



## 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

B014946

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: JULY 2024**

#### OWNER OF OPERATOR (Co.#681)

General Atomics - LSNC  
3550 General Atomics Court  
San Diego, CA 92121-1194

#### EQUIPMENT LOCATION (Fac.#1367)

G A Aeronautical Sys - Adelanto Yucca  
9779 Yucca Road  
Adelanto, CA 92301

#### Description:

DIESEL IC ENGINE, PORTABLE GPU\* consisting of: A certified Tier 4 final diesel engine, USEPA Family JCEXL04.5AAH, manufactured in 2018 and equipped with factory-installed emission controls. Exhaust flow is 602 acfm at 778 degrees Fahrenheit through a 5.375 foot tall by 3 inch diameter stack. \*Please note, this equipment may be operated at various locations at this facility, however emissions comply with the requirements of 17 CCR 93115 and 40 CFR 60, Subpart IIII.

One Cummins, Inc., Diesel fired internal combustion engine Model No. QSB4.5 and Serial No. 74329705, Direct Injected, Turbo Charged, Selective Catalytic Reduction, Exhaust Gas Recirculation, Exhaust Gas Recirculation, Diesel Oxidation Catalyst, Selective Catalytic Reduction, Ammonia Oxidation Catalyst, Charge Air Cooler, Engine/Powertrain Control Module, producing 155 bhp with 4 cylinders at 2000 rpm while consuming a maximum of 7.5 gal/hr. This equipment powers a Hobart Ground Power Unit Model No. TBD and Serial No. 219PS23176, rated at 72 kW.

#### EMISSIONS RATES

Emission Type	Est. Max Load	Unit
CO	0.030	gm/bhp-hr
NOx	0.07	gm/bhp-hr
PM10	0.015	gm/bhp-hr
PM2.5	0.015	gm/bhp-hr
SOx	0.005	gm/bhp-hr
VOC	0.030	gm/bhp-hr

Fee Schedule: 1 (b)

Rating: 155 bhp

SIC: 3728

SCC: 20100102

Location/UTM(Km):  
459E/3826N

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.

General Atomics - LSNC  
ATTN: LSNC

San Diego, CA 92186-5608

By: **COPY**

**Brad Poiriez**

Air Pollution Control Officer

## CONDITIONS:

1. This certified 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.

[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. Exhaust Gas Recirculation System;
- c. Turbocharger;
- d. Engine Control Module;
- e. Selective Catalytic Reduction System; and,
- f. Ammonia Oxidation Catalyst.

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

[District Rule 1302]

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); 40 CFR 80.510(b)]

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. This engine shall not operate for more than 1,000 hours in any consecutive 12 month period.

[District Rules 1302, 1303, and 1320]

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. Monthly and consecutive 12 month period hour meter readings, including the dates of all monthly readings;
- b. Date of each maintenance action or repair on any equipment noted in Condition #2;
- c. Description of each maintenance action or repair on any equipment noted in Condition #2;
- d. 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);
- e. Calendar year operating hours as determined by the installed hour meter (to assist in CEI calculations); and
- f. Date, description and results of all inspections and/or source testing conducted on the engine as required by conditions #9 and #10.

[District Rules 1160, 1302 and 1320; Title 17 CCR 93115]

7. This engine may be relocated throughout this facility in support of operations without prior notification being sent to the District, but shall not be used within 300 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)]

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.

9. The owner/operator must comply with the emission standards under District Rule 1160(C)(1) over the entire life of the engine. Compliance may be demonstrated by meeting certified manufacturer emission rates, pursuant to (E)(1)(c)(ii).

Maximum Allowable Emission Standards:

- a. NOx: 80 ppmvd corrected to 15% O<sub>2</sub>;
- b. VOC: 106 ppmvd corrected to 15% O<sub>2</sub>; and
- c. CO: 4500 ppmvd corrected to 15% O<sub>2</sub>.

Documentation from the manufacturer stating that the engine is certified to meet the emission standards must be retained on-site (or at a central location) and shall be provided to District, State and Federal personnel upon request.

[District Rule 1160]

10. This engine must be inspected at least once each quarter or after every 2,000 hours of operation, whichever is more frequent. The manufacturer recommended frequency may be used as an alternative to this schedule, upon approval by the APCO. An inspection includes any testing, maintenance, and/or other procedures that ensure the engine is operated in strict accordance with the manufacturer's specifications and in continual compliance with the provisions of District Rule 1160. Records of such inspections must include the following information as a minimum:

- a. Inspection date;
- b. Records of testing, as applicable; and,
- c. Records of maintenance.

[District Rule 1160(E)(1)(a)]

11. The entire facility shall not emit any of the Regulated Pollutants listed below in excess of the following limits in any consecutive 12 month period to remain below the USEPA's Synthetic Minor - 80% (SM-80) threshold:

- a. Oxides of Nitrogen (NO<sub>x</sub>): 20 tons per consecutive twelve (12) month period, measured as NO<sub>2</sub>;
- b. Oxides of Sulfur (SO<sub>x</sub>): 20 tons per consecutive twelve (12) month period;
- c. Volatile Organic Compounds (VOC): 20 tons per consecutive twelve (12) month period;
- d. Carbon Monoxide (CO): 80 tons per consecutive twelve (12) month period;
- e. Hydrogen Sulfide (H<sub>2</sub>S): 8 tons per consecutive twelve (12) month period;
- f. Lead (Pb): 0.48 tons per consecutive twelve (12) month period;
- g. Particulate Matter 10 microns and less (PM<sub>10</sub>): 14.5 tons per consecutive twelve (12) month period;
- h. Any single Hazardous Air Pollutant (HAP): 8 tons per consecutive twelve (12) month period; and,
- i. All HAPs combined: 20 tons per consecutive twelve (12) month period.

Compliance with these limits shall be demonstrated through the submission of a facility-wide Comprehensive Emission Inventory (CEI) for all emitted Regulated Air Pollutants. Exceedance of these emission limits may trigger offsets, BACT, National Emission Standards for Hazardous Air Pollutants (NESHAP), and/or require submission of a Title V permit application.

[District Rules 1302 and 1303]

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), H&S Code 39607 & 44341-44342, and 40 CFR 51, Subpart A]