



# 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

B012745

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. #1657)

CH2M Hill Services  
P.O. Box 10450  
Fort Irwin, CA 92310

### EQUIPMENT LOCATION (Fac. #2806)

Fort Irwin Wastewater Treatment Plant  
Wastewater Treatment Plant, Bldg 700  
Fort Irwin, CA 92310

#### **Description:**

DIESEL IC ENGINE, PORTABLE PUMP consisting of: A certified Tier 4 Final Compression-Ignition (Diesel) Portable Prime Use Engine, EPA Family FJDXL04.5304 with a factory installed Periodic Trap Oxidizer (PTOX) consisting of a Diesel Oxidation Catalyst (DOC) and Diesel Particulate Filter (DPF). Exhaust flow is approximately 400 acfm at 800 degrees Fahrenheit:

One John Deere, Diesel fired internal combustion engine Model No. 4045TFG03 and Serial No. 661845, Direct Injected, Turbo Charged, After Cooled, Permit To Operate (PTO), Electronic Control Module, Compression-Ignited, producing 73.8 bhp with 4 cylinders at 2400 rpm while consuming a maximum of 4.6 gal/hr. This equipment powers a Global Pump Model No. 6GST and Serial No. 14-1762, rated at 3,000 gpm.

#### **EMISSIONS RATES**

Emission Type	Est. Max Load	Unit
CO	0.07	gm/bhp-hr
NOx+NMHC	3.28	gm/bhp-hr
PM10	0.0008	gm/bhp-hr
PM2.5	0.0008	gm/bhp-hr
SOx	0.004	gm/bhp-hr

#### **CONDITIONS:**

Fee Schedule: 1 (b)

Rating: 74 bhp

SIC: 9511

SCC: 20200102

Location/UTM(Km):  
511E/3861N

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.

CH2M Hill Services  
P.O. Box 10450  
  
Fort Irwin, CA 92310

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

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 Rule 1302]

2. This diesel ICE and its associated equipment cannot be operated at the same engine-print (spot) for more than 365 consecutive days. (This system must be moved for a valid business purpose within this facility or moved to another facility annually.)  
[Title 17 CCR 93116.2(bb)]

3. 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) 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.  
Note: Use of CARB ULSD satisfies this requirement.  
[Title 17 CCR 93116.3(a)]

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 93116.4(c)(2)(A)]

5. The o/o 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. Reason for use (Regular use, testing & maintenance, emergency, required emission testing);
- c. Calendar year operation in terms of fuel consumption (in gallons) or total hours; and,
- d. Fuel sulfur concentration (the o/o may use the supplier's certification of sulfur content if it is maintained as part of this log).

[Title 17 CCR 93116.4(c)]

6. The fleet\* under control of this o/o is subject to and shall comply with the weighted Diesel Particulate Matter (DPM) emission fleet averages\*\* expressed as grams per brake horsepower-hour (g/bhp-hr) of Title 17 CCR Section 93116.3(c) & (d) by the following dates:

// Compliance Date // Weighted DPM (g/bhp-hr)

January 1, 2017 // 0.18

January 1, 2020 // 0.04

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\* Fleet is defined in Title 17 CCR Section 93116.2(p) as one or more portable unit(s).

\*\* The method used to calculate the Fleet Average is found in Title 13 CCR 93116.3(d).

[Title 17 CCR 93116.4]

7. The owner/operator of this unit must submit a Statement of Compliance signed by the Responsible Official that the fleet standards are being achieved and shall include a summary that identifies each portable engine in the fleet, its associated emission rate (expressed in g/bhp-hr), and all other information required by Title 17 CCR 93116.4(e)(2), (3), (4), (5), (6) and (7). These Statements of Compliance shall be submitted by the following dates:

// DPM Emission Fleet Average Date // Submit by Date

January 1, 2017 // March 1, 2017

January 1, 2020 // March 1, 2020

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[Title 17 CCR 93116.4]

8. The owner/operator of fleets that are exempted from the reporting requirements of section 93116.4 pursuant to section 93116.4(a), the Responsible Official shall certify that all portable diesel-fueled engines in the fleet satisfy the requirements of section 93116.4(a). See Title 17 CCR 93116.4(f) for details.

[Title 17 CCR 93116.4]

9. 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. [District Rule 1302]

10. This engine shall not operate within 1,000 feet of the outer boundary of any K-12 school. Such operation will require the submittal of an application for a revised permit to to operate so that the applicable requirements of the California Health and Safety Code Section 42301.6 will be met.

[District Rule 1302; H&SC 423016]

11. This entire facility (MDAQMD Facility no. 2806 - Fort Irwin Wastewater Treatment Plant) 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)]

12. This entire facility (MDAQMD Facility no. 2806 - Fort Irwin Wastewater Treatment Plant) 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]

13. 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, and 3903) 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]