



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 2027

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: 14.5 MW Solar Model Titan 130, 156 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 stationary combustion turbine, associated duct burner, air pollution control equipment, and monitoring equipment shall be operated and maintained in a manner consistent with good air pollution control practices for minimizing emissions at all times, including during startup, shutdown, and malfunction. 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]
[40 CFR 60 Subpart KKKKa]
2. This equipment is subject to the federal NSPS codified at 40 CFR Part 60, Subparts A (General Provisions) and KKKKa (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

Fee Schedule: 2 (f)

Rating: 243120000 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**
Eldon Heaston
Air Pollution Control Officer

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 Rules 1159 and 1302]

4. The owner/operator (o/o) shall not operate this equipment without operating the selective catalytic reduction (SCR) system listed in District permit C011114.

[District Rules 1303 and 1320]

5. To demonstrate continuous compliance with the emissions limits in Condition 6, the o/o shall employ a Predictive Emissions Monitoring System (PEMS) for emissions of NO_x and CO. The facility shall continuously monitor the following parameters in accordance with a district-approved PEMS Monitoring and Quality Assurance Plan that must be submitted to the District prior to operation of the equipment:

- a. fuel flow rate; and
- b. flue gas oxygen level; and
- c. ammonia injection rate in lb/hr; and
- d. most recent annual source test report

[District Rules 1159(F), 1303 BACT 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. NO_x as NO₂: 1.79 lb/hr operating at 100% load, based on 2 ppmvd corrected to 15% O₂ and averaged over one hour [District Rules 1159, 1303 - BACT and 40 CFR 60 Subpart KKKKa]
- b. CO: 3.27 lb/hr operating at 100% load, based on 6 ppmvd corrected to 15% O₂ and averaged over one hour [Rules 1302 and 1159]
- c. VOC as CH₄: 0.63 lb/hr operating at 100% load [Rule 1302]
- d. SO_x as SO₂: 0.14 lb/hr operating at 100% load [40 CFR 60 Subpart KKKKa]
- e. PM₁₀: 1.81 lb/hr operating at 100% load [Rules 475 and 1303 - BACT]
- f. NH₃ 1.66 lb/hr operating at 100% load, based on 5.0 ppmvd ammonia corrected to 15% O₂ [District Rule 1303 - BACT]

[District Rules 475, 1159, 1303 and 1320]

[40 CFR 60 Subpart KKKKa]

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

[District Rules 431, 1303 and 1320]

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

[District Rule 475]

[40 CFR 60 Subpart KKKKa]

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 month, hours per year); [Rules 1159, 1303 BACT, 40 CFR 60 Subpart KKKKa]
- b. Annual fuel use per rolling twelve months; [Rules 1159, 1303 BACT, 40 CFR 60 Subpart KKKKa]
- c. Maximum hourly, maximum daily, total quarterly, and total rolling twelve month year emissions of NO_x, CO, PM₁₀, VOC and SO_x (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]

[40 CFR 60 Subpart KKKKa]

10. The o/o shall perform an initial compliance test on this equipment in accordance with the MDAQMD Compliance Test Procedural Manual. The test shall be performed within 60 days after achieving the maximum production rate upon completion of the turbine uprate project, but not later than 180 days after completion of the turbine uprating project (40 CFR 60 subpart KKKKa). 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 475, 1159, 1303 and 1320]
[40 CFR 60 Subpart KKKKa]

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 more than 12 calendar months following the previous test (40 CFR 60 subpart KKKKa) 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 475, 1159, 1303 and 1320]
[40 CFR 60 Subpart KKKKa]

12. The following reports as required to be submitted pursuant to 40 CFR 60 Subpart KKKKa Section 60.4375a:

- a. Notifications as required by 60.8 which apply to the initial and subsequent performance tests; and
- b. Within 60 days after the date of completing each performance test or continuous emissions monitoring systems (CEMS) performance evaluation that includes a relative accuracy test audit (RATA), you must submit the results following the procedures specified in paragraph (g) of this section. You must submit the report in a file format generated using the EPA's Electronic Reporting Tool (ERT). Alternatively, you may submit an electronic file consistent with the extensible markup language (XML) schema listed on the EPA's ERT website (<https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert>) accompanied by the other information required by 60.8(f)(2) in PDF format; and
- c. You must submit to the Administrator semiannual reports of the following recorded information. Beginning on January 15, 2027, or once the report template for this subpart has been available on the Compliance and Emissions Data Reporting Interface (CEDRI) website (<https://www.epa.gov/electronic-reporting-air-emissions/cedri>) for one year, whichever date is later, submit all subsequent reports using the appropriate electronic report template on the CEDRI website for this subpart and following the procedure specified in paragraph (g) of this section. The date report templates become available will be listed on the CEDRI website. Unless the Administrator or delegated State agency or other authority has approved a different schedule for submission of reports, the report must be submitted by the deadline specified in this subpart, regardless of the method in which the report is submitted.

Do not use CEDRI to submit information you claim as CBI. If any information present in any report required by 40 CFR 60 Subpart KKKKa, follow the CBI submission procedures outlined in Section 60.4375a.
[40 CFR 60 Subpart KKKKa]

13. This facility shall submit an Emissions Control Plan as required by Rule 1159. The approved ECP shall be available on site upon request by District staff.
[District Rule 1159]

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

- a. 42 tons per year of NOx [District Rule 1303(B)]
 - b. 46 tons per year of PM10 [District 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]

15. 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), Health & Safety Code 39607 & 44341-44342, 17 CCR 93400 et seq., and 40 CFR 51, Subpart A]