



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

B013582

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: NOVEMBER 2026

OWNER OF OPERATOR (Co.#86)

MAGTFTC MCAGCC
Box 788110, Bldg 1418
Twentynine Palms, CA 92278-8110

EQUIPMENT LOCATION (Fac.#3247)

USMC AGCC - USMC Facilities
Box 788110, Bldg. 1451
Twentynine Palms, CA 92278

Description:

DIESEL IC ENGINE, PORTABLE CHIPPER consisting of: A certified Tier 4F diesel engine manufactured in 2017, USEPA Family HHZXL1.95V50; CARB Executive Order U-R-034-0310, equipped with a diesel oxidation catalyst (DOC). This portable engine powers a wood chipper to be used at various locations throughout the base. Exhaust flow is approximately 156 cfm through a 7 foot high by 4 inch diameter stack. Facility Elevation is 1969 feet above sea level.

One Motorenfabrik Hatz GMBH & Co. KG, Diesel fired internal combustion engine Model No. 4H50TIC and Serial No. 1361417002914, Charge Air Cooler, Diesel Oxidation Catalyst, Electronic Control Module, Exhaust Gas Recirculation, Exhaust Gas Recirculation, Turbo Charged, producing 74.8 bhp with 4 cylinders at 2800 rpm while consuming a maximum of 4.8 gal/hr. This equipment powers a Salsco, Inc. Chipper Model No. 810XT and Serial No. 18101500102874744, rated at TBD.

EMISSIONS RATES

Emission Type	Est. Max Load	Unit
CO	0.373	gm/bhp-hr
NOx	3.12	gm/bhp-hr
NOx+NMHC	3.284	gm/bhp-hr
PM10	0.007	gm/bhp-hr
PM2.5	0.0069	gm/bhp-hr
SOx	0.006	gm/bhp-hr
VOC	0.164	gm/bhp-hr

Fee Schedule: 1 (b)

Rating: 74.8 bhp

SIC: 9711

SCC: 20100102

Location/UTM(Km):
587E/3788N

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.

MAGTFTC MCAGCC
Box 788110, Building 1418
Twentynine Palms, CA 92278-8110

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

CONDITIONS:

1. This certified portable diesel internal combustion engine 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, excluding time spent at a designated storage site when the chipper is not in use. This chipper must be moved within this facility or to another facility annually for a valid operational reason.

[Title 17 CCR 93116.2(a)(29)]

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) 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)]

4. 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) and Title 17 CCR 93116]

5. This engine shall not be operated unless all of the following emission control systems are properly functioning:

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

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

[District Rule 1302]

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 of each use, location of each use (decimal degrees, xx.xxxxx;-yy.yyyyy) and duration of each use (in hours);
- b. Reason for use (regular use, testing & maintenance, emergency use, required emission testing);
- c. Monthly and consecutive 12 month period hours of operation (in hours);
- d. Calendar year operation in terms of fuel consumption (in gallons) or total hours (to assist in CEI data collection);
- e. Description of all repairs and/or maintenance actions on emission control systems; and,
- f. Fuel sulfur concentration (the o/o may use the supplier's certification of sulfur content if it is maintained as part of this log).

[District Rule 1302(C)(2)(a)]

7. This portable, diesel-fired engine is certified to Tier 4 final emissions standards and is therefore exempted from the requirements of section 93116.4 of Title 17 CCR 93116. In order to establish this exemption for a fleet, the Responsible Official must certify that all portable diesel-fueled engines within the fleet satisfy the requirements of section 93116.4(a). The Responsible Official must provide a Certification Statement and a list of the portable diesel-fueled engines in the fleet to the District and CARB when the fleet initially satisfies the requirements of section 93116.4(a). The Certification Statement must list the following for each engine:

- a. The District permit number; and,
- b. The serial number.

Compliance statements should be sent to the District via mail or electronically to reporting@mdaqmd.ca.gov

Compliance Statements should be mailed to CARB at:
ARB/PERP
P.O. Box 2038
Sacramento, CA 95812
[Title 17 CCR 93116.4(a)and(e)]

8. Except as provided in section 93116.3(c)(2), engines may not operate in California on or after the dates listed in the following schedule: // Engine Certification // Engines rated 50 to 750 bhp, Large Fleet // Engines rated 50 to 750 hp, Small Fleet // Engines rated >750 bhp

Tier 1 // 1/1/2020 // 1/1/2020 // 1/1/2022

Tier 2 built prior to 1/1/2009 // 1/1/2022 // 1/1/2023 // 1/1/2025

Tier 2 built on or after 1/1/2009 // NA // NA // 1/1/2027

Tier 3 built prior to 1/1/2009 // 1/1/2025 // 1/1/2027 // NA

Tier 3 built on or after 1/1/2009 // 1/1/2027 // 1/1/2029 // NA

Tier 1, 2, and 3 flexibility engines // December 31 of the year 17 years after the date of manufacture. This provision shall not apply to any engine operation before the effective date of this regulation. // December 31 of the year 17 years after the date of manufacture. This provision shall not apply to any engine operation before the effective date of this regulation. // December 31 of the year 17 years after the date of manufacture. This provision shall not apply to any engine operation before the effective date of this regulation.

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[Title 17 CCR 93116.3(c)(1)]

9. Pursuant to Title 17 CCR 93116.3(c)(8), for fleets demonstrating compliance with any of the applicable weighted PM emission fleet averages listed below, the Executive Officer of the California Air Resources Board may grant benefits which may be used to modify compliance with the fleet requirements in section 93116.3(c)(1). // Engines <175 hp (g/bhp-hr) // Engines 175 to 750hp (g/bhp-hr) // Engines >750hp (g/bhp-hr)

0.18 // 0.08 // 0.08

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Upon approval from the Executive Officer, one of the following methods may be used to modify compliance with the fleet requirements set forth under section 93116.3(c):

a. A fleet may delay the requirements in section 93116.3(c)(1) by two years for the size category of engines for which the fleet average was met; or

b. A fleet may double count Tier 4 interim engines and Tier 4 final engines when demonstrating compliance with the first two weighted PM emission fleet averages in section 93116.3(c)(2).

[17 CCR 93116.3(c)(8)]

10. In order to utilize the benefits in section 93116.3(c)(8), as outlined in condition 9, the Responsible Official must submit a Statement of Compliance, per section 93116.4(d)(2), to the Executive Officer of the California Air Resources Board, no later than 60 days after November 30, 2018. A copy of the submission and corresponding Executive Officer approval must be provided to the District upon request.

[Title 17 CCR 93116.3(c)(8)]

11. Pursuant to Title 17 CCR 93116.3(c)(2), for large fleets that elect not to comply with section 93116.3(c)(1), the fleet must comply with the following weighted PM emission fleet averages expressed as grams per brake horsepower-hour (g/bhp-hr) by the listed compliance dates:

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

January 1, 2020 // 0.10

January 1, 2023 // 0.06

January 1, 2027 // 0.03

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12. In order to comply with weighted PM emission fleet average option in section 93116.3(c)(2), as outlined in condition 11, the responsible official for a large fleet must submit a written request to the Executive Officer of the California Air Resources Board, no later than June 30, 2019. At a minimum, the written request will include a listing of each engine in the fleet including registration number, serial number, maximum rated bhp, and engine family name. A copy of this submission must be provided to the District upon request.

[Title 17 CCR 93116.3(c)(2)(B)]

13. For large fleets electing to comply with the weighted PM emission fleet average provision of section 93116.3(c)(2), as outlined in condition 11, the Responsible Official must provide a signed Statement of Compliance to the Executive Officer of the California Air Resources Board, stating that the fleet standards are being achieved and including a summary that identifies each portable engine in the fleet and the associated emission rate (g/bhp-hr). Portable engines included in the fleet are those that are part of the fleet at the time the fleet standard became effective. The engine identification must include, at a minimum, registration number, bhp rating, engine family name, serial number, and year of manufacture for each engine. Alternative-fueled engines must be identified by fuel type. The statements of compliance are due to the Executive Officer at the following times:

- a. Upon application to add an engine to the fleet for any Tier 1 engine, Tier 2 engine, Tier 3 engine, including flexibility engines built to those standards;
- b. Upon a request to remove a Tier 4 interim engine or a Tier 4 final engine from a fleet, except for engine dealers and rental businesses;
- c. March 1, 2020, for the fleet standards that become effective January 1, 2020;
- d. March 1, 2023, for the fleet standards that become effective January 1, 2023; and
- e. March 1, 2027 for the fleet standards that become effective January 1, 2027.

The details pertaining to the contents of these Statement of Compliance reports are outlined in Title 17 CCR 93116.4. Copies of these Compliance Statements must be provided to the District upon request.

[Title 17 93116.4]

14. This unit shall not operate within 1000 feet of the outer boundary of any K-12 school for more than 45 days. Such operation will require the submittal of an application for a revised permit to operate so that the applicable requirements of the California Health and Safety Code Section 42301.6 will be met.

[District Rule 1302 and H&S Code 42301.6]

15. The fleet of portable diesel engines under control of this owner/operator are subject to the requirements of the Airborne Toxic Control Measure For Diesel Particulate Matter From Portable Engines Rated At 50 Horsepower and Greater (Title 17 CCR 93116). In the event of conflict between these conditions and the ATCM, the more stringent shall govern.

[Title 17 CCR 93116]

16. In every twelve (12) month period (rolling 12-month sum), the actual emissions of this facility shall be less than 20 tons NO_x, 20 tons VOC, and 12 tons PM₁₀. The owner/operator shall demonstrate compliance with this limit on an annual basis through the submission of a process statement (as defined in Rule 222) to the District. The o/o may substitute a Comprehensive Emission Inventory Report (CEIR) for the process statement when the CEIR includes all items of a process statement (including 12 month rolling emission sum.)

[District Rule 221; District Rule 107(b), H&S Code 39607 & 44341-44342, and 40 CFR 51, Subpart A]