



# 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

M014678

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:

DIESEL IC ENGINE, EMERGENCY GENERATOR consisting of: Year of Manufacture TBD, EPA Tier II Engine Family CCPXL106.NZS, equipped with a Miratech SCR/DPF/DOC aftermarket emissions control device which achieves Tier 4 Final emissions: Stack Data: H: 24' Diam.:14" Temp: 885 degrees F CFM: 30,778

One Caterpillar, Diesel fired internal combustion engine Model No. C175-20 and Serial No. TBD, Direct Injected, Turbo Charged, After Cooled, Selective Catalytic Reduction, Diesel Particulate Filter, Diesel Oxidation Catalyst, Selective Catalytic Reduction, producing 5647 bhp with cylinders at 1800 rpm while consuming a maximum of 274.6 gal/hr. This equipment powers a Caterpillar Generator Model No. C175-20 and Serial No. TBD, rated at 3900 kW.

#### EMISSIONS RATES

Emission Type	Est. Max Load	Unit
CO	2.60	gm/bhp-hr
NOx	0.50	gm/bhp-hr
PM10	0.02	gm/bhp-hr
PM2.5	0.02	gm/bhp-hr
SOx	0.01	gm/bhp-hr
VOC	0.15	gm/bhp-hr

#### CONDITIONS:

Fee Schedule: 10 (1d)

Rating: 5647 bhp

SIC: 1099

SCC: 20100102

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

1. This certified Tier II stationary compression-ignited internal combustion engine, and the associated air pollution control equipment, shall be installed, operated, and maintained in strict accord 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 1303]

[60 CFR 60.4211]

2. A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this equipment to indicate elapsed engine operating time.

[17 CCR 93115.10(d)]

3. This equipment shall only be fired on diesel fuel that meets the following requirements, or an alternative fuel approved by the ATCM for Stationary CI Engines:

a. Ultra-low sulfur concentration of 0.0015% (15 ppm) or less, on a weight per weight basis; and,

b. A cetane index or aromatic content, as follows:

(i) A minimum cetane index of 40; or,

(ii) A maximum aromatic content of 35 volume percent.

[17 CCR 93115.5(a), 40 CFR 80.510(b), and 40 CFR 60.4207(b)]

Note: Use of CARB certified ULSD fuel satisfies these requirements.

4. This engine shall not be operated unless all of the following emission control systems are properly functioning:

a. Diesel Oxidation Catalyst

b. Selective Catalytic Reduction

c. Diesel Particulate Trap

Furthermore, no changes shall be made to any of the above systems unless done so by a factory certified technician.

[40 CFR 60.4211, MDAQMD Rule 1302]

5. This equipment shall be equipped with a DPF backpressure monitor that notifies the owner/operator when the high backpressure limit of the engine is approached.

[17 CCR 93115.10(d)]

6. This engine shall be limited to use for stand by power only, to allow for continued operations of plant processes during interruption of commercially available power and/or maintenance or repair of power generated by combustion turbines under permits B011111 and B011184. "Stand by" use includes planned and unplanned outages of alternative energy supply from combustion turbines under permits B011111 and B011184 when the facility has no other source of power available. Stand by use shall not exceed 500 hours total per year.

[District Rule 301 (E)(10)]

7. The owner/operator shall maintain an operations log for this equipment current and on-site (or at a central location) for a minimum of three (3) years, and this log shall be provided to District, State and/or Federal personnel, upon request. The log shall include, at a minimum, the information specified below:

a. Date(s) of each use and hours of operation;

b. Reason for use (testing & maintenance, emergency, planned outage etc.);

c. Monthly and rolling 12 month period operation in terms of fuel consumption (in gallons) and/or total hours;

d. Fuel sulfur concentration as required by condition 3 (the o/o may use the supplier's certification of sulfur content if it is maintained as part of this log); and,

e. Maintenance performed on this equipment.

[17 CCR 93115.10(f)]

8. An initial test demonstrating compliance with the Tier IV Final emissions standards for the following pollutants:

a. NO<sub>x</sub>, CARB Method 100

b. PM<sub>10</sub>, CARB Method 5

c. VOC, CARB Method 100

d. CO, CARB Method 100

The test shall be conducted in accordance with the procedures specified in MDAQMD Compliance Test Procedural Manual and 17 CCR

93115 within 180 days of commencing operation. The owner/operator must submit a compliance/certification test protocol at least thirty (30) days prior to the compliance/certification test date. The owner/operator must conduct all required compliance/certification tests in accordance with a District-approved test protocol. The owner/operator must notify the District a minimum of ten (10) days prior to the compliance/certification test date so that an observer may be present. The final compliance/certification test results must be submitted to the District within sixty (60) days of completion of the test. All compliance/certification test notifications, protocols, and results may be submitted electronically to [reporting@mdaqmd.ca.gov](mailto:reporting@mdaqmd.ca.gov). The test may be conducted during the packaging of the engine and control device by the manufacturer provided that the test methods used meet the requirements of 17 CCR 93115.14.

[District Rule 1303 - BACT]

[District Rule 407]

[17 CCR 93115.7]

9. The o/o shall perform subsequent compliance tests on this equipment in accordance with the procedures set forth in Condition 7 and in the MDAQMD Compliance Test Procedural Manual. The owner/operator must submit a compliance/certification test protocol at least thirty (30) days prior to the compliance/certification test date. The owner/operator must conduct all required compliance/certification tests in accordance with a District-approved test protocol. The owner/operator must notify the District a minimum of ten (10) days prior to the compliance/certification test date so that an observer may be present. The final compliance/certification test results must be submitted to the District within sixty (60) days of completion of the test. All compliance/certification test notifications, protocols, and results may be submitted electronically to [reporting@mdaqmd.ca.gov](mailto:reporting@mdaqmd.ca.gov). The test shall be performed no more than 12 months following the previous test. After compliance with the Tier IV Final emissions standards for two consecutive annual tests, the testing frequency may be reduced to every 36 months. If the results of any subsequent performance test indicate the engine is not operating in compliance with the Tier IV Final emission standards, testing every 12 months shall be resumed. Per the MDAQMD Compliance Test Procedural Manual, test reports shall be submitted to the District within 45 days of performance of the test.

[District Rule 1303 - BACT]

[17 CCR 93115.7]

10. In the event that any of the control equipment is replaced, the new (replacement) emission control device must be of the same Manufacturer and model designation and it must be installed by Factory Certified personnel to avoid follow-on source testing. If the Manufacturer or the Model designation of the new (replacement) control equipment is not identical to the original or if the unit is not installed by Factory Certified personnel, then the engine shall be source tested in accordance with the requirements outlined in Conditions 7 and 8, within 180 days after the equipment replacement. The source test results must confirm that the engine meets the Tier IV Final emission standards.

[District Rules 1303 and 1320]

11. This engine is subject to the requirements of Title 17 CCR 93115, the Airborne Toxic Control Measure (ATCM) for Stationary Compression Ignition Engines and 40 CFR 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (NSPS). In the event of a conflict between these conditions and the ATCM or NSPS, the more stringent requirements shall govern.

[District Rule 1302]

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

a. 42 tons per year of NO<sub>x</sub> [Rule 1303(B)]

b. 46 tons per year of PM<sub>10</sub> [Rule 1303(B)]

c. 25 tons per year of VOC

d. 25 tons per year of SO<sub>x</sub>

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]

13. 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]