



## MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT

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

### PERMIT TO OPERATE

B013391

Operation under this permit must be conducted in compliance with all information included with the initial application, initial permit condition, and conditions contained herein. The equipment must be maintained and kept in good operating condition at all times. This Permit to Operate or copy must be posted on or within 8 meters of equipment. If a copy is posted, the original must be maintained on site, available for inspection at all times.

**EXPIRES LAST DAY OF: JUNE 2024**

#### OWNER OF OPERATOR (Co.#2502)

Castle Mountain Venture  
980 American Pacific Dr., Suite 102  
Henderson, NV 89014

#### EQUIPMENT LOCATION (Fac.#3896)

Castle Mountain Mine  
115575 Hart Mine Road  
Ivanpah, CA 92364

#### Description:

DIESEL IC ENGINE, GENERATOR #1 consisting of: Year of Mfg. 12/2019, EPA Engine Family FCPXL18.1HTG: Stack Data H: 10 ft D: 0.42 ft Temp: 799 F ACFM 2350

One Caterpillar, Diesel fired internal combustion engine Model No. C18 ACERT and Serial No. CM800387, Direct Injected, Turbo Charged, After Cooled, Selective Catalytic Reduction, Exhaust Gas Recirculation, Diesel Particulate Filter, Exhaust Gas Recirculation, Diesel Oxidation Catalyst, Electronic Control Module, Selective Catalytic Reduction, producing 778 bhp with 6 cylinders at 1800 rpm while consuming a maximum of 33.4 gal/hr. This equipment powers a Caterpillar Generator Model No. 500 and Serial No. G6B25881, rated at 455 kW.

#### EMISSIONS RATES

Emission Type	Est. Max Load	Unit
CO	0.10	gm/Kw-hr
NOx	0.10	gm/Kw-hr
PM10	0.010	gm/Kw-hr
PM2.5	0.01	gm/Kw-hr
SOx	0.005	gm/bhp-hr
VOC	0.02	gm/Kw-hr

#### CONDITIONS:

Fee Schedule: 1 (c)

Rating: 778 bhp

SIC: 1041

SCC: 20100102

Location/UTM(Km):  
672E/3905N

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.

Castle Mountain Venture  
980 American Pacific Dr.

Henderson, NV 89014

By: **COPY**  
**Brad Poiriez**  
Air Pollution Control Officer

1. This certified Tier 4 Final stationary compression-ignited internal combustion engine and its associated emission control systems 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 air contaminants. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit.

[40 CFR 60.4211(a)]

2. The Diesel Particulate Filter shall be installed with a backpressure monitor that notifies the owner/operator when the high backpressure limit of the engine is approached.

[17 CCR 93115.10(d)(2)]

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

- a. Engine Control Module?
- b. Diesel Particulate Filter?
- c. Diesel Oxidation Catalyst?
- d. Selective Catalytic Reduction-Urea? ?
- e. Exhaust Gas Recirculation?

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

[District Rule 1302]

4. 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: ?
  - ? 1. A minimum cetane index of 40; or, ?
  - ? 2. A maximum aromatic content of 35 volume percent.

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

Note: Use of CARB certified ULSD fuel satisfies the above requirements.

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

[17 CCR 93115.10(d)(1) and 40 CFR 60.4209(a)]

6. Owner/operator shall conduct inspection, whichever is more frequent of, at least once every calendar quarter; or, after every 2,000 hours of engine operation. ??An inspection includes any testing, maintenance, and/or other procedures that ensure the Internal Combustion Engine is operated in strict accordance with the manufacturer's specifications and in continual compliance with the provisions of this rule. ?

[District Rule 1302]

7. The owner/operator shall maintain an operations log for this unit, current and on-site (or at a central location), for a minimum of five (5) years, and this log shall be provided to District, State and Federal personnel upon request. The log shall include, at a minimum, the information specified below: ?

- a. Quarterly fuel use and quarterly hours of operation, on a calendar quarter basis;
- b. The date and a summary of each engine inspection including any testing and maintenance performed.
- c. Fuel sulfur concentration (may use the fuel supplier's certification of sulfur content if it is maintained as part of this log). ?
- d. Records of any corrective action taken after digital engine monitoring has notified the owner or operator of malfunction.

[17 CCR 93115, District Rules 1302 and 1320]

8. 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]

9. 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]