



NOV 2 0 2013

Mr. Ron Cook Bear Mountain LTD 34759 Lencioni Ave Bakersfield, CA 93308

#### Re: Notice of Final Action - Title V Permit Renewal District Facility # S-2049 Project # S-1123306

Dear Mr. Cook:

The District has issued the Final Renewed Title V Permit for Bear Mountain LTD. The preliminary decision for this project was made on June 21, 2013. No comments were received subsequent to the District preliminary decision.

The public notice for issuance of the Final Title V Permit will be published approximately three days from the date of this letter.

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

Sincerely, David Warner

David Warner Director of Permit Services

Enclosures

- cc: Mike Tollstrup, CARB (w/enclosure) via email
- cc: Gerardo C. Rios, EPA (w/enclosure) via email

#### 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

www.valleyair.org www.healthyairliving.com





# **Permit to Operate**

FACILITY: S-2049

#### **EXPIRATION DATE: 04/30/2018**

LEGAL OWNER OR OPERATOR: MAILING ADDRESS:	BEAR MOUNTAIN LIMITED 34759 LENCIONI AVE, SUITE A BAKERSFIELD, CA 93308
FACILITY LOCATION:	HEAVY OIL CENTRAL KERN BLUFF
FACILITY DESCRIPTION:	OIL AND NATURAL GAS PRODUCTION

The Facility's Permit to Operate may include Facility-wide Requirements as well as requirements that apply to specific permit units.

This Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require prior District approval. This permit shall be posted as prescribed in District Rule 2010.

Seyed Sadredin Executive Director / APCO David Warner Director of Permit Services

Nov 14 2013 1:30PM - OGDENA

# San Joaquin Valley Air Pollution Control District

FACILITY: S-2049-0-3

#### EXPIRATION DATE: 04/30/2018

# 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; 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; Kern County Rule 111] Federally Enforceable Through Title V Permit
- 3. The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
- 4. Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (12/20/07). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
- 5. The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.9.1 and 9.13.1] Federally Enforceable Through Title V Permit
- 6. A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit
- 7. Every application for a permit required under Rule 2010 (12/17/92) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit
- 8. The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit
- 9. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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

- 10. The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.5.1] Federally Enforceable Through Title V Permit
- 11. Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520 (6/21/01). [District Rules 2520, 9.5.2 and 1100, 7.0] Federally Enforceable Through Title V Permit
- 12. If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit. [District Rule 2520, 9.7] Federally Enforceable Through Title V Permit
- 13. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.8.2] Federally Enforceable Through Title V Permit
- 14. The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.8.3] Federally Enforceable Through Title V Permit
- 15. The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.8.4] Federally Enforceable Through Title V Permit
- 16. The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.8.5] Federally Enforceable Through Title V Permit
- 17. The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.9] Federally Enforceable Through Title V Permit
- 18. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 2520, 9.13.2.1] Federally Enforceable Through Title V Permit
- 19. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.13.2.2] Federally Enforceable Through Title V Permit
- 20. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.13.2.3] Federally Enforceable Through Title V Permit
- 21. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.13.2.4] Federally Enforceable Through Title V Permit
- 22. No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (2/17/05). 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 Kern County Rule 401] Federally Enforceable Through Title V Permit

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

- 36. The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.16] Federally Enforceable Through Title V Permit
- 37. The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2] Federally Enforceable Through Title V Permit
- 38. When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permits shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit
- 39. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Kern County Rule 401 and Kern County Rule 111. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 40. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (2/17/05); 4601 (12/17/09); 8021 (8/19/2004); 8031 (8/19/2004); 8041 (8/19/2004); 8051 (8/19/2004); 8061 (8/19/2004); and 8071 (9/16/2004). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 41. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 42. An owner or operator shall not use organic solvents for cleaning operations that exceed the VOC content limits specified as follows: A) Product cleaning during manufacturing process or surface preparation for adhesive application; 1) general, 50 g/l (0.42 lb/gal) and 2) electrical apparatus components and electronic components, 500 g/l (4.2 lb/gal); B) repair and maintenance cleaning, 1) 50 g/l (0.42 lb/gal) and 2) electrical apparatus components and electronic components and electronic components 900 g/l (7.5 lb/gal); C) cleaning of coating or adhesive application equipment, 550 g/l (4.6 lb/gal) [District Rule 4663, 5.1.2] Federally Enforceable Through Title V Permit
- 43. Cleaning activities that use solvents with a VOC content greater than 50 g/l (0.42 lb/gallon) shall be performed by one or more of the following methods: 1) wipe cleaning; 2) application of solvent from hand-held spray bottles from which solvents are dispensed without a propellant-induced force; 3) non-atomized solvent flow method in which the cleaning solvent is collected in a container or a collection system which is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container, or; 4) solvent flushing method in which the cleaning solvent is discharged into a container that is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container. The discharged solvent from the equipment must be collected into containers without atomizing into the open air. The solvent may be flushed through the system by air or hydraulic pressure, or by pumping. [District Rule 4663, 5.2.1] Federally Enforceable Through Title V Permit
- 44. Solvent shall not be atomized into the open air unless it is vented to a VOC emission control system. This provision shall not apply to the cleaning of nozzle tips of automated spray equipment systems, except for robotic systems, and cleaning with spray bottles or containers described elsewhere in this permit. [District Rule 4663, 5.2.2] Federally Enforceable Through Title V Permit
- 45. An owner or operator shall not use VOC-containing materials to clean spray equipment used for the application of coatings, adhesives, or ink, unless an enclosed system or equipment that is proven to be equally effective at controlling emissions is used for cleaning. If an enclosed system is used, it must totally enclose spray guns, cups, nozzles, bowls, and other parts during washing, rinsing and draining procedures, and it must be used according to the manufacturer's recommendations and must be closed when not in use. [District Rule 4663, 5.2.3] Federally Enforceable Through Title V Permit

- 46. All fresh or spent solvents, waste solvent cleaning materials such as cloth, paper, etc., coatings, adhesives, catalysts and thinners shall be stored in closed, non-absorbent and non-leaking containers. [District Rule 4663, 5.3] Federally Enforceable Through Title V Permit
- 47. In lieu of complying with the requirements in Sections 5.1.2, an owner or operator may comply with this rule by using a VOC emission collection and control system in association with the solvent cleaning operation as provided in District Rule 4663, 5.4.1 and 5.4.2 (Adopted December 30, 2001). [District Rule 4663, 5.4] Federally Enforceable Through Title V Permit
- 48. An owner or operator shall maintain the records required by District Rule 4663, Sections 6.2.2 through 6.2.5 (Adopted December 20, 2001) at the stationary source for a period of five years. The records shall be made available to the APCO upon request. [District Rules 1070 and 4663, 6.2.1] Federally Enforceable Through Title V Permit
- 49. The VOC content of solvents and organic materials shall be determined by using United States Environmental Protection Agency (EPA) Test Method 24 or 24A, or South Coast Air Quality Management District (SCAQMD) Method 304 (Determination of Volatile Organic compounds in Various Materials), or by using the manufacturer's product formulation data and the formula for "Grams of VOC per liter of Material" in Section 3.0. [District Rule 4663, 6.3.1.1] Federally Enforceable Through Title V Permit
- 50. The content of exempt halogenated VOCs shall be determined by using the California Air Resources Board (ARB) Test Method 432 or SCAQMD Test Method 303 (Determination of Exempt Compounds). [District Rule 4663, 6.3.1.2] Federally Enforceable Through Title V Permit
- 51. The facility shall comply with all applicable requirements regarding preparation and implementation of a Risk Management Plan and shall abide by all applicable sections of 40 CFR Part 68. [40 CFR Part 68] Federally Enforceable Through Title V Permit
- 52. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin January 1 of every year, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days after the end of the reporting period. [District Rule 2520] Federally Enforceable Through Title V Permit

# San Joaquin Valley Air Pollution Control District

#### PERMIT UNIT: S-2049-1-9

#### **EXPIRATION DATE: 04/30/2018**

#### SECTION: SW12 TOWNSHIP: 29S RANGE: 28E

#### **EQUIPMENT DESCRIPTION:**

NOMINALLY RATED 48 MW G.T.E. COGENERATION SYSTEM WITH SCR, INCLUDING STEWART AND STEVENSON GE LM-5000 GAS TURBINE GENERATOR, HEAT RECOVERY STEAM GENERATOR, AND INLET AIR ABSORPTION CHILLER AND HEAT EXCHANGER

## PERMIT UNIT REQUIREMENTS

- 1. Turbine washing operation shall take place only when the turbine is off-line. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. VOC emissions from off-line turbine wash operation shall not exceed 9.8 lb per day [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. Gas fired turbine engine shall be equipped with combustor steam injection and a selective catalytic reduction (SCR) system utilizing ammonia as the reducing agent. [District Rules 2201 and 4703, 5.1.1] Federally Enforceable Through Title V Permit
- 4. Gas fired turbine engine shall be equipped with carbon monoxide catalytic oxidizer. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. Gas turbine engine combustor steam injection rate shall be maintained at a steam to fuel ratio which results in compliance with emissions limits, except during periods of startup, shutdown and malfunction as defined in this permit. Only malfunctions as defined in 40 CFR 60 qualify for this exemption. [40 CFR 60.334(c)] Federally Enforceable Through Title V Permit
- 6. CEM data shall be used in addition to stack testing to determine compliance with NOx and CO concentrations and daily emission limits. [District Rule 2201] Federally Enforceable Through Title V Permit
- Gas turbine combustor steam injection system shall be equipped with continuously recording steam and fuel injection rate monitoring system accurate to within +/- 5%. [District Rules 2201 and 4703, 6.2.1 and 40 CFR 60.334 (a)] Federally Enforceable Through Title V Permit
- 8. The gas turbine shall be fired exclusively with PUC regulated or FERC regulated natural gas, with fuel gas sulfur content not to exceed 1 grain S/100 scf. [District Rules 2201 and 4801; 40 CFR 60.333 (a) & (b); 60.332(a) and Kern County Rule 407] Federally Enforceable Through Title V Permit
- 9. Startup is defined as the thermal stabilization period to bring the exhaust gas to normal operating temperature range. Shutdown is defined as the cessation of operation. [District Rule 4703 and 40 CFR Subpart A 60.2] Federally Enforceable Through Title V Permit
- 10. Operations during periods of startup and shutdown shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the emission limit shown in this permit during periods of startup and shutdown be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. This requirement only applies to the subsumed NOx and SO2 emission standards under NSPS subpart GG for Stationary Gas Turbines. [40 CFR 60.8(c)] Federally Enforceable Through Title V Permit

- 11. Inlet gas temperature to oxidation catalyst bed shall be maintained within the range recommended by manufacturer except during periods of startup and shutdown as defined herein. The facility shall maintain a record of the recommended temperature range of the manufacturer onsite. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. All gas turbine engine exhaust shall flow through catalyst bed. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. When oxidation catalyst inlet temperature exceeds 800 degrees F, the VOC emission concentration at turbine exhaust shall not exceed 0.6 ppmv dry at 15% O2, except during periods of startup and shutdown. [District Rule 2201] Federally Enforceable Through Title V Permit
- Total VOC emissions, including those from the gas turbine exhaust and lube oil vents shall not exceed 1.04 lb/hr and 25.0 lb/day, except during periods of startup and shutdown. [District Rule 2201] Federally Enforceable Through Title V Permit
- 15. Emission rate from the gas turbine exhaust shall not exceed the following: PM10: 75.0 lb/day, NOx (as NO2): 143.7 lb/day, SOx (as SO2): 31.1 lb/day, and CO: 252.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 16. Nitrogen oxides (as NO2) concentrations from the exhaust stack shall not exceed 3.6 ppmv dry calculated to 15% O2, except during periods of startup and shutdown. [District Rules 2201 and 4703, 5.1 and 40 CFR Part 60.332(a)] Federally Enforceable Through Title V Permit
- Carbon monoxide (CO) concentrations from the exhaust stack shall not exceed 10 ppmv dry calculated to 15% O2, except during periods of startup and shutdown. [District Rules 2201 and 4703, 5.2] Federally Enforceable Through Title V Permit
- 18. The circular cross section exhaust stack (after SCR unit) shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and equipped with flow straighteners, if necessary, to minimize turbulence. The facility shall comply with this and all applicable compliance testing procedures described in District Rule 1081 (amended December 17, 1992). [District Rules 2201, 4703 and 1081] Federally Enforceable Through Title V Permit
- 19. 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, 7.2] Federally Enforceable Through Title V Permit
- 20. Facility shall maintain file copies of all natural gas fuel invoices, including certification and quantity of gas consumed used to determine compliance with the requirements of this permit unit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- Facility shall notify the APCO of a violation of any emission standards indicated by the CEMs within 96 hours of occurrence. The APCO shall be notified within 24 hours prior to a planned shut down of monitoring equipment. [District Rule 2520, 9.6.2; Rule 1080, 9.0 and 10.0 and 40 CFR 60.334(c)] Federally Enforceable Through Title V Permit
- 22. Startup and shutdown of the gas turbine, as defined in this permit, in 40 CFR Subpart A 60.2, and in Rule 4703 shall not exceed a time limit of two hours and one hour, respectively, per occurrence. Emission concentrations subsequent to this startup period shall not exceed the limits specified in this permit, except during shutdown. [40 CFR Subpart A 60.2] Federally Enforceable Through Title V Permit
- 23. All permits issued for facilities S-172, S-1118, S-1119, S-1120 and S-2049 are included in the same heavy oil central stationary source. [District Rule 2201] Federally Enforceable Through Title V Permit
- 24. Turbine lube oil vent shall be equipped with one pre-separator, one heat exchanger, and one air/oil separator with drain lines to turbine lube oil reservoir. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. All atmospheric lube oil vents from the turbine lube oil reservoir and the generator shall be equipped with a lube oil mist eliminator. [District Rule 2201] Federally Enforceable Through Title V Permit

- 26. Gas turbine exhaust shall be equipped with continuously recording NOx emission monitor located prior to catalyst. [District Rule 2201] Federally Enforceable Through Title V Permit
- 27. Gas temperature at SCR catalyst section inlet shall be monitored and recorded by operational temperature indicator. [District Rules 2201 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 28. Ammonia injection grid shall be equipped with operational ammonia flowmeter and injection pressure indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
- 29. Ammonia slip shall not exceed 20 ppmv and daily compliance with ammonia slip limit shall be demonstrated by means of the calculation procedure set forth in this operating permit. The "daily compliance" requirement can be met with a daily average slip value as calculated pursuant to condition 41 below. Ammonia slip shall be calculated as: slip = (a-(bxc/1,000,000)) x1,000,000/b, where a=ammonia injection rate(lb/hr)/17(lb/lb. mol), b=dry exhaust gas flow rate (lb/hr)/(29(lb/lb. mol), and c=change in measured NOx concentration ppmv at stack O2. [District Rule 4102]
- 30. Audits of monitors shall be conducted quarterly, except during quarters in which RATA testing is performed, in accordance with EPA guidelines. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 2201] Federally Enforceable Through Title V Permit
- 31. Facility shall monitor and record exhaust gas temperature at oxidation catalyst inlet. [District Rule 2201] Federally Enforceable Through Title V Permit
- 32. Compliance with VOC emission limits shall be demonstrated by sample collection by independent testing laboratory annually, using EPA Test Method 25, within 60 days prior to permit anniversary date. The District shall be notified prior to the completion of any sampling event. Official test results and field data collected shall be submitted to the District within 60 days of testing. [District Rule 2201] Federally Enforceable Through Title V Permit
- 33. Any lube oil/accumulating vent having visible emissions with an opacity of 5% or greater shall be tested, using EPA Test Method 25, to demonstrate compliance with lube oil/accumulating vent VOC emissions limit. If no visible emissions occur, VOC emissions are assumed to be zero. [District Rule 2201] Federally Enforceable Through Title V Permit
- 34. The gas turbine engine shall be equipped with continuously recording fuel gas flowmeter. [District Rule 2201] Federally Enforceable Through Title V Permit
- 35. All CEM data required to comply with the conditions in this permit shall be rounded to the same number of significant digits as the specified limits, but not less than two significant digits. [40 CFR 60.14(h)] Federally Enforceable Through Title V Permit
- 36. Except during system breakdowns, repairs and maintenance, calibration checks, and zero and span adjustments, the continuous emission monitoring system shall be in continuous operation. NOx emissions in ppmv (corrected to 15% O2) and O2 concentrations must be recorded continuously (except as noted before) and data shall be reduced to 15 minute averages per 40 CFR Part 60.13(e)(2). [District Rule 2201 and 40 CFR 60.486 paragraph (b), (c) and (d)] Federally Enforceable Through Title V Permit
- 37. Compliance with ammonia slip (ppmv) emission limit shall be demonstrated by sample collection by independent testing laboratory annually within 60 days prior to permit anniversary date. The District shall be notified prior to the completion of any sampling event. Official test results and field data collected shall be submitted to the District within 60 days of testing. [District Rule 4102] Federally Enforceable Through Title V Permit
- 38. The owner or operator shall install, certify, maintain, operate and quality-assure a Continuous Emission Monitoring System (CEMS) which continuously measures and records the exhaust gas NOx and O2 concentrations. [40 CFR 60.334(b) and District Rule 4703, 6.2.1] Federally Enforceable Through Title V Permit
- 39. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [40 CFR 60.334(b)(2) and District Rule 1080, 6.4] Federally Enforceable Through Title V Permit

- 40. The NOx and O2 CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specifications 2 and 3, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [40 CFR 60.334(b)(1) and, District Rule 1080, 6.3, 6.5, 6.6, & 7.2] Federally Enforceable Through Title V Permit
- 41. The CEMS shall be linked to a data logger which is compatible with the District's Data acquisition system. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080, 7.1] Federally Enforceable Through Title V Permit
- 42. The owner or operator shall maintain CEMS records that contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance, duration of any periods during which a continuous monitoring system or monitoring device is inoperative, and emission measurements. [40 CFR 60.7(b) and District Rule 1080, 7.3] Federally Enforceable Through Title V Permit
- 43. The owner or operator shall submit a written report of CEM operations for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NOx emissions, nature and the cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEM was inoperative (monitor downtime), except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [40 CFR 60.334(j), (j)(5) and District Rule 1080, 8.0] Federally Enforceable Through Title V Permit
- 44. Excess emissions shall be defined as any operating hour in which 4-hour rolling average NOx concentration exceeds applicable emissions limit and a period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx or O2 (or both). [40 CFR 60.334(J)(1)(iii)] Federally Enforceable Through Title V Permit
- 45. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the monitoring devices required by this rule to ensure that such devices are functioning properly. [District Rule 1080, 11.0] Federally Enforceable Through Title V Permit
- 46. Reduced Load Period shall be defined as the time during which a gas turbine is operated at less than rated capacity in order to change the exhaust gas diverter gate not exceeding one hour. [District Rule 4703, 3.19] Federally Enforceable Through Title V Permit
- 47. Thermal Stabilization Period shall be defined as the start up or shut down time during which the exhaust gas is not within the normal operating range, not to exceed two hours. [District Rule 4703, 3.25] Federally Enforceable Through Title V Permit
- 48. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
- 49. The sulfur content of each fuel source shall be: (i) documented in a valid purchase contract, a supplier certification, a tariff sheet or transportation contract or (ii) monitored weekly using ASTM Methods D4084, D5504, D6228, or Gas Processors Association Standard 2377. If H2S content is less than 0.25 gr/100 scf for 8 consecutive weeks, then the Monitoring frequency shall be every six (6) months. If any six (6) month monitoring show an exceedance, weekly monitoring shall resume. [40 CFR 60.334(h)(3) and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 50. Performance testing shall be conducted annually to measure NOx and CO emission concentrations using the following test methods: EPA Methods 7E or 20 for NOx emissions, EPA Methods 10 or 10B for CO emissions, EPA Methods 3, 3A, or 20 for Oxygen content of the exhaust gas. The 9-run tests shall be performed at highest physically achievable load of the gas turbine. [40 CFR 60.335(a), (b)(7) and District Rule 4703, 6.3.1, 6.4.1, 6.4.2, & 6.4.3] Federally Enforceable Through Title V Permit

- 51. The owner or operator shall be required to conform to the sampling facilities and testing procedures described in District Rule 1081, 3.0, & 6.0 (as amended 12/16/93). [District Rule 1081, 3.0 & 6.0] Federally Enforceable Through Title V Permit
- 52. The District must be notified 30 days prior to any performance testing and a test plan shall be submitted for District approval 15 days prior to such testing. [District Rule 1081, 7.1] Federally Enforceable Through Title V Permit
- 53. Performance testing shall be witnessed or authorized District personnel. Test results must be submitted to the District within 60 days of performance testing. [District Rule 1081, 7.2, 7.3] Federally Enforceable Through Title V Permit
- 54. The owner or operator of a stationary gas turbine system shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2 and 4703, 6.2.4] Federally Enforceable Through Title V Permit
- 55. Results of the CEM system shall be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance with all applicable requirements of CFR 60.13. [40 CFR 60.13 and District Rule 4703, 5.1, 6.4] Federally Enforceable Through Title V Permit
- 56. 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. [District Rule 4703, 6.2.6] Federally Enforceable Through Title V Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT: S-2049-2-6** 

#### EXPIRATION DATE: 04/30/2018

#### SECTION: SW12 TOWNSHIP: 29S RANGE: 28E

#### **EQUIPMENT DESCRIPTION:**

208 BHP CUMMINS MODEL 6BTA DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIRE WATER PUMP

# **PERMIT UNIT REQUIREMENTS**

- 1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
- 2. The IC engine shall be equipped with a turbocharger and with an aftercooler or intercooler. [District NSR Rule] Federally Enforceable Through Title V Permit
- 3. The IC engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District NSR Rule] Federally Enforceable Through Title V Permit
- 4. Engine shall be equipped with an rpm indicator. [District Rule 2520, 9.3.3] Federally Enforceable Through Title V Permit
- 5. Maximum engine speed shall not exceed 1760 rpm (182 bhp). [District NSR Rule] 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, 4.3, 17 CCR 93115 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 7. 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, 5.1] Federally Enforceable Through Title V Permit
- 8. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
- 9. Nitrogen oxide (NOx as NO2) emissions shall not exceed 7.1 grams/hp-hr. [District NSR Rule] Federally Enforceable Through Title V Permit
- 10. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District NSR Rule and District Rule 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
- 11. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

- 13. This engine shall be operated only for maintenance, testing, and 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, 4.3, 17 CCR 93115 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 14. 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 Rules 4702, 6.2 and 2520, 9.4.2 and 17 CCR 93115] Federally Enforceable Through Title V Permit
- The engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first.
  [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 16. The engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 17. The engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 18. 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. [District Rule 2520, 9.4.2 and 17 CCR 93115] Federally Enforceable Through Title V Permit
- 19. The permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action 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. [District Rule 1070 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 20. The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d of Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days of the oil changes for the engine. The analysis program must be part of the program, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 21. 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
- 22. This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702] Federally Enforceable Through Title V Permit

23. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 4702, 6.2 and 2520, 9.4.2, 17 CCR 93115 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit