

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

B014187

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: NOVEMBER 2024

OWNER OF OPERATOR (Co.#84)

NTC - Public Works Bldg 602, 5th Street Fort Irwin, CA 92310

EQUIPMENT LOCATION (Fac. #589)

NTC - Dir. of Public Works, Mission Related Bldg. 602, 5th street Fort Irwin, CA 923105085

Description:

DIESEL IC ENGINE, PORTABLE* GENERATOR (RELOCATABLE COMBAT SUPPORT) consisting of: A certified Tier 4f diesel engine, USEPA Family KCEXL04.5AAJ, manufactured in 2019 and equipped with factory-installed emission control. Exhaust flow is approximately 611 ACFM at 731 degrees Fahrenheit through an 7.9 foot tall by 4 inch diameter stack: *Please note, this equipment may be operated at various locations at this facility, however emissions comply with the stationary requirements of 17 CCR 93115 and 40 CFR 60, Subpart IIII.

One Cummins, Inc., Diesel fired internal combustion engine Model No. QSB5-G11 and Serial No. 74643020, Direct Injected, Turbo Charged, Selective Catalytic Reduction, Exhaust Gas Recirculation, Exhaust Gas Recirculation, Diesel Oxidation Catalyst, Electronic Control Module, Selective Catalytic Reduction, Ammonia Oxidation Catalyst, Charge Air Cooler, producing 153 bhp with 4 cylinders at 1800 rpm while consuming a maximum of 7.1 gal/hr. This equipment powers a Doosan Generator Model No. G125 and Serial No. 63049572, rated at 114 kW.

EMISSIONS RATES

| Emission Type | Est. Max Load | Unit |
|---------------|---------------|-----------|
| СО | 0.0037 | gm/bhp-hr |
| NOx | 0.157 | gm/bhp-hr |
| PM10 | 0.0075 | gm/bhp-hr |
| PM2.5 | 0.0074 | gm/bhp-hr |
| SOx | 0.0045 | gm/bhp-hr |
| VOC | 0.0075 | gm/bhp-hr |
| | | |

Fee Schedule: 1 (b)

Rating: 153 bhp

SCC: 20100102

Location/UTM(Km): 529E/3902N

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.

SIC: 9711

NTC - Public Works Attn: Air Resources Manager

Fort Irwin, CA 92310

By: **COPY** Brad Poiriez

Air Pollution Control Officer

CONDITIONS:

1. This certified Tier 4 Final 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. [District Rule 1302; 40 CFR 60.4211(a)]

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

- a. Diesel Oxidation Catalyst;
- b. Electronic Control Module;
- c. Exhaust Gas Recirculation System;
- d. Selective Catalytic Reduction (SCR) System;
- e. Ammonia Oxidation Catalyst;
- f. Turbocharger; and
- g. Charge Air Cooler

Furthermore, no changes shall be made to any of the above systems unless done so by a factory certified technician. [District Rule 1302; 40 CFR 60.4211]

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:
- 1. A minimum cetane index of 40; or,
- 2. A maximum aromatic content of 35 volume percent.
- [17 CCR 93115.5(a) and 40 CFR 80.510(c)]

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

4. A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this unit to indicate elapsed engine operating time. [Title 17 CCR 93115.10(d)]

5. The owner/operator shall maintain an operations log for this engine 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 following information:

a. Date, location, and duration of each use;

- b. Monthly and consecutive 12 month period hour meter readings, including the dates of all monthly readings;
- c. Date of each maintenance action or repair on any equipment noted in Condition #2;

d. Description of each maintenance action or repair on any equipment noted in Condition #2;

e. Fuel sulfur concentration as required by condition #3 (you may use the supplier's certification of sulfur content if it is maintained as part of this log);

- f. Calendar year operating hours as determined by the installed hour meter (to assist in CEI calculations); and
- g. Results of any source testing conducted on the engine.

[District Rules 1302 and 1320; Title 17 CCR 93115]

6. This engine shall not operate for more than 2,500 hours in any consecutive twelve month period. [District Rules 1302 and 1320]

7. 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]

8. This engine may be relocated throughout the NTC in support of operations without prior notification being sent to the District, but shall not be used within 700 meters of any K-12 school, residence, hospital, or other sensitive receptor location. Sensitive receptor locations

include, but are not limited to, hospitals, schools, and day care centers, and such other locations as the District board or California Air Resources Board may determine. [District Rule 204 and H&S Code 42705.5(a)(5)]

In every twelve (12) month period (rolling 12-month summation), the actual emissions of this facility shall be less than 20 tons NOx, 20 tons VOC, and 12 tons PM10. The o/o shall demonstrate compliance with this limit through the submission of a facility-wide Comprehensive Emission Inventory (CEI) for all emitted criteria and toxic air pollutants (including 12 month rolling emissions summary). This CEI 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]