



## 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

**B015255**

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: OCTOBER 2025**

#### OWNER OF OPERATOR (Co. #970)

Lockheed Martin Aeronautics Co.  
1011 Lockheed Way  
Palmdale, CA 93599

#### EQUIPMENT LOCATION (Fac. #4274)

Lockheed - Fort Irwin  
983 Inner Loop Road  
Fort Irwin, CA 92310

#### Description:

DIESEL IC ENGINE, PORTABLE GENERATOR consisting of: A certified Tier 4f diesel engine, EPA Family LJDXL04.5315, manufactured in 2020 and equipped with factory-installed emission controls. Exhaust flow is approximately 533 scfm at 910 degrees Fahrenheit through a 12.9 foot tall by 4 inch diameter stack:

One John Deere, Diesel fired internal combustion engine Model No. 4045HFG04 and Serial No. TBD, Ammonia Oxidation Catalyst, Charge Air Cooler, Compression-Ignited, Direct Injected, Electronic Control Module, Exhaust Gas Recirculation, Exhaust Gas Recirculation, Oxidation Catalyst, Selective Catalytic Reduction, Selective Catalytic Reduction, Turbo Charged, producing 133 bhp with 4 cylinders at 1800 rpm while consuming a maximum of 6.60 gal/hr. This equipment powers a OEM Generator Model No. JD80-03FT4 and Serial No. 119127-1-1, rated at 80 kW.

#### EMISSIONS RATES

| Emission Type | Est. Max Load | Unit      |
|---------------|---------------|-----------|
| CO            | 0.0746        | gm/bhp-hr |
| NOx           | 0.246         | gm/bhp-hr |
| PM10          | 0.0149        | gm/bhp-hr |
| PM2.5         | 0.0149        | gm/bhp-hr |
| SOx           | 0.005         | gm/bhp-hr |
| VOC           | 0.0149        | gm/bhp-hr |

#### CONDITIONS:

Fee Schedule: 1 (b)      Rating: 133 bhp      SIC: 3812      SCC: 20100102      Location/UTM(Km): 528E/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.

Lockheed Martin Aeronautics Co.  
1011 Lockheed Way  
  
Palmdale, CA 93599

By: **COPY**  
**Brad Poiriez**  
Air Pollution Control Officer

- 1.This certified 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 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(C)(a)]
- 2.This diesel ICE and its associated equipment cannot be operated at the same engine-print (spot) for more than 365 consecutive days. This equipment must be moved within this facility or moved to another facility annually. The amount of time that the equipment is kept in the storage location does not count towards the residence requirement so long as the equipment is not set up in an operational configuration.  
[Title 17 CCR 93116.2(a)(29)]
- 3.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. Electronic 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]
- 4.This unit shall only be fired on ultra-low sulfur diesel fuel whose sulfur concentration is less than or equal to 0.0015% (15 ppm) on a weight per weight basis per CARB Diesel or equivalent requirements; or alternative diesel fuel, or CARB diesel fuel utilizing fuel additives, that has been verified through the Verification Procedure for In-Use Strategies to Control Emissions from Diesel Engines.  
[Title 17 CCR 93116.3(a)]
- 5.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 1302(C)(2)(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 (decimal degrees, xx.xxxxx;-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 #3;
  - d. Description of each maintenance action or repair on any equipment noted in Condition #3; and
  - e. Fuel sulfur concentration as required by condition #4 (you may use the supplier's certification of sulfur content if it is maintained as part of this log).
- [District Regulation XIII - NSR]
- 7.This engine shall not operate at Fort Irwin NTC for more than 300 hours in any consecutive 12 month period. Before this limitation can be increased, the facility is required to submit to the District an application to modify the permit, which may trigger BACT review and may necessitate a Health Risk Assessment (HRA). In addition, public notice and/or a commenting period may be required.  
[District Rules 1302, 1303, and 1320]
- 8.This unit is subject to the requirements of the Airborne Toxic Control Measure (ATCM) for Portable Compression Ignition Engines (Title 17 CCR 93116). In the event of conflict between these conditions and the ATCM, the more stringent requirements shall govern.  
[Title 17 CCR 93116, District Rule 1302]
- 9.This entire facility (MDAQMD Facility no. 4274 - Lockheed - Fort Irwin) shall not emit any regulated air pollutant or any pollutant listed under section 112(b) of the Clean Air Act 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; and,
- g. Particulate Matter 10 microns and less (PM<sub>10</sub>): 12.0 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.

For the purposes of implementation of the Title I (Part D) Nonattainment New Source Review (nonattainment NSR), Title I (Part C) Prevention of Significant Deterioration (PSD), and Title V Operating Permit Programs under the Clean Air Act, Facility refers to a stationary source, or group of stationary sources that are located on one or more contiguous or adjacent properties that are owned, operated, supervised, or controlled by one or more Department of Defense (DoD) component(s) that were disaggregated during the course of major source determination(s), based upon appropriate industrial groupings and support facility relationships. Compliance with these limits shall be demonstrated through the submission of an installation-wide Comprehensive Emission Inventory (CEI) for all emitted regulated air pollutants or any pollutant listed under section 112(b) of the Clean Air Act (including 12 month emissions summary). Exceedance of these emission limits may trigger offsets, BACT, and/or require submission of a Title V permit application.

[District Rules 1302 and 1303, 40 CFR 51.165, 40 CFR 52.21(b), 40 CFR 70.2 and "Major Source Determinations for Military Installations under the Air Toxics, New Source Review, and Title V Operating Permit Programs of the Clean Air Act," memorandum from John S. Seitz, Director, Office of Air Quality Planning and Standards, (Aug. 2, 1996)]

10. This entire facility (MDAQMD Facility no. 4274 - Lockheed - Fort Irwin) shall not emit any Hazardous Air Pollutants (HAP) listed in or pursuant to Section 112(b) of the Clean Air Act 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. Any single Hazardous Air Pollutant (HAP): 8 tons per consecutive twelve (12) month period; and,
- b. All HAPs combined: 20 tons per consecutive twelve (12) month period.

For the purposes of determining the applicability of Section 112 air toxics requirements under the Clean Air Act, Facility refers to a stationary source, or group of stationary sources that are located within a contiguous area and under common control. Compliance with these limits shall be demonstrated through the submission of an installation-wide Comprehensive Emission Inventory (CEI) for all emitted pollutants listed under section 112 (b) (including 12 month emissions summary). Exceedance of these emission limits may trigger National Emission Standards for Hazardous Air Pollutants (NESHAP) or Maximum Achievable Control Technology (MACT) standards.

[40 CFR 63.2]

11. A Comprehensive Emission Inventory (CEI) for all emitted criteria and toxic air pollutants located at this military installation (including, but not limited to, MDAQMD Facility nos. 589, 2806, 3023, 3280, 3534, 3903, and 4274) must be submitted to the District, in a format approved by the District, upon District request. For the purposes of CEI, Facility is defined as every structure, appurtenance, installation, and improvement on land which is associated with a source of air releases or potential air releases of a hazardous material. [District Rule 107(b), H&S Code 39607, 44304 and 44341-44342]