MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
14306 Park Avenue Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

INACTIVE

B011186

Inactive type Permit has no description information.

EXPIRES LAST DAY OF: FEBRUARY 2014

OWNER OF OPERATOR (Co.#2349)

MP Mine Operations LLC
67750 Bailey Road
Mountain Pass, CA 92366

EQUIPMENT LOCATION (Fac.#364)

Mountain Pass Mine
67750 Bailey Road
Mountain Pass, CA 92366

Description:
COMBUSTION TURBINE GENERATOR #4 consisting of: 12.3 MW Solar Model Titan 130, 143 MMBtu/hr natural gas fired combustion turbine with a connected heat recovery steam generator (HRSG) with 87.12 MMBtu/hr natural gas fired duct burner, manufacturer and model to be determined. The turbine and HRSG vent to 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 maintained in strict accord with the recommendations of its manufacturer or supplier and/or sound engineering principles.

3. This equipment is subject to the federal NSPS codified at 40 CFR Part 60, Subparts A (General Provisions) and KKKK (Standards of Performance for Stationary Combustion Turbines).

4. Emissions from this equipment shall not exceed the limits contained in Condition 7 except during startup and shutdown periods. Startup is defined as the period beginning with ignition and ending when 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.

Fee Schedule: 2 (f)	Rating: 230000000 Btu	SIC: 1099	SCC: 20100101	Location/UTM(Km): 634E/3926N

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.

MP Mine Operations LLC
1700 S. Pavilion Center Drive, 8th Floor
Las Vegas, NV 89135

By: **COPY**
Brad Poiriez
Executive Director

5. The o/o shall not operate this equipment after the initial commissioning period without operating the selective catalytic reduction (SCR) system listed in District permit C011180. During an initial commissioning period of no more than 270 days, commencing with the first firing of fuel in this equipment, PM10, NOx, CO, VOC and ammonia concentration limits listed in Condition 7 shall not apply. The o/o shall minimize emissions of PM10, NOx, CO, VOC and ammonia to the maximum extent possible during the initial commissioning period.

6. For the purpose of compliance with the emissions limits in Condition 7 and the recordkeeping requirements of Condition 9, the o/o shall employ a Predictive Emissions Monitoring System (PEMS) for emissions of NOx and CO consisting of the continuously-monitored parameters listed in Condition 11 (i.e., fuel flow rate and flue gas oxygen level) along with the most recent results of stack testing conducted under Conditions 12 and 13.

7. Stack emissions from this equipment vented to properly operating control equipment under District Permits C011183 and C011180, shall not exceed the following hourly emission limits at any firing rate, except during periods of startup, shutdown, verified by fuel use and compliance tests:
a. NOx as NO2:
1. 1.64 lb/hr operating at 100% load (based on 2 ppmvd corrected to 15% O2 and averaged over one hour
b. CO:
1. 3.00 lb/hr operating at 100% load (based on 6 ppmvd corrected to 15% O2 and averaged over one hour)
c. VOC as CH4:
1. 0.57 lb/hr operating at 100% load
d. SOx as SO2:
1. 0.14 lb/hr operating at 100% load
e. PM10:
1. 2.53 lb/hr operating at 100% load
f. NH3
1. 1.52 lb/hr operating at 100% load (based on 5.0 ppmvd ammonia corrected to 15% O2)

8. This equipment shall be operated only on PUC pipeline quality natural gas.

9. The o/o shall maintain an operations log for this equipment on-site and current for a minimum of five (5) years, and said log shall be provided to District personnel on request. The operations log shall include the following information at a minimum:
a. Total operation time (hours per day, hours per year);
b. Annual fuel use per rolling twelve months;
c. Maximum hourly, maximum daily, total quarterly, and total rolling twelve month year emissions of NOx, CO, PM10, VOC and SOx (including calculation protocol); and,
d. Any permanent changes made to the equipment that would affect air pollutant emissions, and indicate when changes were made.

10. Records of fuel supplier certifications of fuel sulfur content shall be maintained to demonstrate compliance with the sulfur dioxide and particulate matter emissions limits.

11. The owner/operator shall continuously monitor fuel flow rate, flue gas oxygen level and ammonia injection rate in lb/hr.

12. The o/o shall perform an initial compliance test on this equipment in accordance with the MDAQMD Compliance Test Procedural Manual within 180 days of initial start up. The test report shall be submitted to the District within 6 weeks of performance of the test. The initial compliance test shall be for all items listed in condition 7 above, in addition to:
a. NOx as NO2 in ppmvd at 15% oxygen and lb/hr (measured per USEPA Reference Methods 19 and 20).
b. CO in ppmvd at 15% oxygen and lb/hr (measured per USEPA Reference Method 10).
c. PM10 in mg/m3 at 15% oxygen and lb/hr (measured per USEPA Reference Method 201A).
d. SOx as SO2 in ppmvd and lb/hr at 15% oxygen calculated based on fuel supplier provided information.
e. NH3 in ppmvd and lb/hr at 15% oxygen
f. Opacity (measured per USEPA reference Method 9).
g. Flue gas flow rate in dscf per minute.
h. VOC as CH4 in ppmvd and lb/hr at 15% oxygen and lb/hr (measured per USEPA Reference Methods 25A and 18).

13. The o/o shall perform annual compliance tests on this equipment in accordance with the MDAQMD Compliance Test Procedural Manual. The test shall be performed no more than 14 months following the previous test (40 CFR 60 subpart KKKK). Per the MDAQMD Compliance Test Procedural Manual, test reports shall be submitted to the District within 45 days of performance of the test. 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. CO in ppmvd at 15% oxygen and lb/hr (measured per USEPA Reference Method 10).
c. PM10 in mg/m3 at 15% oxygen and lb/hr (measured per USEPA Reference Method 201A).
d. NH3 in ppmvd and lb/hr at 15% oxygen
e. Flue gas flow rate in dscf per minute.
f. Opacity (measured per USEPA reference Method 9).

14. The owner/operator must surrender to the District sufficient valid Emission Reduction Credits for this equipment before the start of construction of any part of the project for which this equipment is intended to be used. In accordance with Regulation XIII the owner/operator shall obtain 17 tons of NOx offsets and 46 tons of PM10 offsets for the new equipment proposed for Stage I and Stage II of the project.

15. PM10 Emissions from the CHP Plant including all equipment under District permit numbers: B011111, B011112, B011177, B011184, B011185, B011186, C011113, C011114, C011178, C011179, C011180, C011181, C011182, C011183, E011115, E011175, E011176 shall not exceed 36.1 tons/year. Cumulative PM10 emissions from the CHP Plant shall be calculated on a monthly basis in lb/month and tons per rolling twelve months. PM10 emissions calculations for the CHP plant shall be made available to the District upon request and shall be kept on site for a minimum of five (5) years.

16. Mountain Pass Mine Voluntary Emissions Limit/Synthetic Minor Hazardous Air Pollutant Limits:

(a). General Limits for Entire Facility. The total emissions for the Mountain Pass Mine shall be less than 25 tons per year of VOC. The total emissions of Hazardous Air Pollutants (HAPs) for the Mountain Pass Mine shall not exceed 9.9 tons per year for any single HAP and 24.9 tons per year for any combination of HAPs calculated on an annual basis. HAPs are defined in 40 CFR 61.01 Lists of pollutants and are the chemical compounds listed in section 112(b) of the Clean Air Act (Act).
(b). Monitoring, Periodic Monitoring & Recordkeeping Conditions. To prove compliance with condition (a) above, permittee shall maintain usage records of all VOC- and HAP-containing solvent materials. Such records shall be compiled into an annual usage report and added to the Potential to Emit from permitted equipment to show that HAP limits cannot be exceeded per the PTE calculations as approved by the district. For equipment where PTE calculations are not available, annual total HAP emissions shall be calculated from solvent operations and be added to the annual HAP emissions from fuel burning and other HAP emitting equipment. Annual or PTE HAP/VOC emissions from fuel burning and other emitting equipment for purposes of this condition shall be determined by use of HAP/VOC emissions factors (as set forth by District approved emission factors), or by annual actual emissions as determined by source test of the equipment, or by methods and emission factors established in an approved comprehensive Emission Inventory Plan (CEIP).
(c) A facility wide Comprehensive Emission Inventory (CEIR) must be submitted to the District, in a format approved by the District, for all emitted criteria air pollutant on a yearly basis, and every three years for toxic air pollutants, which is to be received by the District no later than May 31 of the following year.
[40 CFR 70.6 (a)(3)(i)(B) - Periodic Monitoring Requirements]
[Rule 204 - Permit Conditions; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]
[California Clean Air Act, Health and Safety Code \S\S39607 and \S\S44300 et seq., and the Federal Clean Air Act, \S110(a)(2)(F)(ii), codified in 40 CFR 60 Subpart Q]