



## 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

B015240

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:**

BOILER, NATURAL GAS consisting of: Fulton model FBS-475 natural gas fueled utility boiler, serial number F10412690A rated at 425 bhp with a maximum heat input of 17.8 MMBtu/hr. The boiler is heated via a low NOx burner Serial 12182721. This boiler consumes approximately 17,786 cubic feet of natural gas per hour and has an exhaust flow of approximately TBD acfm at TBD degrees Fahrenheit through a TBD foot high by TBD foot diameter stack.

#### **CONDITIONS:**

1. This equipment 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. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit. [District Rules 204 and 1303]

2. This boiler shall only be fueled with PUC-Regulated pipeline quality natural gas. A dedicated fuel meter shall be installed to directly measure fuel usage. [District Rules 431, 1157 and 1303]

3. The burner shall not exceed the following emission limits verified via source test when annual heat input is 50,000 MMBtu/year:

a. NOx: No more than 7 ppmvd measured as NO<sub>2</sub> at 3% O<sub>2</sub> nor more than 0.008 lb/MMBtu;

b. CO: No more than 10 ppmvd measured at 3% O<sub>2</sub> nor more than 0.0073 lb/MMBtu;

[District Rules 1157, 1303 BACT, and 1320]

Fee Schedule: 2 (e)

Rating: 17790000 Btu

SIC: 1479

SCC: 10200602

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**

**Brad Poiriez**

Air Pollution Control Officer

4. Prior to the permit expiration date each year, the o/o shall either perform a NOx and CO compliance test, or have this equipment tuned, as specified by Rule 1157. A tune-up may be performed in lieu of a compliance test during those permit years when the annual heat input to this unit does not exceed 50,000 MMBtu per year. Should the fuel use reach 50,000 MMBtu/year or more, a compliance test will be required not less than every twelve (12) months commencing when the fuel usage reaches the 50,000 MMBtu/year threshold. [District Rule 1157]

5. If a source test is required pursuant to the fuel use as specified in permit condition 4, source tests for NOx and CO shall be conducted as follows:

The NOx source test must be conducted in accordance with USEPA Method 7E or CARB Method 100, the CO source test must be conducted in accordance with USEPA Method 10 or CARB Method 100, and the Stack Gas Oxygen must be measured in accordance with USEPA Method 3 or 3A or ARB Method 100. All tests must be conducted while the furnace is running at a minimum load of 90%.

The owner/operator must submit a source test protocol at least thirty (30) days prior to the scheduled source test date for District review and approval, and the owner/operator must conduct all required tests in accordance with the District-approved test protocol.

The owner/operator must notify the District a minimum of ten (10) days prior to the first day of testing so that an observer may be present.

The source test report must be submitted to the District within forty-five (45) 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) [District Rules 204, 1157(E)(1), and 1320; 40 CFR 60.8]

6. In the event of a malfunction of any emissions related part of this boiler, the unit must be shut down as soon as safely possible and shall not be restarted until all malfunctions have been corrected. Equipment breakdowns shall be reported to the District in accordance with District Rule 430. [District Rules 430 and 1302]

7. The owner/operator must maintain an operations log for this equipment. This log shall be maintained current, kept for a total of five (5) years and be provided to authorized personnel upon request. The log shall contain the following at a minimum:

- a. The monthly natural gas usage in MMSCF.
- b. Consecutive rolling 12 month period natural gas usage in MMSCF.
- c. Times and durations of malfunctions, a description of each malfunction, and the corrective action taken for each malfunction.
- d. The results of all initial, annual, and all subsequent equipment tune ups and source tests.
- e. Fuel sulfur concentration (the owner/operator may use the supplier's certification of sulfur content if it is maintained as part of this log).

[District Rules 1157 and 1302]

8. A statement certifying the total heat input for this boiler for the previous calendar year shall be submitted to the District no later than March first each year. This statement may be submitted electronically to [reporting@mdaqmd.ca.gov](mailto:reporting@mdaqmd.ca.gov) [District Rule 1157(E)(2)(a)]

9. This equipment may not be operated within 500 meters (1640 feet) of any receptor. 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]

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. Pilot plant equipment permitted under B015240, B015241, B015242, B015243, B015244, B015248, B015245 and B015249 shall not be operated with equipment under permits B013333, B013334, B013335, B013336, B013337, B013338, B013344, B013345, B013346, B013347, B014763, B013320, B013321, B013323, B013325, B013326, B013327, B013328, B013329, B013330, B013331 and T013324 but may be operated with B013319 and B013318. [District Rules 1303 and 1320]

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

- a. Oxides of Nitrogen (NO<sub>x</sub>): 24 tons per consecutive twelve month period, measured as NO<sub>2</sub>;
- b. Oxides of Sulfur (SO<sub>x</sub>): 24 tons per consecutive twelve month period;
- c. Volatile Organic Compounds (VOC): 24 tons per consecutive twelve month period;
- d. Carbon Monoxide (CO): 95 tons per consecutive twelve month period;
- e. Hydrogen Sulfide (H<sub>2</sub>S): 9.5 tons per consecutive twelve month period;
- f. Lead (Pb): 0.5 tons per consecutive twelve month period;
- g. Particulate Matter 10 microns and less (PM<sub>10</sub>): 14.5 tons per consecutive twelve month period;
- h. Any single Hazardous Air Pollutant (HAP): 9.5 tons per consecutive twelve month period; and
- i. All HAPs combined: 24 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]

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]