify District of date of initiation of construction no later than 30 days after such date, date of anticipated startup not more than 60 days nor less than 30 days prior to such date, and date of actual startup within 15 days after such date. [District Rule 4001]
32. The permittee shall maintain hourly records of NO_x, CO, and ammonia emission concentrations (ppmv @ 15% O₂), and hourly, daily, and twelve month rolling average records of NO_x and CO emissions. Compliance with the hourly, daily, and twelve month rolling average VOC emission limits shall be demonstrated by the CO CEM data and the VOC/CO relationship determined by annual CO and VOC source tests. [District Rule 2201]
33. The permittee shall maintain records of SO_x lb/hr, lb/day, and lb/twelve month rolling average emission. SO_x emissions shall be based on fuel use records, natural gas sulfur content, and mass balance calculations. [District Rule 2201]
34. Permittee shall maintain the following records for the GTE: occurrence, duration, and type of any startup, shutdown, or malfunction; performance testing; emission measurements; total daily and rolling twelve month average hours of operation; hourly quantity of fuel used and gross three hour average operating load. [District Rules 2201 & 4703]
35. Permittee shall maintain the following records for the continuous emissions monitoring system (CEMS): performance testing, evaluations, calibrations, checks, maintenance, adjustments, and any period during which a CEMS was inoperative. [District Rules 2201 & 4703]
36. Permittee shall provide notification and record keeping as required under 40 CFR, Part 60, Subpart A, 60.7. [District Rule 4001]
37. All records required to be maintained by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rule 2201]
38. Results of continuous emissions monitoring shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3. 3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080]

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

39. The permittee 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 Districts satisfaction that the longer reporting period was necessary. [District Rule 1100]
40. 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]
41. Audits of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and total accuracy testing is performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080]
42. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F . [District Rule 1080]
43. The permittee shall submit a written report to the APCO for each calendar quarter, within 30 days of the end of the quarter, including: time intervals, data and magnitude of excess emissions, nature and cause of excess (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting shall correspond to the averaging period for each respective emission standard; applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred . [District Rule 1080]

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

Facility Name: PASTORIA ENERGY FACILITY, LLC

Location: TEJON RANCH 30 MILES S OF BAKERSFIELD, AND 6.5 MILES E OF GRAPEVINE, RANCHO EL TEJON, CA

S-3636-2-3 : Nov 1 2011 9:06AM - SRANK

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-3636-3-3

EXPIRATION DATE: 02/28/2015

EQUIPMENT DESCRIPTION:

168 MW NOMINALLY RATED GENERAL ELECTRIC 7FA NATURAL GAS FIRED GAS TURBINE ENGINE/ELECTRICAL GENERATOR #3 WITH DRY LOW NOX COMBUSTORS, SELECTIVE CATALYTIC REDUCTION, HRSG #1 AND 90 MW STEAM TURBINE #2

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Combustion turbine and electrical generator lube oil vents shall be equipped with mist eliminators to maintain visible emissions from lube oil vents no greater than 5% opacity, except for three minutes in any hour. [District Rule 2201]
3. Combustion turbine engine(GTE) shall be equipped with continuously recording fuel gas flowmeter. [District Rule 2201]
4. Heat recovery steam generator (HRSG) exhaust duct downstream of the SCR unit shall be equipped with continuously recording emissions monitors (CEM) for NO_x, CO, and O₂. All CEMs shall be dedicated to this unit and shall meet the requirements of 40 CFR Part 60 Appendices B & F (for CO), and 40 CFR Part 75 (for NO_x and O₂), and shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns, provided the CEM(s) pass the relative accuracy requirements for startups and shutdown specified herein. If relative accuracy of CEM(s) cannot be certified during startup conditions, CEM results during startup and shutdown events shall be replaced with startup emission rates obtained during source testing to determine compliance with emission limits in conditions 14, 18 and 19. [District Rule 2201]
5. HRSG exhaust duct shall be equipped with a continuously recording emission monitor upstream of the SCR unit for measuring the NO_x concentration for the purposes of calculating ammonia slip. Permittee shall check, record, and quantify the calibration drift (CD) at two concentration values at least once daily (approximately 24 hours). The calibration shall be adjusted whenever the daily zero or high-level CD exceeds 5%. If either the zero or high-level CD exceeds 5% for five consecutive daily periods, the analyzer shall be deemed out-of-control. If either the zero or high-level CD exceeds 10% during any CD check, analyzer shall be deemed out-of-control. If the analyzer is out-of-control, the permittee shall take appropriate corrective action and then repeat the CD check. [District Rule 2201]
6. Ammonia injection grid shall be equipped with operational ammonia flowmeter and injection pressure indicator. [District Rule 2201]
7. Exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods. [District Rule 1081]
8. Heat recovery steam generator design shall provide space for additional selective catalytic reduction catalyst if required to meet NO_x emission limits. [District Rule 2201]
9. Permittee shall monitor and record exhaust gas temperature at selective catalytic reduction and oxidation catalyst inlets. [District Rule 2201]
10. GTE shall be fired exclusively on natural gas, consisting primarily of methane and ethane, with a sulfur content no greater than 0.75 grains of sulfur compounds (as S) per 100 dry scf of natural gas. [District Rule 2201]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

11. Startup is defined as the period beginning with turbine initial firing until the unit meets the lb/hr and ppmv emission limits in condition 16. Shutdown is defined the period beginning with initiation of turbine shutdown sequence and ending with cessation of firing of the gas turbine engine. Startup and shutdown durations shall not exceed three hours and one hour, respectively, per occurrence. [District Rule 2201 and 4001]
12. Only one of GTEs S-3636-1, '2 or '3 shall be in startup at any one time. [District Rule 2201]
13. Ammonia shall be injected when the selective catalytic reduction system catalyst temperature exceeds 500 degrees F. Permittee shall monitor and record catalyst temperature during periods of startup. [District Rule 2201]
14. During startup or shutdown GTE exhaust emissions shall not exceed any of the following: NOx (as NO2) - 130 lb, VOC - 273 lb or CO - 1235 lb, in any one hour. [CEQA]
15. By two hours after turbine initial firing, GTE exhaust emissions shall not exceed any of the following: NOx (as NO2) - 12.2 ppmv @ 15% O2 or CO - 25 ppmv @ 15% O2. [District Rule 4703]
16. Emission rates from GTE, except during startup and/or shutdown, shall not exceed any of the following: NOx (as NO2) - 17.03 lb/hr and 2.5 ppmvd @ 15% O2, VOC - 2.0 ppmvd @ 15% O2, CO - 24.92 lb/hr and 6 ppmvd @ 15% O2 or ammonia - 10 ppmvd @ 15% O2. NOx (as NO2) emission limit is a one-hour average. Ammonia emission limit is a twenty-four hour rolling average. All other emission limits are three-hour rolling averages. [District Rules 2201, 4001, and 4703]
17. Emission rates from the GTE shall not exceed either of the following: PM10 - 9.0 lb/hr and SOx (as SO2) - 3.495 lb/hr. Emission limits are three-hour rolling averages. [District Rules 2201 and 4001]
18. On any day when a startup or shutdown occurs, emission rates from GTE shall not exceed any of the following: PM10 - 216 lb/day, SOx (as SO2) - 84 lb/day, NOx (as NO2) - 450 lb/day, VOC - 355 lb/day or CO - 2,113 lb/day. [District Rule 2201]
19. Combined annual emissions from GTEs S-3636-1, '2 and '3, calculated on a twelve consecutive month rolling basis, shall not exceed any of the following: PM10 - 224,343 lb/year, SOx (as SO2) - 84,780 lb/year, NOx (as NO2) - 344,484 lb/year, VOC - 227,619 lb/year or CO - 1,220,166 lb/year. [District Rule 2201]
20. Combined annual emissions of all hazardous air pollutants (HAPS) from GTEs S-3636-1, '2 and '3, calculated on a twelve consecutive month rolling basis, shall not exceed 25 tons/year. Combined annual emissions of any single HAP from GTEs S-3636-1, '2 and '3, calculated on a twelve consecutive month rolling basis, shall not exceed 10 tons/year. [District Rule 4002]
21. Each one-hour period shall commence on the hour. Each one-hour period in a three-hour rolling average will commence on the hour. The three-hour average will be compiled from the three most recent one-hour periods. Each one-hour period in a twenty-four-hour average for ammonia slip will commence on the hour. [District Rule 2201]
22. Daily emissions will be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each month in the twelve-consecutive-month rolling average emissions shall commence at the beginning of the first day of the month. The twelve-consecutive-month rolling average emissions to determine compliance with annual emissions limitations shall be compiled from the twelve most recent calendar months. [District Rule 2201]
23. Compliance with ammonia slip limit shall be demonstrated by using the following calculation procedure: ammonia slip ppmv @ 15% O2 = $((a-(bxc/1,000,000)) \times 1,000,000 / b) \times d$, where a = ammonia injection rate(lb/hr)/17(lb/lb. mol), b = dry exhaust gas flow rate (lb/hr)/(29(lb/lb. mol), c = change in measured NOx concentration ppmv at 15% O2 across catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip. Alternatively, permittee may utilize a continuous in-stack ammonia monitor, acceptable to the District, to monitor compliance. At least 60 days prior to using a NH3 CEM, the permittee must submit a monitoring plan for District review and approval [District Rule 4102]
24. Compliance with the short term emission limits (ppmv @ 15% O2 and lb/hr) shall be demonstrated annually by District witnessed in situ sampling of exhaust gases by a qualified independent source test firm at full load conditions as follows - NOx: ppmvd @ 15% O2 and lb/hr, CO: ppmvd @ 15% O2 and lb/hr, VOC: ppmvd @ 15% O2 and lb/hr, PM10: lb/hr, and ammonia: ppmvd @ 15% O2. Sample collection to demonstrate compliance with ammonia emission limit shall be based on three consecutive test runs of thirty minutes each. [District Rule 1081]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

25. Compliance with the startup NO_x, CO, and VOC mass emission limits shall be demonstrated for one of the GTEs (S-3636-1, '2, or '3) at least once every seven years by District witnessed in situ sampling of exhaust gases by a qualified independent source test firm. CEM relative accuracy shall be determined during startup source testing in accordance with methodology approved by the District. If CEM data is not certifiable to determine compliance with NO_x and CO startup emissions limits, then source testing to measure startup NO_x and CO mass emissions rates shall be conducted at least once every 12 months. [District Rule 1081]
26. Based on the initial speciated HAPS and total VOC source test conducted for one of the GTEs (S-3636-1, '2 or '3), Pastoria shall correlate the total HAPS emissions rate and the single highest HAP emission rate to the VOC mass emission determined during the speciated HAPS source test. Annual compliance with the HAPS emissions limit (25 tpy all HAPS or 10 tpy any single HAP) shall be by the combined VOC emissions rates for the GTEs (S-3636-1, '2 and '3) determined during annual compliance source testing and the correlation between VOC emissions and HAP(S). [District Rule 4002]
27. Compliance with natural gas sulfur content limit shall be demonstrated periodically as required by 40 CFR 60 Subpart GG and 40 CFR 75. [District Rules 1081, 2540, and 4001]
28. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. Official test results and field data collected by source tests required by conditions on this permit shall be submitted to the District within 60 days of testing. [District Rule 1081]
29. Source test plans for initial and seven-year source tests shall include a method for measuring the VOC/CO surrogate relationship that will be used to demonstrate compliance with VOC lb/hr, lb/day, and lb/twelve month rolling emission limits. [District Rule 2201]
30. The following test methods shall be used PM10: EPA method 5 (front half and back half), NO_x: EPA Method 7E or 20, CO: EPA method 10 or 10B, O₂: EPA Method 3, 3A, or 20, VOC: EPA method 18 or 25, ammonia: BAAQMD ST-1B, and fuel gas sulfur content: ASTM D3246. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081, 4001, and 4703]
31. The permittee shall notify District of date of initiation of construction no later than 30 days after such date, date of anticipated startup not more than 60 days nor less than 30 days prior to such date, and date of actual startup within 15 days after such date. [District Rule 4001]
32. The permittee shall maintain hourly records of NO_x, CO, and ammonia emission concentrations (ppmv @ 15% O₂), and hourly, daily, and twelve month rolling average records of NO_x and CO emissions. Compliance with the hourly, daily, and twelve month rolling average VOC emission limits shall be demonstrated by the CO CEM data and the VOC/CO relationship determined by annual CO and VOC source tests. [District Rule 2201]
33. The permittee shall maintain records of SO_x lb/hr, lb/day, and lb/twelve month rolling average emission. SO_x emissions shall be based on fuel use records, natural gas sulfur content, and mass balance calculations. [District Rule 2201]
34. Permittee shall maintain the following records for the GTE: occurrence, duration, and type of any startup, shutdown, or malfunction; performance testing; emission measurements; total daily and rolling twelve month average hours of operation; hourly quantity of fuel used and gross three hour average operating load. [District Rules 2201 & 4703]
35. Permittee shall maintain the following records for the continuous emissions monitoring system (CEMS): performance testing, evaluations, calibrations, checks, maintenance, adjustments, and any period during which a CEMS was inoperative. [District Rules 2201 & 4703]
36. Permittee shall provide notification and record keeping as required under 40 CFR, Part 60, Subpart A, 60.7. [District Rule 4001]
37. All records required to be maintained by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rule 2201]
38. Results of continuous emissions monitoring shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3. 3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

39. The permittee 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 Districts satisfaction that the longer reporting period was necessary. [District Rule 1100]
40. 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]
41. Audits of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and total accuracy testing is performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080]
42. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F . [District Rule 1080]
43. The permittee shall submit a written report to the APCO for each calendar quarter, within 30 days of the end of the quarter, including: time intervals, data and magnitude of excess emissions, nature and cause of excess (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting shall correspond to the averaging period for each respective emission standard; applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred . [District Rule 1080]

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-3636-4-3

EXPIRATION DATE: 02/28/2015

EQUIPMENT DESCRIPTION:

FORCED DRAFT COOLING TOWER WITH 8 CELLS AND HIGH EFFICIENCY DRIFT ELIMINATOR

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Permittee shall maintain and make available to the District upon request vendor supplied justification for the correction factor used to correlate blowdown TDS to drift TDS and correct for the amount of drift that stays suspended in the atmosphere. Correction factor is used in the equation below to calculate cooling tower PM10 emissions rate. [District Rule 2201]
3. No hexavalent chromium containing compounds shall be added to cooling tower circulating water. [District Rule 7012]
4. Drift eliminator drift rate shall not exceed 0.0005%. [District Rule 2201]
5. PM10 emission rate shall not exceed 22.1 lb/day. [District Rule 2201]
6. Compliance with the PM10 daily emission limit shall be demonstrated as follows: $PM10 \text{ lb/day} = \text{circulating water recirculation rate} \times \text{total dissolved solids concentration in the blowdown water} \times \text{design drift rate} \times \text{correction factor}$. [District Rule 2201]
7. Compliance with PM10 emission limit shall be determined by blowdown water sample analysis by independent laboratory at least weekly. [District Rule 1081]

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-3636-5-3

EXPIRATION DATE: 02/28/2015

EQUIPMENT DESCRIPTION:

4 CELL FORCED DRAFT COOLING TOWER WITH HIGH EFFICIENCY CELLULAR DRIFT ELIMINATOR

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Permittee shall maintain and make available to the District upon request vendor supplied justification for the correction factor used to correlate blowdown TDS to drift TDS and correct for the amount of drift that stays suspended in the atmosphere. Correction factor is used in the equation below to calculate cooling tower PM10 emissions rate. [District Rule 2201]
3. No hexavalent chromium containing compounds shall be added to cooling tower circulating water. [District Rule 7012]
4. Drift eliminator drift rate shall not exceed 0.0005%. [District Rule 2201]
5. PM10 emission rate shall not exceed 11.1 lb/day. [District Rule 2201]
6. Compliance with the PM10 daily emission limit shall be demonstrated as follows: $PM10 \text{ lb/day} = \text{circulating water recirculation rate} * \text{total dissolved solids concentration in the blowdown water} * \text{design drift rate} * \text{correction factor}$. [District Rule 2201]
7. Compliance with PM10 emission limit shall be determined by blowdown water sample analysis by independent laboratory at least weekly. [District Rule 1081]

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-3636-7-3

EXPIRATION DATE: 02/28/2015

EQUIPMENT DESCRIPTION:

814 BHP CATERPILLAR MODEL G3512 SC TA NATURAL GAS-FIRED EMERGENCY STANDBY IC ENGINE
POWERING AN ELECTRICAL GENERATOR WITH THREE-WAY EXHAUST CATALYST

PERMIT UNIT REQUIREMENTS

1. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201]
2. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702]
3. No air contaminant shall be released into the atmosphere which causes a public nuisance. [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]
5. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
6. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
7. The sulfur content of the natural gas fuel shall not exceed 0.75 grain/100 scf. [District Rule 2201]
8. Emissions from this IC engine shall not exceed any of the following limits: 1.84 lb NO_x/hr, 3.62 lb CO/hr, 0.11 lb PM₁₀/hr or 0.23 lb VOC/hr. [District Rules 2201]
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]
10. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rule 4702]
11. 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]
12. 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]

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

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]
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]

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-3636-12-0

EXPIRATION DATE: 02/28/2015

EQUIPMENT DESCRIPTION:

360 BHP JOHN DEERE COMPANY MODEL 6081HF001 DIESEL-FIRED EMERGENCY IC ENGINE (SN PG6081H156175X) POWERING A FIREWATER PUMP

PERMIT UNIT REQUIREMENTS

1. 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]
2. 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]
3. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
4. This engine shall be operated using only CARB certified diesel fuel. [17 CCR 93115]
5. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, during emergency situations and fire fighting. For testing purposes, the engine shall only be operated the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 - "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems", 1998 edition. Total hours of operation for all maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rule 4702 and 17 CCR 93115]
6. 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]
7. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
8. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
9. Emissions from this IC engine shall not exceed any of the following limits: 5.6 g-NOx/bhp-hr, 0.29 g-CO/bhp-hr, or 0.11 g-VOC/bhp-hr. [District Rule 2201 and 13 CCR 2423 and 17 CCR 93115]
10. Emissions from this IC engine shall not exceed 0.07 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]
11. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, and the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.). For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702 and 17 CCR 93115]
12. The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [17 CCR 93115]

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

13. If this engine is located on the grounds of a K-12 school, or if this engine is located within 500 feet of the property boundary of a K-12 school, the engine shall not be operated for non-emergency purposes, including maintenance and testing, between 7:30 a.m. and 3:30 p.m. on days when school is in session. [17 CCR 93115]
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]

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

Facility Name: PASTORIA ENERGY FACILITY, LLC

Location: TEJON RANCH 30 MILES S OF BAKERSFIELD, AND 6.5 MILES E OF GRAPEVINE, RANCHO EL TEJON, CA

S-3636-12-0; Nov 1 2011 9:08AM - SRA/TK

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-3636-13-0

EXPIRATION DATE: 02/28/2015

EQUIPMENT DESCRIPTION:

CONFINED ABRASIVE BLASTING OPERATION WITH A 50 LB ECONOLINE ABRASIVE PRODUCTS RA 60 X 48 CB
BLASTING UNIT SERVED BY A ECONOLINE ABRASIVE PRODUCTS RA 400-60 DUST COLLECTOR

PERMIT UNIT REQUIREMENTS

1. The blasting operations shall be carried out in a manner to prevent any nuisances. [District Rule 4102]
2. All abrasive blasting shall be conducted in accordance with California Code of Regulations Title 17, Subchapter 6, Sections 92000 through 92540. [92000 through 92540 CCR]
3. A used certified abrasive shall not be considered certified for reuse unless the abrasive conforms to its original cut-point fineness. [92530 CCR]
4. Abrasive blasting operations conducted within a permanent building shall not discharge air contaminants into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark or darker than Ringelmann 1 or equivalent to 20% opacity. [92200 CCR]

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

Facility Name: PASTORIA ENERGY FACILITY, LLC

Location: TEJON RANCH 30 MILES S OF BAKERSFIELD, AND 6.5 MILES E OF GRAPEVINE, RANCHO EL TEJON, CA

S-3636-13-0: Nov 9 2011 2:16PM - SRANK

ATTACHMENT D

Current District Rule SIP Comparison

Stringency Comparison of District Rule 4601 Non-SIP Version (12/17/09) to Current SIP Version (10/31/01)

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
2.0 Applicability	This rule is applicable to any person who supplies, sells, offers for sale, applies, or solicits the application of any architectural coating, or who manufactures any architectural coating for use within the District.	This rule is applicable to any person who supplies, sells, offers for sale, applies, or solicits the application of any architectural coating, or who manufactures, blends or repackages any architectural coating for use within the District.	No change in the applicability, therefore, non-SIP version of rule is as stringent as SIP version.
4.0 Exemptions	<p>The provisions of this rule shall not apply to:</p> <p>4.1 Any architectural coating that is sold or manufactured for use outside of the District or for shipment to other manufacturers for reformulation or repackaging.</p> <p>4.2 Any architectural coating that is sold in a containers with a volume of one liter (1.057 quarts) or less.</p> <p>4.3 Any aerosol coating product.</p>	<p>4.1 The provisions of this rule shall not apply to:</p> <p>4.1.1 Any architectural coating that is supplied, sold, offered for sale, or manufactured for use outside of the District or for shipment to other manufacturers for reformulation or repackaging.</p> <p>4.1.2 Any aerosol coating product.</p> <p>4.2 With the exception of Section 6.2, the provisions of this rule shall not apply to any architectural coating that is sold in a container with a volume of one liter (1.057 quarts) or less.</p>	The only change is to require reporting requirements as discussed in Section 6.2 of the non-SIP approved version. Therefore, the non-SIP version of the rule is more stringent than the SIP version of the rule.
5.0 Requirements	Note: Section 5.0 requirements refer to Table of Standards, Table of Standards 1, and Table of Standards 2. These tables are included as Attachment X.		
	<p>5.1 VOC Content Limits: Except as provided in Sections 5.2, 5.3, 5.8 and 8.0, no person shall;</p> <p>5.1.1 manufacture, blend, or repackage for sale within the District;</p> <p>5.1.2 supply, sell, or offer for sale within the district;</p> <p>5.1.3 solicit for application or apply within the District any architectural coating with a VOC content in excess of the corresponding limit specified in the Table of Standards, after the specified effective date in the Table of Standards.</p>	<p>5.1 VOC Content Limits: Except as provided in Sections 5.2 and 5.3, no person shall: manufacture, blend, or repackage for use within the District; or supply, sell, or offer for sale within the District; or solicit for application or apply within the District any architectural coating with a VOC content in excess of the corresponding limit specified in the Table of Standards 1 or the Table of Standards 2, after the specified effective date in the Table of Standards 1 or the Table of Standards 2. Limits are expressed as VOC Regulatory, thinned to the manufacturer's maximum thinning recommendation, excluding any colorant added to tint bases.</p>	Sections 5.8 and 8.0 of the SIP version are not included in the non-SIP version. As discussed in corresponding sections the non-SIP version is more stringent. The Table of Standards and Table of Standards 1 have the same VOC limits. Table of Standard 2 is more stringent as discussed below. Therefore, the non-SIP version of the rule is more stringent than the SIP version of the rule.
	<p>5.2 Most Restrictive VOC Limit: If anywhere on the container of any architectural coating, or any label or sticker affixed to the container, or in any sales, advertising, or technical literature supplied by a manufacturer or anyone acting on their behalf, any representation is made that indicates that the coating meets the definition of or is recommended for use for more than one of the coating categories listed in the Table of Standards, then the most restrictive VOC content limit shall apply. This provision does not apply to the following coating categories:</p> <p>5.2.1 Lacquer coatings (including lacquer sanding sealers)</p> <p>5.2.2 Metallic pigmented coatings</p> <p>5.2.3 Shellacs</p> <p>5.2.4 Fire-retardant coatings</p> <p>5.2.5 Pretreatment wash primers</p> <p>5.2.6 Industrial maintenance coatings</p> <p>5.2.7 Low-solids coatings</p>	<p>5.2 Most Restrictive VOC Limit: If a coating meets the definition in Section 3.0 for one or more specialty coating categories listed in the Table of Standards 1 or the Table of Standards 2, then that coating is not required to meet the VOC limits for Flat, Nonflat, or Nonflat – High Gloss coatings, but is required to meet the VOC limit for the applicable specialty coating listed in the Table of Standards 1 or the Table of Standards 2.</p> <p>5.2.1 Effective until December 31, 2010, with the exception of the specialty coating categories specified in Section 5.2.3.1 through 5.2.3.15, if a coating is recommended for use in more than one of the specialty coating categories listed in the Table of Standards 1, the most restrictive (or lowest) VOC content limit shall apply.</p> <p>5.2.2 Effective on and after January 1, 2011, with the exception of the</p>	The VOC limit of the non-SIP version is at least as stringent as the SIP version. Therefore, the non-SIP version of the rule is more stringent than the SIP version of the rule.

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	5.2.8 Wood preservatives 5.2.9 High temperature coatings 5.2.10 Temperature-indicator safety coatings 5.2.11 Antenna coatings 5.2.12 Antifouling coatings 5.2.13 Flow coatings 5.2.14 Bituminous roof primers 5.2.15 Specialty primers, sealers and undercoaters	specialty coating categories specified in Sections 5.2.3.2, 5.2.3.3, 5.2.3.5 through 5.2.3.9, and 5.2.3.14 through 5.2.3.18, if a coating is recommended for use in more than one of the specialty coating categories listed in the Table of Standards 2, the most restrictive (or lowest) VOC content limit shall apply. 5.2.3 This requirement applies to: usage recommendations that appear anywhere on the coating container, anywhere on any label or sticker affixed to the container, or in any sales, advertising, or technical literature supplied by a manufacturer or anyone acting on their behalf. 5.2.3.1 Lacquer coatings (including lacquer sanding sealers) 5.2.3.2 Metallic pigmented coatings 5.2.3.3 Shellacs 5.2.3.4 Fire-retardant coatings 5.2.3.5 Pretreatment wash primers 5.2.3.6 Industrial maintenance coatings 5.2.3.7 Low-solids coatings 5.2.3.8 Wood preservatives 5.2.3.9 High temperature coatings 5.2.3.10 Temperature-indicator safety coatings 5.2.3.11 Antenna coatings 5.2.3.12 Antifouling coatings 5.2.3.13 Flow coatings 5.2.3.14 Bituminous roof primers 5.2.3.15 Specialty primers, sealers and undercoaters 5.2.3.16 Aluminum roof coatings 5.2.3.17 Zinc-rich primers 5.2.3.18 Wood Coatings	
	5.3 Sell-Through of Coatings: 5.3.1 A coating manufactured prior to the January 1, 2003 or January 1, 2004 effective date specified for that coating in the Table of Standards may be sold, supplied, or offered for sale for up to three years after the specified effective date. In addition, a coating manufactured before the effective date specified for that coating in the Table of Standards may be applied at any time, both before and after the specified effective date, so long as the coating complied with the standards in effect at the time the coating was manufactured. This Section 5.3 does not apply to any coating that does not display the date or date-code required by Section 6.1.1. 5.3.2 A coating included in an approved Averaging Program that does not comply with the specified limit in the	5.3 Sell-Through of Coatings: A coating manufactured prior to the effective date specified for that coating in the Table of Standards 1 or the Table of Standards 2, and that complied with the standards in effect at the time the coating was manufactured, may be sold, supplied, or offered for sale for up to three years after the specified effective date. In addition, a coating manufactured before the effective date specified for that coating in the Table of Standards 1 or the Table of Standards 2 may be applied at any time, both before and after the specified effective date, so long as the coating complied with the standards in effect at the time the coating was manufactured. This Section 5.3 does not apply to any coating that does not display the date or date-code required by Section 6.1.1.	The VOC limit of the non-SIP version is at least as stringent as the SIP version. Section 5.3.2 was removed it is no longer applicable in the SIP version. Therefore, the non-SIP version of the rule is more stringent than the SIP version of the rule.

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	<p>Table of Standards may be sold, supplied, or offered for sale for up to three years after the end of the compliance period specified in the approved Averaging Program. In addition, such a coating may be applied at any time, both during and after the compliance period. This Section 5.3.2 does not apply to any coating that does not display on the container either the statement: "This product is subject to architectural coatings averaging provisions in California" or a substitute symbol specified by the Executive Officer of the California Air Resources Board (ARB). This Section 5.3.2 shall remain in effect until January 1, 2008.</p>		
	<p>5.4 Painting Practices: All architectural coating containers used to apply the contents therein to a surface directly from the container by pouring, siphoning, brushing, rolling, padding, ragging or other means, shall be closed when not in use. These architectural coating containers include, but are not limited to, drums, buckets, cans, pails, trays or other application containers. Containers of any VOC containing materials used for thinning and cleanup shall also be closed when not in use.</p>	<p>5.4 Painting Practices: All architectural coating containers used to apply the contents therein to a surface directly from the container by pouring, siphoning, brushing, rolling, padding, ragging or other means, shall be closed when not in use. These architectural coating containers include, but are not limited to, drums, buckets, cans, pails, trays or other application containers. Containers of any VOC-containing materials used for thinning and cleanup shall also be closed when not in use.</p>	<p>No change in the requirements, therefore, non-SIP version of rule is as stringent as SIP version.</p>
	<p>5.5 Thinning: No person who applies or solicits the application of any architectural coating shall apply a coating that is thinned to exceed the applicable VOC limit specified in the Table of Standards.</p>	<p>5.5 Thinning: No person who applies or solicits the application of any architectural coating shall apply a coating that is thinned to exceed the applicable VOC limit specified in the Table of Standards 1 or the Table of Standards 2.</p>	<p>The VOC limit of the non-SIP version is at least as stringent as the SIP version. Therefore, the non-SIP version of the rule is more stringent than the SIP version of the rule.</p>
	<p>5.6 Rust Preventative Coatings: Effective January 1, 2004, no person shall apply or solicit the application of any rust preventative coating for industrial use, unless such a rust preventative coating complies with the industrial maintenance coating VOC limit specified in the Table of Standards.</p>	<p>5.6 Rust Preventative Coatings: Effective through December 31, 2010, no person shall apply or solicit the application of any rust preventative coating for industrial use, unless such a rust preventative coating complies with the industrial maintenance coating VOC limit specified in the Table of Standards 1.</p>	<p>The VOC limit of the non-SIP version is at least as stringent as the SIP version. Therefore, the non-SIP version of the rule is more stringent than the SIP version of the rule.</p>
	<p>5.7 Coatings Not Listed in the Table of Standards: For any coating that does not meet any of the definitions for the specialty coatings categories listed in the Table of Standards, the VOC content limit shall be determined by classifying the coating as a flat coating or a nonflat coating, based on its gloss, as defined in Sections 3.21, 3.36 and 3.37 and the corresponding flat or nonflat VOC limit shall apply.</p>	<p>5.7 Coatings Not Listed in the Table of Standards 1 or the Table of Standards 2: For any coating that does not meet any of the definitions for the specialty coatings categories listed in the Table of Standards 1 or the Table of Standards 2, the VOC content limit shall be determined by classifying the coating as a Flat, Nonflat, or Nonflat – High Gloss coating, based on its gloss, and the corresponding Flat, Nonflat, or Nonflat – High Gloss VOC limit in the Table of Standards 1 or the Table of Standards 2 shall apply.</p>	<p>The VOC limit of the non-SIP version is at least as stringent as the SIP version. Therefore, the non-SIP version of the rule is more stringent than the SIP version of the rule.</p>
	<p>5.8 Lacquers: Notwithstanding the provisions of Section 3.1, a person or facility may add up to 10 percent by volume of VOC to a lacquer to avoid blushing of the finish during days with relative humidity greater</p>	<p>---</p>	<p>This section has been removed. The operation is required to meet the lacquer VOC limit regardless of</p>

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	than 70 percent and temperature below 65°F, at the time of application, provided that the coating contains acetone and no more than 550 grams of VOC per liter of coating, less water and exempt compounds, prior to the addition of VOC.		temperature and humidity. Therefore, non-SIP version of rule is as stringent as SIP version
	5.9 Averaging Compliance Option: On or after January 1, 2003, in lieu of compliance with the specified limits in The Table of Standards for floor coatings; industrial maintenance coatings; primers, sealers, and undercoaters; quick-dry primers, sealers, and undercoaters; quick-dry enamels; roof coatings; bituminous roof coatings; rust preventative coatings; stains; waterproofing sealers, as well as flats and non-flats (excluding recycled coatings), manufacturers may average designated coatings such that their actual cumulative emissions from the averaged coatings are less than or equal to the cumulative emissions that would have been allowed under those limits over a compliance period not to exceed one year. Such manufacturers must also comply with the averaging provisions contained in Section 8.0, as well as maintain and make available for inspection records for at least three years after the end of the compliance period. This Section 5.9 and Section 8.0 shall cease to be effective on January 1, 2005, after which averaging will no longer be allowed.	---	This section is removed from the non-SIP version, it is no longer applicable. Therefore, non-SIP version of rule is as stringent as SIP version.
	---	5.8 Prior to January 1, 2011, any coating that meets a definition in Section 3.0 for a coating category listed in the Table of Standards 2 and complies with the applicable VOC limit in the Table of Standards 2 and with Sections 5.2 and 6.1 (including those provision of Section 6.1 otherwise effective on January 1, 2011) shall be considered in compliance with this rule.	Table of Standards 2 is more stringent than the VOC limits of Table of Standards in the SIP-Approved version. Therefore, non-SIP version of rule is as stringent as SIP version.
	Table of Standards (See Attachment X for Table)	Table of Standards 1 (Effective through 12/31/10) (See Attachment X for Table)	The non-SIP rule requirements are the same as the Table of Standards in the SIP approved rule, except Table of Standards 1 expires at which time Table of Standards 2 is in effect. As discussed below these standards are more stringent. Therefore, non-SIP version of rule is as stringent as SIP version.
		Table of Standards 2 (Effective on and after 1/1/11) (See Attachment X for Table)	The requirements of Table of Standards 2 are more stringent than the Table of Standards in the SIP rule. Therefore, non-SIP version of rule is as stringent as SIP version.
6.0 Administrative Requirements	6.1 Labeling Requirements: Each manufacturer of any architectural coating subject to this rule shall display the information listed in Sections	6.1 Labeling Requirements: Each manufacturer of any architectural coating subject to this rule shall display the	The non-SIP approved rule contain sections listed in the SIP rule plus

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	<p>6.1.1 through 6.1.9 on the coating container (or label) in which the coating is sold or distributed.</p> <p>6.1.1 Date Code: The date the coating was manufactured, or a date code representing the date, shall be indicated on the label, lid or bottom of the container. If the manufacturer uses a date code for any coating, the manufacturer shall file an explanation of each code with the Executive Officer of the ARB.</p> <p>6.1.2 Thinning Recommendations: A statement of the manufacturer's recommendation regarding thinning of the coating shall be indicated on the label or lid of the container. This requirement does not apply to the thinning of architectural coatings with water. If thinning of the coating prior to use is not necessary, the recommendation must specify that the coating is to be applied without thinning.</p> <p>6.1.3 VOC Content: Each container of any coating subject to this rule shall display either the maximum or actual VOC content of the coating, as supplied, including the maximum thinning as recommended by the manufacturer. VOC content shall be displayed in grams of VOC per liter of coating. VOC content displayed shall be calculated using product formulation data, or shall be determined using the test methods in Section</p> <p>6.3.1. The equations in Sections 3.25 or 3.26, as appropriate, shall be used to calculate VOC content.</p> <p>6.1.4 Industrial Maintenance Coatings: In addition to the information specified in Sections 6.1.1, 6.1.2 and 6.1.3, each manufacturer of any industrial maintenance coating subject to this rule shall display on the label or lid of the container in which the coating is sold or distributed one or more of the following descriptions listed in Section 6.1.4.1 through 6.1.4.3.</p> <p>6.1.4.1 "For industrial use only"</p> <p>6.1.4.2 "For professional use only"</p> <p>6.1.4.3 "Not for residential use" or "Not intended for residential use"</p> <p>6.1.5 Clear Brushing Lacquers: Effective January 1, 2003, the labels of all clear brushing lacquers shall prominently display the statements "For brush application only," and "This product must not be thinned or sprayed."</p> <p>6.1.6 Rust Preventative Coatings: Effective January 1, 2003, the labels of all rust preventative coatings shall prominently display the statement "For Metal Substrates Only"</p> <p>6.1.7 Specialty Primers, Sealers and Undercoaters: Effective January 1, 2003, the labels of all specialty primers, sealers and undercoaters shall prominently</p>	<p>information listed in Sections 6.1.1 through 6.1.14 on the coating container (or label) in which the coating is sold or distributed.</p> <p>6.1.1 Date Code: The date the coating was manufactured, or a date code representing the date, shall be indicated on the label, lid or bottom of the container. If the manufacturer uses a date code for any coating, the manufacturer shall file an explanation of each code with the Executive Officer of the ARB.</p> <p>6.1.2 Thinning Recommendations: A statement of the manufacturer's recommendation regarding thinning of the coating shall be indicated on the label or lid of the container. This requirement does not apply to the thinning of architectural coatings with water. If thinning of the coating prior to use is not necessary, the recommendation must specify that the coating is to be applied without thinning.</p> <p>6.1.3 VOC Content: Each container of any coating subject to this rule shall display one of the following values, in grams of VOC per liter of coating:</p> <p>6.1.3.1 Maximum VOC Content, as determined from all potential product formulations; or</p> <p>6.1.3.2 VOC Content, as determined from actual formulation data; or</p> <p>6.1.3.3 VOC Content, as determined using the test methods in Section 6.3.2.</p> <p>If the manufacturer does not recommend thinning, the container must display the VOC Content, as supplied. If the manufacturer recommends thinning, the container must display the VOC Content, including the maximum amount of thinning solvent recommended by the manufacturer. If the coating is a multicomponent product, the container must display the VOC content as mixed or catalyzed. If the coating contains silanes, siloxanes, or other ingredients that generate ethanol or other VOCs during the curing process, the VOC content must include the VOCs emitted during curing.</p> <p>6.1.4 Faux Finishing Coatings: Effective January 1, 2011, the labels of all clear topcoat Faux Finishing coatings shall prominently display the statement "This product can only be sold or used as part of a Faux Finishing coating system".</p> <p>6.1.5 Industrial Maintenance Coatings: Each manufacturer of any industrial maintenance coating subject to this rule shall display on the label or lid of</p>	<p>additional requirements not found in the SIP version. Therefore, non-SIP version of rule is as stringent as SIP version.</p>

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	<p>display one or more of the descriptions listed in Section 6.1.7.1 through 6.1.7.5.</p> <p>6.1.7.1 For blocking stains.</p> <p>6.1.7.2 For fire-damaged substrates.</p> <p>6.1.7.3 For smoke-damaged substrates.</p> <p>6.1.7.4 For water-damaged substrates.</p> <p>6.1.7.5 For excessively chalky substrates.</p> <p>6.1.8 Quick Dry Enamels: Effective January 1, 2003, the labels of all quick dry enamels shall prominently display the words "Quick Dry" and the dry hard time.</p> <p>6.1.9 Non-flat – High Gloss Coatings: Effective January 1, 2003, the labels of all non-flat – high gloss coatings shall prominently display the words "High Gloss".</p>	<p>the container in which the coating is sold or distributed one or more of the following descriptions listed in Section 6.1.5.1 through 6.1.5.3.</p> <p>6.1.5.1 "For industrial use only"</p> <p>6.1.5.2 "For professional use only"</p> <p>6.1.5.3 "Not for residential use" or "Not intended for residential use"</p> <p>6.1.6 Clear Brushing Lacquers: The labels of all clear brushing lacquers shall prominently display the statements "For brush application only," and "This product must not be thinned or sprayed." (Category deleted effective January 1, 2011.)</p> <p>6.1.7 Rust Preventative Coatings: The labels of all rust preventative coatings shall prominently display the statement "For Metal Substrates Only".</p> <p>6.1.8 Specialty Primers, Sealers and Undercoaters: Effective until December 31, 2010, the labels of all specialty primers, sealers and undercoaters shall prominently display one or more of the descriptions listed in Section 6.1.8.1 through 6.1.8.5. Effective on and after January 1, 2011, the labels of all specialty primers, sealers, and undercoaters shall prominently display one or more of the descriptions listed in Sections 6.1.8.1 through 6.1.8.3. On and after January 1, 2011, Sections 6.1.8.4 and 6.1.8.5 will be no longer effective.</p> <p>6.1.8.1 For fire-damaged substrates.</p> <p>6.1.8.2 For smoke-damaged substrates.</p> <p>6.1.8.3 For water-damaged substrates.</p> <p>6.1.8.4 For excessively chalky substrates.</p> <p>6.1.8.5 For blocking stains.</p> <p>6.1.9 Quick Dry Enamels: The labels of all quick dry enamels shall prominently display the words "Quick Dry" and the dry hard time. (Category deleted effective January 1, 2011.)</p> <p>6.1.10 Reactive Penetrating Sealers: Effective January 1, 2011, the labels of all Reactive Penetrating Sealers shall prominently display the statement "Reactive Penetrating Sealer."</p> <p>6.1.11 Stone Consolidants: Effective January 1, 2011, the labels of all Stone Consolidants shall prominently display the statement "Stone Consolidant - For Professional Use Only."</p> <p>6.1.12 Nonflat– High Gloss Coatings: The labels of all Nonflat – high gloss coatings shall prominently display the words "High Gloss."</p>	

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
		<p>6.1.13 Wood Coatings: Effective January 1, 2011, the labels of all Wood Coatings shall prominently display the statement "For Wood Substrates Only."</p> <p>6.1.14 Zinc Rich Primers: Effective January 1, 2011, the labels of all Zinc Rich Primers shall prominently display one or more of the following descriptions listed in Section 6.1.14.1 through 6.1.14.3.</p> <p>6.1.14.1 "For industrial use only"</p> <p>6.1.14.2 "For professional use only"</p> <p>6.1.14.3 "Not for residential use" or "Not intended for residential use"</p>	
	<p>6.2 Reporting Requirements</p> <p>6.2.1 Clear Brushing Lacquers: Each manufacturer of clear brushing lacquers shall, on or before April 1 of each calendar year beginning in the year 2004, submit an annual report to the Executive Officer of the ARB. The report shall specify the number of gallons of clear brushing lacquers sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales.</p> <p>6.2.2 Rust Preventative Coatings: Each manufacturer of rust preventative coatings shall, on or before April 1 of each calendar year beginning in the year 2004, submit an annual report to the Executive Officer of the ARB. The report shall specify the number of gallons of rust preventative coatings sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales.</p> <p>6.2.3 Specialty Primers, Sealers and Undercoaters: Each manufacturer of specialty primers, sealers and undercoaters shall, on or before April 1 of each calendar year beginning in the year 2004, submit an annual report to the Executive Officer of the ARB. The report shall specify the number of gallons of specialty primers, sealers and undercoaters sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales.</p> <p>6.2.4 Toxic Exempt Compounds: For each architectural coating that contains perchloroethylene or methylene chloride, the manufacturer shall, on or before April 1 of each calendar year beginning in the year 2004, submit an annual report to the Executive Officer of the ARB the following information for products sold in the State during the preceding year:</p> <p>6.2.4.1 the product brand name and a copy of the product label with legible usage instructions;</p>	<p>6.2 Reporting Requirements</p> <p>The reporting requirements specified in Sections 6.2.1 through 6.2.6 shall apply until December 31, 2010.</p> <p>6.2.1 Clear Brushing Lacquers: Each manufacturer of clear brushing lacquers shall, on or before April 1 of each calendar year beginning in the year 2004, submit an annual report to the Executive Officer of the ARB. The report shall specify the number of gallons of clear brushing lacquers sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales.</p> <p>6.2.2 Rust Preventative Coatings: Each manufacturer of rust preventative coatings shall, on or before April 1 of each calendar year beginning in the year 2004, submit an annual report to the Executive Officer of the ARB. The report shall specify the number of gallons of rust preventative coatings sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales.</p> <p>6.2.3 Specialty Primers, Sealers and Undercoaters: Each manufacturer of specialty primers, sealers and undercoaters shall, on or before April 1 of each calendar year beginning in the year 2004, submit an annual report to the Executive Officer of the ARB. The report shall specify the number of gallons of specialty primers, sealers and undercoaters sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales.</p> <p>6.2.4 Toxic Exempt Compounds: For each architectural coating that contains perchloroethylene or methylene chloride, the manufacturer shall, on or before April 1 of each calendar year beginning in the year 2004, submit an</p>	<p>Until December 31, 2010 both versions of the rule have the same reporting requirements. After that date the non-SIP approved rule includes very specific information to be kept and is required for all architectural coatings. Therefore, non-SIP version of rule is as stringent as SIP version.</p>

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	<p>6.2.4.2 the product category listed in the Table of Standards to which the coating belongs;</p> <p>6.2.4.3 the total sales in California during the calendar year to the nearest gallon;</p> <p>6.2.4.4 the volume percent, to the nearest 0.10 percent, of perchloroethylene and methylene chloride in the coating.</p> <p>6.2.5 Recycled Coatings: Manufacturers of recycled coatings must submit a letter to the Executive Officer of the ARB certifying their status as a Recycled Paint Manufacturer. The manufacturer shall, on or before April 1 of each calendar year beginning with the year 2004, submit an annual report to the Executive Officer of the ARB. The report shall include, for all recycled coatings, the total number of gallons distributed in the State during the preceding year, and shall describe the method used by the manufacturer to calculate State distribution.</p> <p>6.2.6 Bituminous Coatings: Each manufacturer of bituminous roof coatings or bituminous roof primers shall, on or before April 1 of each calendar year beginning with the year 2004, submit an annual report to the Executive Officer of ARB. The report shall specify the number of gallons of bituminous roof coatings or bituminous roof primers sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales.</p>	<p>annual report to the Executive Officer of the ARB the following information for products sold in the State during the preceding year:</p> <p>6.2.4.1 the product brand name and a copy of the product label with legible usage instructions;</p> <p>6.2.4.2 the product category listed in the Table of Standards 1 or the Table of Standards 2 to which the coating belongs;</p> <p>6.2.4.3 the total sales in California during the calendar year to the nearest gallon;</p> <p>6.2.4.4 the volume percent, to the nearest 0.10 percent, of perchloroethylene and methylene chloride in the coating.</p> <p>6.2.5 Recycled Coatings: Manufacturers of recycled coatings must submit a letter to the Executive Officer of the ARB certifying their status as a Recycled Paint Manufacturer. The manufacturer shall, on or before April 1 of each calendar year beginning with the year 2004, submit an annual report to the Executive Officer of the ARB. The report shall include, for all recycled coatings, the total number of gallons distributed in the State during the preceding year, and shall describe the method used by the manufacturer to calculate State distribution.</p> <p>6.2.6 Bituminous Coatings: Each manufacturer of bituminous roof coatings or bituminous roof primers shall, on or before April 1 of each calendar year beginning with the year 2004, submit an annual report to the Executive Officer of ARB. The report shall specify the number of gallons of bituminous roof coatings or bituminous roof primers sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate state sales.</p> <p>6.2.7 Effective on and after January 1, 2011, Sales Data: All sales data listed in Sections 6.2.7.1 to 6.2.7.14 shall be maintained on-site by the responsible official for a minimum of three years. A responsible official from each manufacturer shall upon request of the Executive Officer of the ARB, or his or her delegate, provide data concerning the distribution and sales of architectural coatings. Sales data submitted by the responsible official to the Executive Officer of the ARB may be claimed as confidential, and such information shall be handled in accordance with the procedures specified in Title 17,</p>	

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
		<p>California Code of Regulations Sections 91000-91022. The responsible official shall within 180 days provide information, including, but not limited to the data listed in Sections 6.2.7.1 through 6.2.7.14:</p> <p>6.2.7.1 the name and mailing address of the manufacturer;</p> <p>6.2.7.2 the name, address and telephone number of a contact person;</p> <p>6.2.7.3 the name of the coating product as it appears on the label and the applicable coating category;</p> <p>6.2.7.4 whether the product is marketed for interior or exterior use or both;</p> <p>6.2.7.5 the number of gallons sold in California in containers greater than one liter (1.057 quart) and equal to or less than one liter (1.057 quart);</p> <p>6.2.7.6 the VOC Actual content and VOC Regulatory content in grams per liter. If thinning is recommended, list the VOC Actual content and VOC Regulatory content after maximum recommended thinning. If containers less than one liter have a different VOC content than containers greater than one liter, list separately. If the coating is a multi-component product, provide the VOC content as mixed or catalyzed;</p> <p>6.2.7.7 the names and CAS numbers of the VOC constituents in the product;</p> <p>6.2.7.8 the names and CAS numbers of any compounds in the product specifically exempted from the VOC definition;</p> <p>6.2.7.9 whether the product is marketed as solvent-borne, waterborne, or 100% solids;</p> <p>6.2.7.10 description of resin or binder in the product;</p> <p>6.2.7.11 whether the coating is a single-component or multi-component product;</p> <p>6.2.7.12 the density of the product in pounds per gallon;</p> <p>6.2.7.13 the percent by weight of: solids, all volatile materials, water, and any compounds in the product specifically exempted from the VOC definition; and</p> <p>6.2.7.14 the percent by volume of: solids, water, and any compounds in the product specifically exempted from the VOC definition.</p>	

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	<p>6.3 Test Methods</p> <p>6.3.1 VOC Content of Coatings: To determine the physical properties of a coating in order to perform the calculations in Section 3.26 and 3.27, the reference method for VOC content is U.S. EPA Method 24, except as provided in Sections 6.3.2 and 6.3.15. An alternative method to determine the VOC content of coatings is SCAQMD Method 304-91 (Revised February 1996), incorporated by reference in Section 6.3.14. The exempt compounds content shall be determined by SCAQMD Method 303-91 (Revised August 1996), incorporated by reference in Section 6.3.12. To determine the VOC content of a coating, the manufacturer may use U.S. EPA Method 24, or an alternative method as provided in Section 6.3.2, formulation data, or any other reasonable means for predicting that the coating has been formulated as intended (e.g., quality assurance checks, recordkeeping). However, if there are any inconsistencies between the results of a Method 24 test and any other means for determining VOC content, the Method 24 test results will govern, except when an alternative method is approved as specified in Section 6.3.2. The District Air Pollution Control Officer (APCO) may require the manufacturer to conduct a Method 24 analysis.</p> <p>6.3.2 Alternative Test Methods: Other test methods demonstrated to provide results that are acceptable for purposes of determining compliance with Section 6.3.1, after review and approved in writing by the staffs of the District, the ARB and the U.S. EPA, may also be used. 6.3.3 Methacrylate Traffic Marking Coatings: Analysis of methacrylate multicomponent coatings used as traffic marking coatings shall be conducted according to a modification of U.S. EPA Method 24 (40 CFR 59, subpart D, Appendix A), incorporated by reference in Section 6.3.15. This method has not been approved for methacrylate multicomponent coatings used for other purposes than as traffic marking coatings or for other classes of multicomponent coatings.</p> <p>6.3.4 Flame Spread Index: The flame spread index of a fire-retardant coating shall be determined by ASTM Designation E 84-99, "Standard Test Method for Surface Burning Characteristics of Building Materials"(see Section 3, Fire-Retardant Coating).</p> <p>6.3.5 Fire Resistance Rating: The fire</p>	<p>6.3 Test Methods</p> <p>The test methods listed below shall be used to demonstrate compliance with this rule. Alternate equivalent test methods may be used provided the test methods have been approved by the APCO and EPA.</p> <p>6.3.1 Calculation of VOC Content: For the purpose of determining compliance with the VOC content limits in the Table of Standards 1 or the Table of Standards 2, the VOC content of a coating shall be determined as defined in Section 3.77, 3.78, or 3.79 as appropriate. The VOC content of a tint base shall be determined without colorant that is added after the tint base is manufactured. If the manufacturer does not recommend thinning, the VOC Content must be calculated for the product as supplied. If the manufacturer recommends thinning, the VOC Content must be calculated including the maximum amount of thinning solvent recommended by the manufacturer. If the coating is a multi-component product, the VOC content must be calculated as mixed or catalyzed. If the coating contains silanes, siloxanes, or other ingredients that generate ethanol or other VOC during the curing process, the VOC content must include the VOCs emitted during curing.</p> <p>6.3.2 VOC Content of Coatings: To determine the physical properties of a coating in order to perform the calculations in Section 3.77 and 3.79, the reference method for VOC content is EPA Method 24, except as provided in Sections 6.3.3 and 6.3.16. An alternative method to determine the VOC content of coatings is SCAQMD Method 304-91 (Revised February 1996). The exempt compounds content shall be determined by SCAQMD Method 303-91 (Revised 1993), BAAQMD Method 43 (Revised 1996), or BAAQMD Method 41 (Revised 1995), as applicable. To determine the VOC content of a coating, the manufacturer may use EPA Method 24, or an alternative method as provided in Section 6.3.3, formulation data, or any other reasonable means for predicting that the coating has been formulated as intended (e.g., quality assurance checks, recordkeeping). However, if there are any inconsistencies between the results of EPA Method 24 test and any other means for determining VOC content, the EPA Method 24</p>	<p>The non-SIP version includes all the requirements of the SIP version. Therefore, the non-SIP version of the rule is more stringent than the SIP version of the rule.</p>

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	<p>resistance rating of a fire-resistive coating shall be determined by ASTM Designation E 119-98, "Standard Test Methods for Fire Tests of Building Construction Materials"(see Section 3, Fire-Resistive Coating).</p> <p>6.3.6 Gloss Determination: The gloss of a coating shall be determined by ASTM Designation D 523-89 (1999), "Standard Test Method for Specular Gloss"(see Section 3, Flat Coating, Nonflat Coating, Nonflat-High Gloss Coating and Quick-Dry Enamel).</p> <p>6.3.7 Metal Content of Coatings: The metallic content of a coating shall be determined by SCAQMD Method 318-95, Determination of Weight Percent Elemental Metal in Coatings by X-Ray Diffraction, <i>SCAQMD Laboratory Methods of Analysis for Enforcement Samples</i> (see Section 3, Metallic Pigmented Coating).</p> <p>6.3.8 Acid Content of Coatings: The acid content of a coating shall be determined by ASTM Designation D 1613-96, "Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer and related products"(see Section 3, Pre-Treatment Wash Primer).</p> <p>6.3.9 Drying Times: The set-to-touch, dry-hard, dry-to-touch and dry-to-recoat times of a coating shall be determined by ASTM Designation D 1640-95, "Standard Test Methods for Drying, Curing, or Film Formation of Organic Coatings at Room Temperature" (see Section 3, Quick-Dry Enamel and Quick-Dry Primer, Sealer and Undercoater) The tack-free time of a quickdry enamel coating shall be determined by the Mechanical Test Method of ASTM Designation D 1640-95.</p> <p>6.3.10 Surface Chalkiness: The chalkiness of a surface shall be determined using ASTM Designation D4214-98, "Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films"(see Section 3, Specialty Primer, Sealer and Undercoater).</p> <p>6.3.11 Exempt Compounds—Siloxanes: Exempt compounds that are cyclic, branched, or linear completely methylated siloxanes, shall be analyzed as exempt compounds for compliance with Section 6 by BAAQMD Method 43, "Determination of Volatile Methylsiloxanes in Solvent-Based Coatings, Inks, and Related Materials," <i>BAAQMD Manual of Procedures</i>, Volume III, adopted 11/6/96 (see Section 3, Volatile Organic Compound, and Section 6.3.1).</p> <p>6.3.12 Exempt Compounds—</p>	<p>test results will govern, except when an alternative method is approved as specified in Section 6.3.3. The District Air Pollution Control Officer (APCO) may require the manufacturer to conduct an EPA Method 24 analysis.</p> <p>6.3.3 Alternative Test Methods: Other test methods demonstrated to provide results that are acceptable for purposes of determining compliance with Section 6.3.2 †, after review and approved in writing by the staffs of the District, ARB and EPA, may also be used.</p> <p>6.3.4 Methacrylate Traffic Marking Coatings: Analysis of methacrylate multicomponent coatings used as traffic marking coatings shall be conducted according to a modification of EPA Method 24 (40 CFR 59, subpart D, Appendix A). This method has not been approved for methacrylate multicomponent coatings used for other purposes than as traffic marking coatings or for other classes of multicomponent coatings.</p> <p>6.3.5 Flame Spread Index: The flame spread index of a fire-retardant coating shall be determined by ASTM E84-07, "Standard Test Method for Surface Burning Characteristics of Building Materials" (see Section 3.0, Fire-Retardant Coating).</p> <p>6.3.6 Fire Resistance Rating: The fire resistance rating of a fire-resistive coating shall be determined by ASTM E119-07, "Standard Test Methods for Fire Tests of Building Construction Materials" (see Section 3.0, Fire-Resistive Coating).</p> <p>6.3.7 Gloss Determination: The gloss of a coating shall be determined by ASTM D523-89 (1999), "Standard Test Method for Specular Gloss" (see Section 3.0, Flat Coating, Nonflat Coating, Nonflat-High Gloss Coating and Quick-Dry Enamel).</p> <p>6.3.8 Metal Content of Coatings: The metallic content of a coating shall be determined by SCAQMD Method 318-95, Determination of Weight Percent Elemental Metal in Coatings by X-Ray Diffraction, <i>SCAQMD Laboratory Methods of Analysis for Enforcement Samples</i> (see Section 3.0, Metallic Pigmented Coating, Aluminum Roof Coating and Faux Finish).</p> <p>6.3.9 Acid Content of Coatings: The acid content of a coating shall be determined by ASTM D1613-06, "Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer and related products" (see Section 3.0, Pre-Treatment Wash Primer).</p>	

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	<p>Parachlorobenzotrifluoride (PCBTF): The exempt compound parachlorobenzotrifluoride, shall be analyzed as an exempt compound for compliance with Section 6 by BAAQMD Method 41, "Determination of Volatile Organic Compounds in Solvent Based Coatings and Related Materials Containing Parachlorobenzotrifluoride," <i>BAAQMD Manual of Procedures</i>, Volume III, adopted 12/20/95 (see Section 3, Volatile Organic Compound, and Section 6.3.1).</p> <p>6.3.13 Exempt Compounds: The content of compounds under U.S. EPA Method 24 shall be analyzed by SCAQMD Method 303-91 (Revised 1996), "Determination of Exempt Compounds," <i>SCAQMD Laboratory Methods of Analysis for Enforcement Samples</i> (see Section 3, Volatile Organic Compound, and Section 6.3.1).</p> <p>6.3.14 VOC Content of Coatings: The VOC content of a coating shall be determined by U.S. EPA Method 24 as it exists in appendix A of 40 <i>Code of Federal Regulations</i> (CFR) part 60, "Determination of Volatile Matter Content, Water Content, Density, Volume Solids and Weight Solids of Surface Coatings"(see Section 6.3.1).</p> <p>6.3.15 Alternative VOC Content of Coatings: The VOC content of coatings may be analyzed either by U.S. EPA Method 24 or SCAQMD Method 304-91 (Revised 1996), "Determination of Volatile Organic Compounds (VOC) in Various Materials," <i>SCAQMD Laboratory Methods of Analysis for Enforcement Samples</i> (see Section 6.3.1).</p> <p>6.3.16 Methacrylate Traffic Marking Coatings: The VOC content of methacrylate multicomponent coatings used as traffic marking coatings shall be analyzed by the procedures in 40 CFR part 59, subpart D, appendix A, "Determination of Volatile Matter Content of Methacrylate Multicomponent Coatings Used as Traffic Marking Coatings" (September 11, 1998) (see Section 6.3.3).</p>	<p>6.3.10 Drying Times: The set-to-touch, dry-hard, dry-to-touch and dry-to-recoat times of a coating shall be determined by ASTM D1640-95, "Standard Test Methods for Drying, Curing, or Film Formation of Organic Coatings at Room Temperature" (see Section 3.0, Quick-Dry Enamel and Quick-Dry Primer, Sealer and Undercoater) The tack-free time of a quick-dry enamel coating shall be determined by the Mechanical Test Method of ASTM D1640-95. (Category deleted effective January 1, 2011.)</p> <p>6.3.11 Surface Chalkiness: The chalkiness of a surface shall be determined using ASTM D4214-98, "Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films"(see Section 3, Specialty Primer, Sealer and Undercoater). (Category deleted effective January 1, 2011.)</p> <p>6.3.12 Exempt Compounds—Siloxanes: Exempt compounds that are cyclic, branched, or linear completely methylated siloxanes, shall be analyzed as exempt compounds for compliance with Section 6 by BAAQMD Method 43, "Determination of Volatile Methylsiloxanes in Solvent-Based Coatings, Inks, and Related Materials," <i>BAAQMD Manual of Procedures</i>, Volume III, adopted 11/6/96 (see Section 3.0, Volatile Organic Compound, and Section 6.3.2).</p> <p>6.3.13 Exempt Compounds—Parachlorobenzotrifluoride (PCBTF): The exempt compound parachlorobenzotrifluoride, shall be analyzed as an exempt compound for compliance with Section 6 by BAAQMD Method 41, "Determination of Volatile Organic Compounds in Solvent Based Coatings and Related Materials Containing Parachlorobenzotrifluoride," <i>BAAQMD Manual of Procedures</i>, Volume III, adopted 12/20/95 (see Section 3.0, Volatile Organic Compound, and Section 6.3.2).</p> <p>6.3.14 Exempt Compounds: The content of compounds under U.S. EPA Method 24 shall be analyzed by SCAQMD Method 303-91 (Revised 1993), "Determination of Exempt Compounds," <i>SCAQMD Laboratory Methods of Analysis for Enforcement Samples</i> (see Section 3.0, Volatile Organic Compound, and Section 6.3.2).</p> <p>6.3.15 VOC Content of Coatings: The VOC content of a coating shall be determined by EPA Method 24 as it exists in appendix A of 40 <i>Code of</i></p>	

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
		<p><i>Federal Regulations (CFR) part 80, "Determination of Volatile Matter Content, Water Content, Density, Volume Solids and Weight Solids of Surface Coatings" (see Section 6.3.2).</i></p> <p>6.3.16 Alternative VOC Content of Coatings: The VOC content of coatings may be analyzed either by U.S. EPA Method 24 or SCAQMD Method 304-91 (Revised 1996), "Determination of Volatile Organic Compounds (VOC) in Various Materials," <i>SCAQMD Laboratory Methods of Analysis for Enforcement Samples.</i></p> <p>6.3.17 Methacrylate Traffic Marking Coatings: The VOC content of methacrylate multicomponent coatings used as traffic marking coatings shall be analyzed by the procedures in 40 CFR part 59, subpart D, appendix A, "Determination of Volatile Matter Content of Methacrylate Multicomponent Coatings Used as Traffic Marking Coatings" (September 11, 1998).</p> <p>6.3.18 Hydrostatic Pressure for Basement Specialty Coatings: The hydrostatic pressure resistance for basement specialty coatings shall be analyzed using ASTM D7088-04, "Standard Practice for Resistance to Hydrostatic Pressure for Coatings Used in Below Grade Applications Applied to Masonry".</p> <p>6.3.19 Tub and Tile Refinish Coating Adhesion: The adhesion of tub and tile coating shall be determined by ASTM O4585-99, "Standard Practice for Testing Water Resistance of Coatings Using Controlled Condensation" and ASTM O3359-02, "Standard Test Methods for Measuring Adhesion by Tape Test".</p> <p>6.3.20 Tub and Tile Refinish Coating Hardness: The hardness of tub and tile .refinish coating shall be determined by ASTM O3363-05, "Standard Test Method for Film Hardness by Pencil Test".</p> <p>6.3.21 Tub and Tile Refinish Coating Abrasion Resistance: Abrasion resistance of tub and tile refinish coating shall be analyzed by ASTM D4060-07, "Standard Test Methods for Abrasion Resistance of Organic Coatings by the Taber Abraser".</p> <p>6.3.22 Tub and Tile Refinish Coating Water Resistance: Water resistance of tub and tile refinish coatings shall be determined by ASTM D4585-99, "Standard Practice for Testing Water Resistance of Coatings Using Controlled Condensation" and ASTM D714-02e1, "Standard Test Method</p>	

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
		<p>for Evaluating Degree of Blistering of Paints".</p> <p>6.3.23 Waterproofing Membrane: Waterproofing membrane shall be tested by ASTM C836-06, "Standard Specification for High Solids Content, Cold Liquid-Applied Elastomeric Waterproofing Membrane for Use with Separate Wearing Course".</p> <p>6.3.24 Mold and Mildew Growth for Basement Specialty Coatings: Mold and mildew growth resistance for basement specialty coatings shall be determined by ASTM D3273-00, "Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber" and ASTM D3274-95, "Standard Test Method for Evaluating Degree of Surface Disfigurement of Paint Films by Microbial (Fungal or Algal) Growth or Soil and Dirt Accumulation".</p> <p>6.3.25 Reactive Penetrating Sealer Water Repellency: Reactive penetrating sealer water repellency shall be analyzed by ASTM C67-07, "Standard Test Methods for Sampling and Testing Brick and Structural Clay Tile"; or ASTM C97-02, "Standard Test Methods for Absorption and Bulk Specific Gravity of Dimension Stone"; or ASTM C140-06, "Standard Test Methods for Sampling and Testing Concrete Masonry Units and Related Units".</p> <p>6.3.26 Reactive Penetrating Sealer Water Vapor Transmission: Reactive penetrating sealer water vapor transmission shall be analyzed ASTM E96/E96M-05, "Standard Test Method for Water Vapor Transmission of Materials".</p> <p>6.3.27 Reactive Penetrating Sealer - Chloride Screening Applications: Reactive penetrating sealers shall be analyzed by National Cooperative Highway Research Report 244 (1981), "Concrete Sealers for the Protection of Bridge Structures".</p> <p>6.3.28 Stone Consolidants: Stone consolidants shall be tested using ASTM E2167-01, "Standard Guide for Selection and Use of Stone Consolidants".</p>	
7.0 Compliance Schedule	Persons subject to this rule shall be in compliance with this rule by October 31, 2001.	Persons subject to this rule shall be in compliance with this rule by the dates specified within the rule.	No change in the requirements, therefore, non-SIP version of rule is as stringent as SIP version.
8.0 Averaging Compliance Option	8.1 On or after January 1, 2003, in lieu of compliance with the specified limits in the Table of Standards for floor coatings; industrial maintenance coatings; primers, sealers, and undercoaters; quick-dry primers, sealers, and undercoaters; quick-dry enamels; roof coatings; rust		No change in the requirements, therefore, non-SIP version of rule is as stringent as SIP version.

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	<p>preventative coatings; stains; waterproofing sealers, as well as flats and non-flats (excluding recycled coatings), manufacturers may average designated coatings such that their actual cumulative emissions from the averaged coatings are less than or equal to the cumulative emissions that would have been allowed under those limits over a compliance period not to exceed one year. Such manufacturers must also comply with the averaging provisions contained in this Section, as well as maintain and make available for inspection records for at least three years after the end of the compliance period. This Section shall cease to be effective on January 1, 2005, after which averaging will no longer be allowed.</p> <p>Per Section 8.1, averaging is no longer applicable. Therefore, Section 8.2 through 8.14 are not listed.</p>		

District Rule 4601 was amended (12/17/2009). As analyzed, each amended section of the non-SIP version of the rule is at least as stringent as, or more stringent than the corresponding section of the SIP version of the rule. Therefore, it is concluded that overall the non-SIP version of the rule is more stringent than the SIP version of the rule.

ATTACHMENT E

EPA PSD Permit (SJ 99-03)

PSD Permit Conditions Comments/Observations

The following is provided at Mr. Martin Keast's request to assist the District in their review of PSD permit conditions with emphasis on significant differences between them and the ones found in the District PTOs.

- Page 6 D. Emission Limits for CO
Annual emissions limit of 1,140,000 lbs (vs. 1,220,166 in Condition 19 of gas turbine PTOs #1-3, #2-3, #3-3).
- F. Emission Limits for SO_x
Annual emissions rates for each CTG must not exceed 28,170 lb/yr (x 3 = 84,510 lb/yr compared to 84,780 lb/yr in Condition 19 gas turbine PTOs).
- Page 7 Note distinction between emissions from cold, warm, and hot start-ups not found in PTO. Note, also, the definitions in the 5. and 7. as well as the restriction in the number of start-ups and shutdowns in Condition 6. None of these are present in the gas turbine PTOs.
- Page 10 L.2. Emergency IC engine restricted by PTO #7-3 to 100 hr/yr (compared to 200 hr/yr limit in PSD permit).



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

December 23, 2004

In Reply
Refer to: AIR-3
PSD SJ-99-03

Barbara McBride
Director, Safety, Health and Environment
Calpine Western and California Power Regions
4160 Dublin Boulevard
Dublin, CA 94568-3139

Re: PSD Permit Modification Request

Dear Ms. McBride:

This letter is to inform you that we have approved your request for a modification to EPA's Prevention of Significant Deterioration permit for Calpine's Pastoria Energy Center (SJ-99-03). On April 2, 2004 EPA published a public notice proposing to approve PSD permit modifications based on your application update of March 4, 2004, and your prior application from September 2001. We understand from your December 21, 2004 letter to us that you have withdrawn your April 30, 2004 comment and would like us to issue the permit as proposed on April 2, 2004. Enclosed is the final revised permit, which is the same as the permit that was public noticed.

Should you have any questions regarding this matter, please contact Ed Pike of my staff at (415) 972-3970.

Sincerely,

A handwritten signature in black ink, appearing to read "Gerardo C. Rios".

for Gerardo C. Rios
Chief, Permits Office
Air Division

Enclosure

cc: Tom Goff, SJVUAPCD
Peter Venturini, California Air Resources Board

**AUTHORITY TO CONSTRUCT
ISSUED PURSUANT TO
PREVENTION OF SIGNIFICANT DETERIORATION ("PSD")
REQUIREMENTS AT 40 C.F.R. § 52.21**

**PSD PERMIT NUMBER: SJ-99-03
U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION 9**

PERMITTEE: Pastoria Energy Facility.

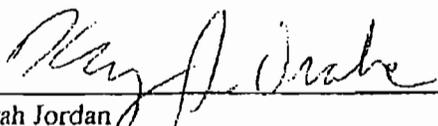
FACILITY LOCATION: Tejon Ranch approximately 30 miles south of Bakersfield in western Kern County, California.

This Authority to Construct (ATC) is issued by US EPA Region IX pursuant to the Prevention of Significant Deterioration ("PSD") requirements of the Clean Air Act, as amended, 42 U.S.C. §§ 7401 - 7671q. Pastoria Energy Facility is granted approval to construct a power plant at Tejon Ranch approximately 30 miles south of Bakersfield in western Kern County, in accordance with the permit application (and plans submitted with the permit application), federal regulations governing the Prevention of Significant Deterioration of air quality (40 C.F.R. § 52.21), and other terms and conditions set forth in this permit.

Failure to comply with any condition or term set forth in this ATC is subject to enforcement pursuant to Section 113 of the Clean Air Act.

This ATC does not relieve the Permittee from the responsibility to comply with any other applicable provisions of the Clean Air Act (including 40 C.F.R. Parts 51, 52, 60, 61, 63), other federal, Tribal, or San Joaquin Valley Unified Air Pollution Control District (District) requirements.

This permit becomes effective at the date of issuance pursuant to 40 CFR § 124.15(b)(3).



Deborah Jordan
Director, Air Division

12/23/04
Date

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PROJECT DESCRIPTION

This 750 MW (net output) plant consists of three 168 MW GE 7FA combustion turbine-generators (CTG) equipped with either XONON catalytic combustors (XONON); or dry low NO_x burners (DLN) with selective catalytic reduction (SCR) to control emissions. The facility is also equipped with two unfired heat recovery steam generators (HRSG), each of which has an associated turbine generator - one producing approximately 185 MW (for two turbines) maximum and one producing approximately 90 MW maximum. The facility's air pollution controls will reduce emissions of two PSD-regulated pollutants, NO_x and CO, to the BACT levels specified in Condition X of this permit. The facility is also restricted to pipeline quality natural gas to limit emissions of sulfur oxides. The facility will be equipped with a continuous emissions monitoring (CEM) system to measure and record NO_x, CO, and O₂ concentrations in the stack exhaust.

PERMIT CONDITIONS

I. Permit Expiration

This Authority to Construct (ATC) shall become invalid (1) if construction is not commenced (as defined in 40 CFR § 52.21(b)(8)) within 18 months after the approval takes effect, (2) if construction is discontinued for a period of 18 months or more, or (3) if construction is not completed within a reasonable time.

II. Notification of Commencement of Construction and Startup

The Permittee must notify EPA in writing of the anticipated date of initial startup (as defined in 40 CFR § 60.2(o)) of the power plant not more than sixty (60) days nor less than thirty (30) days prior to such date and must notify EPA in writing of the actual date of commencement of construction and startup within fifteen (15) days after such date.

III. Facility Operation

All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this ATC must at all times be maintained in good working order and be operated as intended so as to minimize air pollutant emissions.

IV. Malfunction

A. Reporting

The Permittee must notify EPA by telephone, facsimile, or electronic mail transmission within two (2) working days following the discovery of any failure of air pollution control equipment, process equipment, or of a process to operate

in a normal manner, which results in an increase in emissions above any allowable emission limit stated in Section X this ATC. In addition, the Permittee must notify EPA in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial malfunction, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed in Section X, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violation of this permit or of any law or regulation that such malfunction may cause, except as provided for in Condition IV-B of this permit.

B. Treatment of Emissions

1. **Definition of malfunction:** A malfunction means a sudden and unavoidable breakdown of equipment or of a process beyond the reasonable control of the source.
2. **Emissions in excess of the limits specified in Section X of this permit shall constitute a violation.**
3. **Affirmative defense:** With respect to BACT emissions limits in X.D.1. and X.E.1, only, in the context of an enforcement proceeding, emissions which are below the limits set forth in this Condition IV(B)(3)(ii) but above the BACT limits set in conditions X.D.1 and X.E.1 shall not be subject to penalty if the Permittee retains properly signed, contemporaneous operating logs or other relevant evidence and can demonstrate all of the following:
 - i. **A malfunction caused the emissions in excess of the limits in Conditions X.D.1. or X.E.1;**
 - ii. **The emissions did not exceed the levels specified below:**

9 ppmvd NO_x (1-hour average, corrected to 15% O₂) and 164 lbs per hour

9 ppmvd CO (3-hour average, corrected to 15% O₂) and 1284 lbs per hour;
 - iii. **The permitted facility, including the air pollution control equipment and process equipment, was being properly operated at**

the time of the malfunction;

- iv. Preventative maintenance was regularly performed in a manner consistent with good practice for minimizing emissions;
 - v. The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;
 - vi. During the period of the malfunction the Permittee took all reasonable steps to minimize the amount and duration of emissions (including any bypass of pollution controls) that exceeded the emission limits provided in Section X. Reasonable steps to minimize emissions could include, but are not limited to, reducing production to the lowest level practicable, reducing the fuel usage rate that results in the increased emissions, and switching to alternative, less polluting fuels. Where repairs were required, repairs were made in an expeditious fashion when the operator knew or should have known that applicable emission limitations were being exceeded. Off-shift labor and overtime must have been utilized, to the extent practicable, to ensure that such repairs were made as expeditiously as possible; and
 - vii. The Permittee complied with the malfunction reporting requirements of Condition IV-A of this permit.
4. All emissions, including those associated with a malfunction which may be eligible for an affirmative defense, must be included in all emissions calculations and demonstrations of compliance with annual emission limits specified in this permit.

V. Right of Entry

The EPA Regional Administrator, and/or their authorized representative, upon the presentation of credentials, must be permitted:

1. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this ATC;
2. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this ATC ;
3. to inspect any equipment, operation, or method required in this ATC; and

4. to sample emissions from the source(s).

VI. Transfer of Ownership

In the event of any changes in control or ownership of the facilities to be constructed, the ATC must be binding on all subsequent owners and operators. The Permittee must notify the succeeding owner and operator of the existence of this ATC and its conditions by letter, a copy of which must be forwarded to the EPA.

VII. Severability

The provisions of this ATC are severable, and, if any provision of the ATC is held invalid, the remainder of this ATC shall be unaffected.

VIII. Other Applicable Regulations

The Permittee must construct and operate the proposed power plant in compliance with all other applicable provisions of 40 CFR Parts 51, 52, 60, 63, 72 through 75, and all other applicable federal, state, and local air quality regulations.

IX. Paperwork Reduction Act

Any requirements established by this permit for the gathering and reporting of information are not subject to review by the Office of Management and Budget (OMB) under the Paperwork Reduction Act because this permit is not an "information collection request" within the meaning of 44 U.S.C. §§ 3502(4), 3502 (11), 3507, 3512, and 3518. Furthermore, this permit and any information gathering and reporting requirements established by this permit are exempt from OMB review under the Paperwork Reduction Act because it is directed to fewer than ten persons, 44 U.S.C. § 3502(4) and § 3502(11); 5 CFR Part 1320.5(a).

X. Special Conditions

A. Certification

The Permittee must notify the EPA in writing of compliance with Conditions X.B and X.H below, and must make such notification within fifteen (15) days of such compliance. The letter must be signed by a responsible official of the Permittee.

B. Air Pollution Control Equipment and Operation

On or before the date of startup of the power plant, and thereafter (as defined in 40 CFR § 60.2), the Permittee must install, continuously operate, and maintain the air

pollution controls (either XONON or DLN with SCR) and perform any necessary operations to minimize emissions so that emissions are at or below the emissions levels specified under Condition X of this ATC.

C. Performance Tests

1. Within 60 days after achieving the base load, but no later than 180 days after initial startup of equipment (as defined in 40 CFR § 60.2), and annually thereafter (within 30 days of the anniversary of the initial performance test), the Permittee must conduct performance tests (as described in 40 CFR § 60.8) for NO_x and CO on the exhaust stack gases. The Permittee must furnish the District, the California Air Resources Board (CARB), and the EPA a written report of the results of such tests. Upon written request from the Permittee, and adequate justification, EPA may waive a specific annual test and/or allow for testing to be done at less than maximum operating capacity.
2. The Permittee must conduct performance tests and Relative Accuracy tests for the emissions of NO_x and CO and report the results in accordance with the test methods set forth in 40 CFR § 60.8 and 40 CFR Part 60, Appendix A, as modified below. The following test methods must be used:
 - a. Performance tests for the emissions of NO_x must be conducted using EPA Methods 1-4 and 7E. Method 7E shall be performed using a full sampling traverse at sampling points selected according to Method 1. A sample spiking procedure, through the entire sampling train, must be performed before and after the test runs to assure that NO₂ is being measured properly. If NO₂ measurement falls below 90%, the data must be adjusted or the test repeated.
 - b. Performance tests for the emissions of CO must be conducted using EPA Methods 1-4 and 10.

In lieu of the above-mentioned test methods, the Permittee may use equivalent methods with prior written approval from EPA. New test methods are currently being developed by CARB and EPA that may be appropriate for meeting the needs of addressing stratification and NO₂ measurement.

The Permittee must notify EPA in writing at least 30 days prior to such tests to allow time for the development of an approvable performance test plan and to arrange for an observer to be present at the test. The performance test plan shall address the conditions specified above.

3. For performance test purposes, sampling ports, platforms, and access must be provided by the Permittee on the emission unit exhaust system in accordance with 40 CFR § 60.8(e).

D. Emission Limits for CO

On and after the date of startup, the Permittee must not discharge or cause the discharge of CO into the atmosphere in excess of the following emission limits:

1. The more stringent of 24.9 lbs/hr or 6.0 ppmvd @ 15% O₂ from each CTG exhaust stack, 3-hour rolling average, during normal operation.
2. The combined annual emissions rate from three CTGs and the emergency engines listed in condition X.L., based on a 12-month rolling average, must not exceed 1,140,000 lbs.

E. Emission Limits for NO_x

On and after the date of startup, the Permittee must not discharge or cause the discharge of NO_x into the atmosphere in excess of the following emission limits:

1. The more stringent of 17.0 lbs/hr or 2.5 ppmvd @ 15% O₂ from each CTG exhaust stack one-hour average, during normal operation.
2. The combined annual emissions rate from all three CTGs and the emergency engines listed in condition X.L., based on 12-month rolling average, must not exceed 344,485 lbs.

F. Emission Limits for SO_x

On and after the date of startup, the Permittee must not discharge or cause the discharge into the atmosphere of SO_x in excess of the following emission limits:

1. 3.5 lbs/hr from each CTG exhaust stack, 3-hour rolling average, during normal operation.
2. The annual emissions rate from each CTG, based on 12-month rolling average, must not exceed 28,170 lbs.

G. Emission Limits at Startups or Shutdowns

1. *During startup or shut-down of any CTG, the combined emissions from any one CTG and HRSG exhausts must not exceed:*

130 lbs of NO_x or 1234 lbs of CO in any one hour during any cold start-up.

119 lbs of NO_x or 1021 lbs of CO in any one hour during any warm start-up.

107 lbs of NO_x or 903 lbs of CO in any one hour during any hot start-up

58.5 lbs of NO_x or 222.5 lbs of CO in any one hour during which a shut-down occurs

2. The Permittee shall not operate more than one turbine in start-up mode at any time.
3. The Permittee must operate the CEMs during startups and shut downs.
4. The Permittee must record the time, date and duration of each startup and shutdown event. The records must include the lbs/hour calculations based on the CEM data. These records must be kept for five years following the date of such events.
5. Duration of cold startups shall not exceed 3 hours. Duration of warm start-ups shall not exceed 2.5 hours and duration of hot start-ups shall not exceed 1 hour. Duration of shut-downs shall not exceed one half hour.
6. Total number of start-ups and shut-downs for the facility shall not exceed 674 events per year.
7. Startup shall be defined as the period beginning with ignition and lasting until the equipment has reached a continuous operating level and meets permit limits. Cold startup means a startup when the combustion turbine has not been in operation during the preceding 72 hours. Hot startup means a startup when the combustion turbine has been in operation during the preceding 8 hours. Warm startup means a startup that is not a hot or cold startup. Shutdown shall be defined as the period beginning with the lowering of equipment from base load and lasting until fuel flow is completely off and combustion has ceased.

H. Continuous Emissions Monitoring Systems

1. Prior to the date of startup and thereafter, the Permittee must install, maintain and operate the following continuous monitoring systems (CEMs) in the CTG exhaust stacks:

- a. Continuous monitoring systems to measure stack gas NO_x, CO and O₂ concentrations. The systems must meet EPA monitoring performance specification (40 CFR § 60.13 and 40 CFR Part 60, Appendix B, Performance Specifications 2, 3 and 4). The NO_x monitoring system (NO_x adjusted to 15% O₂) must also meet the requirement of 40 C.F.R. Part 75 Appendix A 3.3.2. The system shall be designed to obtain a representative sample (and must address potential stratification) and to properly measure the NO₂ component of the NO_x.
- b. The permittee shall use EPA Method 19 and fuel flow metering required by 40 CFR part 75 to determine exhaust flow rates.

I. Reporting and Record Keeping

1. The Permittee must maintain a file of all measurements, including continuous monitoring systems evaluations; all continuous monitoring systems or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; performance and all other information required by this permit and 40 CFR Part 60, Appendices A-B, recorded in a permanent form suitable for inspection. The file must be retained for five years following the date of such measurements, maintenance, reports and records.
2. The Permittee must notify EPA of the date on which the demonstration of the continuous monitoring system performance commences (40 CFR § 60.13). This date must be no later than 60 days after full load operation but not later than 180 days after startup.
3. The Permittee must submit a written report of all excess emissions to EPA for every calendar quarter. The report must include the following:
 - a. The magnitude of the excess emissions computed in accordance with 40 CFR § 60.13(h), any conversion factors used, the date and time of commencement, and compilation of each time period of excess emissions.
 - b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of any equipment. The nature and cause of any malfunction (if known) and the corrective action taken or preventative measures adopted must also be reported.

- c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks, and the nature of the system repairs or adjustments.
 - d. When no excess emissions have occurred or the continuous monitoring system has not been inoperative, repaired, or adjusted, such information must be stated in the report.
 - e. *Excess emissions shall be defined as any 1-hour period during which the average emissions of NO_x, as measured by the CEM, exceeds the maximum emission limits set forth in Condition X.E.1; any 3-hour period during which the average emissions of CO exceed the maximum emission limits set forth in Conditions X.D.1; any hour that the SO_x limits in condition X.F are exceeded; any time that any annual limit in the permit is exceeded; and any hour when the start-up and shut-down limits in condition X.G. are exceeded.*
- 4. Any excess emission indicated by the CEM system must be considered a violation of the applicable emission limit in this permit.
 - 5. The quality assurance project plan used by the Permittee for the certification and operation of the continuous emissions monitors, which meets the requirements of 40 CFR Part 60, Appendix F, must be available upon request to EPA.

J. New Source Performance Standards

The proposed power plant is subject to the federal regulations entitled Standards of Performance for New Stationary Sources (40 CFR Part 60). The owner or operator must meet all applicable requirements of 40 CFR Part 60, Subparts A and GG.

K. Fuel Use

- 8. The Permittee must only combust pipeline quality natural gas with sulfur content (as S) below 0.75 grains per 100 dry standard cubic feet (dscf) in the combustion turbines and the emergency internal combustion engine. The source shall demonstrate compliance daily as required by 40 CFR Part 60, Subpart GG unless an approved alternate schedule is granted under 40 C.F.R. § 60.13. Fuel flow metering shall be conducted in accordance with Appendix D of 40 CFR Part 75. The source shall also calculate compliance with the emission limits in section X.F based on fuel analysis, fuel usage records, and mass-balance calculations. Records must be kept according to

X.I.

L. 425 hp Diesel Fire Pump and 814 hp Emergency Internal Combustion engine

1. The Permittee shall restrict fuel use for the diesel fire pump engine to diesel fuel with a maximum sulfur content of 0.05 percent by weight.
2. The engines shall be used only for maintenance, testing, required regulatory purposes, and during emergency situations and shall not be used to increase the quantity of electricity generated for sale. The Permittee shall restrict the operation of the diesel fire pump engine and natural gas fired Emergency Internal Combustion engine to no more than 200 hours per year. This restriction is not applicable during emergency situations.
3. The facility shall not operate the engines during start-up or shut-down of a turbine, except during emergency situations.
4. The diesel fire pump engine shall be equipped with a turbocharger and intercooler/aftercooler.
5. The natural gas fired 814 hp Emergency Internal Combustion engine shall be equipped with a three-way catalyst.

XI. Agency Notifications

All correspondence as required by this Approval to Construct/Modify must be forwarded to:

- A. Director, Air Division (Attn: Air-3)
EPA Region IX
75 Hawthorne Street
San Francisco, CA 94105-3901
- B. Chief, Stationary Source Division
California Air Resources Board
P.O. Box 2815
Sacramento, CA 95812
- C. Air Pollution Control Officer
San Joaquin Valley Unified APCD
2700 M Street, Suite 275
Bakersfield, CA 93301-2370