



## MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT

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

**INACTIVE**

B011289

Inactive type Permit has no description information.

**EXPIRES LAST DAY OF: FEBRUARY 2013**

### **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:**

BOILER, TEMPORARY - CRACK PHASE 1A consisting of: 83 MMBtu/hr natural gas fired boiler with dry low NOx burner, flue gas recirculation and a selective catalytic reduction 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. The owner/operator (o/o) shall comply with all District rules and regulations including, but not limited to, malfunction/breakdown notifications.
3. This equipment shall be fired on PUC grade natural gas with the following exceptions where ultra low sulfur diesel (<0.0015% S by weight) can be used:
  - a. During a period of natural gas curtailment or supply interruption.
  - b. Periodic testing not to exceed 48 hours in any calendar year.
4. The o/o shall monitor hourly, daily, quarterly, and annual fuel usage of this equipment through a non-resettable totalizing fuel meter or a natural gas utility meter which supplies natural gas to only this equipment or by any other District approved methods. This monitoring shall be used to satisfy the recordkeeping requirements in condition 11.

Fee Schedule: 2 (e)

Rating: 83000000 Btu

SIC: 1099

SCC: 10200501

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. In the event that ultra-low sulfur diesel is used as specified in permit condition 3, the following regulatory requirements pertaining to diesel engines then apply which include but are not limited to:
- a. 40 CFR Part 60, Subpart Dc "Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units"
    - i. District approved written site-specific monitoring plan
    - ii. Submission of reports to USEPA for each six month period no later than the thirtieth day following the end of the six month reporting period as required
    - iii. Records of fuel supplier certifications of fuel sulfur content
    - iv. Observation of the 20% opacity limits
  - b. 40 CFR Part 63, Subpart JJJJJ "National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers"
    - i. Initial and biennial tune ups
    - ii. Operating load maintained within a maximum of 110% of the average load recorded during the most recent performance test
    - iii. Notification to administrator that changes have been made that would affect air pollutant emissions, and indicate when changes were made.
6. This equipment shall be operated and maintained in strict accord with the recommendations of the manufacturer or supplier and/or sound engineering principles.
7. This equipment is subject to the federal NSPS codified as 40 CFR Part 60, Subparts A (General Provisions) and Dc ("Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units").
8. Emissions from this equipment shall not exceed the limits contained in Condition 10 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.
9. 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 C011290. During an initial commissioning period of no more than 120 days, commencing with the first firing of natural gas fuel in this equipment, PM10, NOx, CO, VOC and ammonia concentration limits listed in Condition 10 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.
10. Stack emissions from this equipment vented to properly operating control equipment under District Permits C011290, 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. 0.52 lb/hr operating at 100% load (based on 5 ppmvd corrected to 3% O2 and averaged over one hour)
  - b. CO:
    1. 3.12 lb/hr operating at 100% load (based on 50 ppmvd corrected to 3% O2 and averaged over one hour)
  - c. VOC as CH4:
    1. 0.36 lb/hr operating at 100% load
  - d. SOx as SO2:
    1. 0.05 lb/hr operating at 100% load
  - e. PM10:
    1. 0.415 lb/hr operating at 100% load
  - f. NH3
    1. 1.04 lb/hr operating at 100% load (based on 10.0 ppmvd ammonia corrected to 3% O2 )
11. 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, SOx and NH3(including calculation protocol); and,

d. Any permanent changes made to the equipment that would affect air pollutant emissions, and indicate when changes were made.

12. O/o shall submit the initial notification required under 40 CFR Part 60 Subpart Dc \S60.48c

13. 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 10 above, in addition to:

- a. NOx as NO2 in ppmvd at 3% oxygen and lb/hr (measured per USEPA Reference Methods 19 and 7, 7A, 7C, or 7E).
- b. CO in ppmvd at 3% oxygen and lb/hr (measured per USEPA Reference Method 10).
- c. PM10 in mg/m3 at 3% oxygen and lb/hr (measured per USEPA Reference Methods 5 and 202 or CARB Method 5).
- d. SOx as SO2 in ppmvd and lb/hr at 3% oxygen calculated based on fuel supplier provided information. (measured per USEPA Reference Methods 19)
- e. NH3 in ppmvd and lb/hr at 3% 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 3% oxygen and lb/hr (measured per USEPA Reference Methods 25A and 18).

14. The o/o shall perform annual compliance tests on this equipment 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 3% oxygen and lb/hr (measured per USEPA Reference Methods 19 and 7, 7A, 7C, or 7E).
- b. CO in ppmvd at 3% oxygen and lb/hr (measured per USEPA Reference Method 10).
- c. PM10 in mg/m3 at 3% oxygen and lb/hr (measured per USEPA Reference Methods 5 and 202 or CARB Method 5).
- d. NH3 in ppmvd and lb/hr at 3% oxygen
- e. Flue gas flow rate in dscf per minute.
- f. Opacity (measured per USEPA reference Method 9).

15. Owner/operator shall meet all applicable requirements of 40 CFR Part 60, Subpart Dc "Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units", 40 CFR Part 63, Subpart JJJJJ "National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers" (if firing diesel). In the event of conflict between District Rules, these permit conditions, the NSPS and the NESHAP, the more stringent requirements shall apply.

16. (a) Mountain Pass Mine Facility Emissions Limits: The total criteria pollutant emissions for the Mountain Pass Mine shall be less than: 42 tons per year of NOx, 25 tons per year of VOC, 46 tons per year of PM10, 25 tons per year of SOx, and 100 tons per year of CO. The total emissions of Hazardous Air Pollutants (HAPs) for the Mountain Pass Mine shall be less than 10 tons per year for any single HAP and 25 tons per year for any combination of HAPs calculated on an annual basis. HAPs are defined in 40 CFR 61.01 and are the chemical compounds listed in section 112(b) of the Clean Air Act (Act).

(b). Monitoring, Periodic Monitoring & Recordkeeping Conditions. This facility shall demonstrate compliance with the specific facilitywide emission limits through the submission of an approved CEIP and CEIR. The CEIP and CEIR shall be based on actual emissions as determined by source test of the equipment or on district approved methods and emissions factors only. Generic or default emission factors shall not be used without approval from the District. The Comprehensive Emission Inventory Plan (CEIP) shall be due no later than March 31 of the year following the year of the actual emissions to be reported. Emissions will be calculated separately for each emissions source on a monthly basis and used to calculate the 12 month rolling annual total. All emissions sources including all permit units will be summed on a monthly basis and used to calculate the 12 month rolling annual total. The permit unit and facilitywide monthly emissions, 12 month rolling annual emissions total, and approved CEIR shall be kept on site and provided to District personnel upon request.

(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 April 30 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]