

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

E012452

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: NOVEMBER 2024

OWNER OF OPERATOR (Co.#87)

Commanding Officer, MCLB Barstow, CA Box 110570 Bldg 196 Attn: Air Program Manager Barstow, CA 92311-5050

EQUIPMENT LOCATION (Fac. #587)

USMC MCLB - Yermo Annex USMC Logistics Base Barstow, CA 923115013

Description:

NATURAL GAS IC ENGINE, EMERGENCY GENERATOR (BLDG 573) consisting of: A natural gas fueled IC engine manufactured in 2014, with a maximum horsepower rating of 176 bhp and a maximum fuel flow of 1,090 scfh. This engine is equipped with a factory-installed three-way Catalytic Converter and an Air-to-Fuel Ratio Controller. Exhaust flow is 625 acfm at 1063 degrees Fahrenheit through an 8 foot tall stack measuring 4 inches in diameter. Facility Elevation is 1964 ft above MSL.

One Cummins, NG fired internal combustion engine Model No. WSG-1068 and Serial No. TBD, Turbo Charged, After Cooled, Three-Way Catalyst (also NSCR), Air-To-Fuel Ratio Controller, Electronic Control Module, Spark-Ignited, producing 176 bhp with 10 cylinders at 1800 rpm while consuming a maximum of 1090 scf/hr. This equipment powers a Cummins Generator Model No. 100GGHH and Serial No. TBD, rated at 100 kW(e).

EMISSIONS RATES

Emission Type	Est. Max Load	Unit
СО	4.00	gm/bhp-hr
NOx	2.00	gm/bhp-hr
PM10	0.01	gm/bhp-hr
SOx	0.017	gm/bhp-hr
VOC	1.00	gm/bhp-hr

CONDITIONS:

Fee Schedule: 7 (g)	Rating: 1 device	SIC: 9711	SCC: 20100202	Location/UTM(Km): 512E/3861N

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.

Commanding Officer, MCLB Barstow, CA Box 110570 Attn: Air Program Manager Barstow, CA 92311-5050



Brad Poiriez Air Pollution Control Officer 1. This stationary, spark-ignited, internal combustion engine, air-fuel ratio controller, and control device (three-way catalyst) 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. [40 CFR 60.4233(e), 60.4234, 60.4243(a),(d), and (g) - Subpart JJJJ - NSPS for Stationary Spark Ignition ICE]

2. A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this unit to indicate elapsed engine operating time. [District Rule 1302(B)(1)(a)]

3. This unit shall only be fired on PUC-Regulated Natural Gas fuel, whose sulfur concentration is less than or equal to 0.0018% (18 ppm) on a weight per weight basis. [District Rules 431 and 1303]

4. 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. Date of each use and duration of each use (in hours);

b. Reason for each use (testing & maintenance, emergency, emission testing, etc.);

c. Monthly and calendar year operation in terms of total hours; and

d. Records of all maintenance and repair actions performed on the engine, the AFRC, and the three-way catalyst.

[District Rules 1302(B)(1)(a) and 1302; 40 CFR 60.4245, 40 CFR 1048]

5. This engine may operate in response to notification of impending rotating outage if the area utility has ordered rotating outages in the area where the engine is located or expects to order such outages at a particular time, the engine is located in the area subject to the rotating outage, the engine is operated no more than 30 minutes prior to the forecasted outage, and the engine is shut down immediately after the utility advises that the outage is no longer imminent or in effect. [District Rule 1302]

6. This unit shall not be used to provide power during a voluntarily agreed to power outage and/or power reduction initiated under an Interruptible Service Contract (ISC); Demand Response Program (DRP); Load Reduction Program (LRP) and/or similar arrangement(s) with the electrical power supplier.
[40 CFR 60.4243(d), 60.4248]

7. This engine shall be source tested in accordance with the procedures outlined in 40 CFR 60.4244 within 90 days after the three-way catalyst is replaced. The source testing shall verify that the following emission limits are not exceeded:
NOx: 0.15 g/bhp-hr
VOC: 0.20 g/bhp-hr
CO: 1.60 g/bhp-hr
PM10: 0.10 g/bhp-hr
[District Rule 1302(B)(1)(a), 40 CFR 60.4244]

8. This unit shall be limited to emergency use only, defined as in response to a fire or when commercially available power has been interrupted. In addition, this unit shall be operated no more than 100 hours per year for testing and maintenance, excluding compliance source testing. Time required for source testing will not be counted toward the 100 hour per year limit. [District Rule 1302(B)(1)(a); 40 CFR 60, Subpart JJJJ]

9. This engine is subject to the requirements of the New Source Performance Standards (NSPS) for Stationary Spark Ignition IC Engines (40 CFR 60, Subpart JJJJ). [District Rule 1302(B)(1)(a); 40 CFR 60, Subpart JJJJ]

10. A facility wide Comprehensive Emission Inventory Report (CEIR) 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]