



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

B015453

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: JUNE 2026

OWNER OF OPERATOR (Co.#2500)

5E Boron Americas, LLC
9329 Mariposa Rd. Suite # 210
Hesperia, CA 92344

EQUIPMENT LOCATION (Fac.#3893)

5E Boron Americas, LLC
27555 Hector Road
Newberry Springs, CA 92365

Description:

DIESEL IC ENGINE, PORTABLE* GENERATOR consisting of: Two Identical EPA Tier IVF, Year of Mfg. 2023, Engine Family PCPXL18.1HTH. *Note these engines may be operated at various locations throughout the district but meets the more stringent requirements of the Stationary ATCM and 40 CFR 60 Subpart IIII therefore is not required to move provided it is located in accordance with the receptor distance specified in the permit conditions.

One CAT, Diesel fired internal combustion engine Model No. C18 and Serial No. CM801789, CM801775, Direct Injected, Turbo Charged, Selective Catalytic Reduction, Exhaust Gas Recirculation, Exhaust Gas Recirculation, Electronic Control Module, Oxidation Catalyst, Periodic Trap Oxidizer, Selective Catalytic Reduction, Ammonia Oxidation Catalyst, Charge Air Cooler, producing 779 bhp with 6 cylinders at 1800 rpm while consuming a maximum of 66.4 gal/hr. This equipment powers a CAT Generator Model No. XQ1140 and Serial No. OTP200328, rated at 910 kW.

EMISSIONS RATES

Emission Type	Est. Max Load	Unit
CO	0.01	gm/bhp-hr
NOx	0.08	gm/bhp-hr
PM10	0.01	gm/bhp-hr
PM2.5	0.01	gm/bhp-hr
SOx	0.01	gm/bhp-hr
VOC	0.02	gm/bhp-hr

Fee Schedule: 1 (d)

Rating: 1558 bhp

SIC: 1479

SCC: 20100102

Location/UTM(Km):
552E/3846N

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.

5E Boron Americas, LLC
9329 Mariposa Rd. Suite # 210
Hesperia, CA 92344

By: **COPY**
Eldon Heaston
Air Pollution Control Officer

CONDITIONS:

1. This certified Tier IVF 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. 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.

Note: Use of CARB certified ULSD fuel satisfies the above requirements.
[17 CCR 93115.5(a), 40 CFR 80.510, 40 CFR 1090.305 and 40 CFR 60.4207(b)]

3. 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 1160(E)(1)(a)(ii), 17 CCR 93115.10(d)(1) and 40 CFR 60.4209(a)]

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

- a. Diesel Oxidation Catalyst;
- b. Ammonia Oxidation Catalyst;
- c. Turbocharger
- d. Electronic Control Module; and,
- e. Selective Catalytic Reduction System; and
- f. Periodic Trap Oxidizer

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]

5. The owner/operator of this Internal Combustion Engine shall conduct inspections, whichever is the 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 this 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 1160 (E)(1)(a)]

6. 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, location, and duration of each use (in hours);
- b. Quarterly operating hours on a calendar quarter basis as determined by the installed hour meter;
- c. Records of all inspection, maintenance and/or repair actions performed on the engine or associated air pollution control equipment, including date and description on any equipment noted in Condition #4;
- d. Fuel sulfur concentration as required by condition #2 (you may use the supplier's certification of sulfur content if it is maintained as part of this log);
- e. any corrective action taken after the DPF backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached;
- f. Quarterly fuel use on a calendar quarter basis.

[District Rule 1160, 17 CCR 93115.10(a)(3)(C) and (D), 17 CCR 93116 and 60.4214(c)]

7. This equipment shall not operate within 500 meters of any receptor which includes any residence, business or sensitive receptor such as a hospital or school. Such operation will require the submittal of an application for a revised permit to operate and may require a Health Risk Assessment.
[District Rule 1320]

8. This unit shall not operate within a 1000 feet of the outer boundary of any K-12 school. Such operation will require the submittal of an application for a revised permit to operate so that the applicable requirements of the California Health and Safety Code Section 42301.6 will be met.

[H&S Code 42301.6; District Rule 1302(C)(2)(a)]

9. 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 204]

10. The owner/operator must contact the MDAQMD PRIOR to adding any new equipment or modifying any existing equipment which requires submission of a MDAQMD permit application and may require a Health Risk Assessment.

[District Rule 1320]

11. Emissions from the entire facility shall not exceed the following limits:

- a. Oxides of Nitrogen (NOx): 20 tons per consecutive twelve month period, measured as NO₂;
- b. Oxides of Sulfur (SOx): 20 tons per consecutive twelve month period;
- c. Volatile Organic Compounds (VOC): 20 tons per consecutive twelve month period;
- d. Carbon Monoxide (CO): 80 tons per consecutive twelve month period;
- e. Particulate Matter 10 microns and less (PM₁₀): 12 tons per consecutive twelve month period;
- f. Any single Hazardous Air Pollutant (HAP): 8 tons per consecutive twelve month period; and
- g. All HAPs combined: 20 tons per consecutive twelve month period.

Compliance shall be demonstrated to the District through the submission of a District approved Comprehensive Emission Inventory Report (CEI) or other equivalent and District approved method.

[District Rules 1302 and 1320]

12. 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]