



MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT

14306 Park Avenue Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

INACTIVE

B009134

Inactive type Permit has no description information.

EXPIRES LAST DAY OF: MAY 2010

OWNER OF OPERATOR (Co.#46)

Victorville, City of
14343 Civic Drive
Victorville, CA 92392-2399

EQUIPMENT LOCATION (Fac.#2723)

Victorville - Foxborough
12961 Enterprise Way
Victorville, CA 92395

Description:

COMBUSTION TURBINE POWER BLOCK (CTG-01) consisting of: A Solar Turbines Taurus 60 gaseous-fueled dry low-nox burner combustion turbine generator power block producing approximately 5 MW(e) with a connected heat recovery steam generator and a steam condensing turbine (shared with B009135 and B009136), maximum combustion turbine heat input of 60 MMBtu/hr. The power block vents through a selective catalytic reduction and oxidation catalyst system.

CONDITIONS:

1. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below.
2. This equipment shall be exclusively fueled with pipeline quality natural gas or propane, and shall be operated and maintained in strict accord with the recommendations of its manufacturer or supplier and/or sound engineering principles.
3. Emissions from this equipment (including its associated duct burner) shall not exceed the following emission limits at any firing rate, except for CO, NO_x, and VOC during periods of startup, shutdown and malfunction:
 - a. Hourly rate, computed every 15 minutes, verified by CEMS and annual compliance tests:
 - i. NO_x as NO₂ - 0.68 lb/hr (based on 2.0 ppmvd corrected to 15% oxygen and averaged over three hours)
 - ii. CO - 1.24 lb/hr (based on 6.0 ppmvd corrected to 15% oxygen and averaged over 24 hours)
 - b. Hourly rates, verified by annual compliance tests or other compliance methods in the case of SO_x:
 - i. VOC as CH₄ - 0.3 lb/hr (based on 2.5 ppmvd corrected to 15% oxygen)

Fee Schedule: 2 (e)

Rating: 60000000 Btu

SIC: 9199

SCC: 20100201

Location/UTM(Km):
473E/3820N

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

Victorville, City of
Public Works - Fleet Division

Victorville, CA 92392-2399

By: **COPY**
Brad Poiriez
Executive Director

- ii. SOx as SO2 - 0.06 lb/hr
- iii. PM10 - 0.24 lb/hr

4. Emissions of CO and NOx from this equipment shall only exceed the limits contained in Condition 3 during startup and shutdown periods. Startup is defined as the period beginning with ignition and lasting until the equipment has reached operating permit limits. Shutdown is 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.

5. Emissions from this facility shall not exceed the following emission limits, based on a rolling 12 month summary:
- a. NOx - 14 tons/year, verified by CEMS
 - b. CO - 37 tons/year, verified by CEMS

6. Particulate emissions from this equipment shall not exceed an opacity equal to or greater than twenty percent (20%) for a period aggregating more than three (3) minutes in any one (1) hour, excluding uncombined water vapor.

7. This equipment shall exhaust through a stack at a minimum height of 50 feet.

8. The owner/operator (o/o) shall not operate this equipment after the initial commissioning period without the selective catalytic NOx reduction system with valid District permit C009137 installed and fully functional.

9. The o/o shall provide stack sampling ports and platforms necessary to perform source tests required to verify compliance with District rules, regulations and permit conditions. The location of these ports and platforms shall be subject to District approval.

10. Emissions of NOx, CO, oxygen and ammonia slip shall be monitored using a Continuous Emissions Monitoring System (CEMS). Turbine fuel consumption shall be monitored using a continuous monitoring system. Stack gas flow rate shall be monitored using either a Continuous Emission Rate Monitoring System (CERMS) meeting the requirements of 40 CFR Part 75 Appendix A or a stack flow rate calculation method. The o/o shall install, calibrate, maintain, and operate these monitoring systems according to a District-approved monitoring plan and MDAQMD Rule 218, and they shall be installed prior to initial equipment startup.

11. The o/o shall conduct all required compliance/certification tests in accordance with a District-approved test plan. Thirty (30) days prior to the compliance/certification tests the o/o shall provide a written test plan for District review and approval. Written notice of the compliance/certification test shall be provided to the District ten (10) days prior to the tests so that an observer may be present. A written report with the results of such compliance/certification tests shall be submitted to the District within forty-five (45) days after testing.

12. The o/o shall perform the following annual compliance tests in accordance with the MDAQMD Compliance Test Procedural Manual. The test report shall be submitted to the District no later than six weeks prior to the expiration date of this permit. The following compliance tests are required:

- a. NOx as NO2 in ppmvd at 15% oxygen and lb/hr (measured per USEPA Reference Methods 19 and 20).
- b. VOC as CH4 in ppmvd at 15% oxygen and lb/hr (measured per USEPA Reference Methods 25A and 18).
- c. SOx as SO2 in ppmvd at 15% oxygen and lb/hr.
- d. CO in ppmvd at 15% oxygen and lb/hr (measured per USEPA Reference Method 10).
- e. PM10 in mg/m3 at 15% oxygen and lb/hr (measured per USEPA Reference Methods 5 and 202 or CARB Method 5)
- f. Flue gas flow rate in dscfm.
- g. Opacity (measured per USEPA Reference Method 9).
- h. Ammonia slip in ppmvd at 15% oxygen.

13. Continuous monitoring systems shall meet the following acceptability testing requirements from 40 CFR 60 Appendix B:
- a. For NOx, Performance Specification 2.
 - b. For oxygen, Performance Specification 3.
 - c. For CO, Performance Specification 4.
 - d. For stack gas flow rate, Performance Specification 6 (if CERMS is installed).

- e. For ammonia, a District approved procedure that is to be submitted by the o/o.
- f. For stack gas flow rate (without CERMS), a District-approved procedure that is to be submitted by the o/o.

14. The o/o shall submit to the APCO the following information for the preceding calendar year by January 30 of each year this permit is in effect. This information shall be maintained on site for a minimum of five (5) years and shall be provided to District, State or Federal personnel on request:

- a. Operating parameters of emission control equipment, including but not limited to ammonia injection rate, NOx emission rate and ammonia slip.
- b. Total plant operation time (hours), number of startups, hours in startup, and hours in shutdown period.
- c. Date and time of the beginning and end of each startup and shutdown period.
- d. All continuous emissions data reduced and reported in accordance with the District-approved CEMS protocol.
- e. Maximum hourly and total calendar year emissions of NOx and CO (including calculation protocol).
- f. A log of all excess emissions, including the information regarding malfunctions/breakdowns required by Rule 430.
- g. Any permanent changes made in the plant process or production which would affect air pollutant emissions, and indicate when changes were made.
- h. Any maintenance to any air pollutant control system (recorded on an as-performed basis).

15. During an initial commissioning period of no more than 120 days, commencing with the first firing of fuel in this equipment, NOx, CO, VOC and ammonia concentration limits shall not apply. The o/o shall minimize emissions of NOx, CO, VOC and ammonia to the maximum extent possible during the initial commissioning period.

16. Within 60 days after achieving the maximum firing rate at which the facility will be operated, but not later than 180 days after initial startup, the operator shall perform an initial compliance test. This test shall demonstrate that this equipment is capable of operation at 100% load in compliance with the emission limits in Condition 3 above and shall include certification of CEMS and CERMS (or stack gas flow calculation method) at 100% load, startup modes and shutdown mode