



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

B015414

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 2026

OWNER OF OPERATOR (Co. #681)

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

EQUIPMENT LOCATION (Fac. #1648)

G A Aeronautical Sys - El Mirage Rd
73 El Mirage Airport Road
Adelanto, CA 92301

Description:

DIESEL IC ENGINE, PORTABLE* GENERATOR consisting of:

One Isuzu, Diesel fired internal combustion engine Model No. BR-4JJ1X and Serial No. 237058, Charge Air Cooler, Diesel Oxidation Catalyst, Electronic Control Module, Exhaust Gas Recirculation, Exhaust Gas Recirculation, Selective Catalytic Reduction, Selective Catalytic Reduction, producing 74 bhp with 4 cylinders at 1800 rpm while consuming a maximum of 4.39 gal/hr. This equipment powers a Whisperwatt Generator Model No. DH-07501 and Serial No. 7354726, rated at 56 kW.

EMISSIONS RATES

Emission Type	Est. Max Load	Unit
CO	0.22	gm/bhp-hr
NOx	0.12	gm/bhp-hr
PM10	0.01	gm/bhp-hr
PM2.5	0.01	gm/bhp-hr
SOx	0.004	gm/bhp-hr
VOC	0.03	gm/bhp-hr

CONDITIONS:

Fee Schedule: 1 (b)

Rating: 74 bhp

SIC: 3721

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
Executive Director

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. Electronic Control Module;
- c. Exhaust Gas Recirculation System;
- d. SCR;
- e. Diesel Oxidation Catalyst;
- f. Charge Air Cooler; and
- g. Turbocharger

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 93116.3(a); 40 CFR 60.4207(b) and 40 CFR 1090.305]

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 must conduct an inspection, whichever is 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 the 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]

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 (decimal degrees, xx.xxxx;-yy.yyyyy), and duration of each use (in hours);
- 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 1160, 1302 and 1320; 17 CCR 93115]

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 facility in support of operations without prior notification being sent to the District, but shall not be used within 500 meters of any K-12 school, residence, hospital, or other sensitive receptor.
[District Rule 204]

9. 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_x): 20 tons per consecutive twelve (12) month period, measured as NO₂;
- b. Oxides of Sulfur (SO_x): 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 (H₂S): 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 (PM₁₀): 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]

10. 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]