



MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT

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

AUTHORITY TO CONSTRUCT

B011111

If construction is not completed by the expiration date of this permit, it may be renewed for one additional year upon payment of applicable fees. Any additional extension will require the written approval of the Air Pollution Control Officer. This Authority to Construct may serve as a temporary Permit to Operate provided the APCO is given prior notice of intent to operate and the Permit to Operate is not specifically denied.

EXPIRES LAST DAY OF: FEBRUARY 2026

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 #1 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: Deltek, model: DINO4308, serial number: KG11726. The turbine and HRSG vent to a selective catalytic reduction and oxidation catalyst system.

CONDITIONS:

1. This equipment shall be installed, operated and maintained in strict accordance with those recommendations of the manufacturer/supplier and/or sound engineering principles which produce the minimum emissions of contaminants. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit. [District Rule 1302]

2. 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).

3. Emissions from this equipment shall not exceed the limits contained in Condition 6 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. [District Rule 1302]

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
Air Pollution Control Officer

4.The o/o shall not operate this equipment after the restart commissioning period ending December 20, 2021 without operating the selective catalytic reduction (SCR) system listed in District permit C011114. During the restart commissioning period which ends on December 20, 2021, the PM10, NOx, CO, VOC and ammonia concentration limits listed in Condition 6 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.
[District Rules 1303 and 1320]

5.For the purpose of compliance with the emissions limits in Condition 6 and the recordkeeping requirements of Condition 8, 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 10 (i.e., fuel flow rate and flue gas oxygen level) along with the most recent results of stack testing conducted under Condition 11.
[District Rules 1303 and 1320]

6.Stack emissions from this equipment vented to properly operating control equipment under District Permits C011113 and C011114, 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)

[District Rules 1303 and 1320]

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

[District Rules 1303 and 1320]

8.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.

[District Rules 1303 and 1320]

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

[40 CFR 60 Subpart KKKK]

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

[District Rules 1303 and 1320]

11.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 later than March 20, 2022 and no more than 14 months following the previous test (40 CFR 60 subpart KKKK) thereafter. 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 Methods 5 and 202).

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).
- [District Rules 1303 and 1320]

12. PM10 Emissions from the CHP Plant including all equipment under District permit numbers: B011111, B011184, C011113, C011114, C011178, C011181, E011115 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.

[District Rule 1303 - Offsets]

13. Actual emissions from this facility shall be less than the following:

- a. 42 tons per year of NOx [Rule 1303(B)]
 - b. 46 tons per year of PM10 [Rule 1303(B)]
 - c. 25 tons per year of VOC
 - d. 25 tons per year of SOx
 - e. 100 tons per year of CO, calculated on a rolling twelve-month basis
 - f. 10 tons per year for any single HAP and 25 tons per year for any combination of HAPs calculated on a rolling twelve-month 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). Compliance with the annual emission limits shall be demonstrated via 12 month rolling sum for CO and HAP via annual emission inventory reports for all criteria pollutants and HAP.
- [District Rule 1303 - Offsets]

14. A facility wide Comprehensive Emission Inventory (CEI) for all emitted criteria and toxic air pollutants must be submitted to the District, in a format approved by the District, upon District request.

[District Rule 107(b); H&S Code 39607 & 44341-44342; and 40 CFR 51, Subpart A]