



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

C003491

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.#88)

NAWS
429 E Bowen Road - Stop 4014
China Lake, CA 93555-6108

EQUIPMENT LOCATION (Fac.#4651)

NAWS CL Facilities Support Services
429 E Bowen Road - Stop 4014
China Lake, CA 93555

Description:

SOIL REMEDIATION SYSTEM (WEST OF BLDG 11040) consisting of: a. Vacuum pump - By Sutorbilt 3LL blower powered by a 7.5 bhp explosion proof motor. b. Knockout Tank - By EVAX with a particulate filter, pressure relief valve, and explosion proof level switch. c. Thermal Oxidizer - By EVAX with a normal operating temperature of 1400 degrees Fahrenheit at a minimum efficiency of 99%. d. Catalytic Oxidizer - By EVAX with a platinum/palladium catalyst bed with a normal operating temperature of 650 degrees Fahrenheit at a minimum efficiency of 98.5%. e. Burner - By Eclipse Combustion, Model 84 MVTA with a heat input rating of one million Btu/hr and a turndown ratio of 25:1. f. Heat Exchanger - By Exothermics-Eclipse, Inc. g. Control Panel - NEMA 4X with 4 channel recorder, temperature controller, over - temperature controller, Eclipse burner management system, and lower explosive limit (LEL) indicator mfg by Control Instruments Corporation.

CONDITIONS:

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 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 204; 40 CFR 63.6640(a)]

2. Liquefied Petroleum Gas (LPG) / Propane shall be continuously co-fired in this equipment in order to optimize combustion of the extracted soil vapors.

Fee Schedule: 7 (h)

Rating: 1 device

SIC: 8744

SCC: 30622205

Location/UTM(Km):
450E/3946N

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.

NAWS
Environmental Management Division

China Lake, CA 93555-6108

By: **COPY**
Brad Poiriez
Executive Director

[District Rule 204]

3. Benzene concentration at the exit of the system, must not exceed 0.01 ppm by volume as determined by method 410A of the California Air Resources Board.

[District Rule 1320]

4. A portable hydrocarbon analyzer (Foxboro OVA-FID, Horiba Mexa 324GE or equivalent) shall be used for the first 10 days and monthly thereafter to measure the total petroleum hydrocarbon (TPH) concentration in the inlet and outlet of this system. The hydrocarbon analyzer shall be calibrated in ppmv of hexane.

[District Rule 204]

5. The TPH concentration measured at the inlet shall not exceed 30,000 ppm and at the outlet shall not exceed 100 ppm.

[District Rule 1320]

6. Temperature measuring devices shall be installed and maintained at the outlet of both the thermal and catalyst oxidizers.

[District Rule 204]

7. Whenever the vapor extraction system is operating, the temperature shall be as follows:

(a) At the outlet of the thermal oxidizer: 1400 degrees Fahrenheit or greater.

(b) At the outlet of the catalytic oxidizer: 650 degrees Fahrenheit or greater.

This requirement is not in effect during periods of startup and shutdown, not to exceed 30 minutes each.

[District Rule 204]

8. A flow indicator and recorder must be installed and maintained at the inlet to measure and record the total rate in standard cubic feet per minute (SCFM).

[District Rule 204]

9. The flow rate measured at the inlet of the system shall not exceed 250 SCFM.

[District Rule 204]

10. Within ninety (90) days of commencement of operation the owner/operator shall conduct a compliance/certification test (source test) for benzene and total petroleum hydrocarbons as gasoline (TPHg) in accordance with the District's "Compliance Test Procedural Manual".

(a) At least thirty (30) days prior to the commencement of operation of this soil vapor extraction and treatment system the o/o shall submit to the District a written test plan for review and approval.

(b) At least ten (10) days prior to the scheduled test date, the o/o shall give written notice of the test date(s) to the District so that an observer may be present.

(c) A written test report with the results of such test shall be submitted to the District within forty-five (45) days after completion of sample collections on-site.

[District Rule 204]

11. The owner/operator shall notify the District Engineering Section, in writing, within 10 working days of each of the following:

(a) Commencement of construction or installation;

(b) Completion of construction or installation;

(c) Commencement of operation; and

(d) Completion of operation.

[District Rule 204]

12. This facility has elected to voluntarily limit its emissions to the extent that this facility is no longer subject to the provisions of Regulation XII - Federal Operating Permits [District Rule 221(B)]. As such, the facility-wide emissions must be less than the following limitations in each calendar year:

- (a) 80 tons per year of Carbon Monoxide (CO)
- (b) 25 tons per year of Oxides of Nitrogen (NO_x) [More stringent limit is offset based]
- (c) 25 tons per year of Volatile Organic Compounds (VOC) [More stringent limit is offset based]
- (d) 15 tons per year of Particulate Matter of 10 microns or less (PM₁₀) [More stringent limit is offset based]
- (e) 10 tons per year of Hydrogen Sulfide (H₂S) [More stringent limit is offset based]
- (f) 25 tons per year of Oxides of Sulfur (SO_x)
- (g) 0.5 tons per year of Lead (Pb)
- (h) 8 tons per year of any single Hazardous Air Pollutant (HAP)
- (i) 20 tons per year of any combination of HAP

Compliance with these emission limitations must be verified by pollutant-specific emission summaries for each calendar year. These emission summaries must be retained on-site for a minimum of five (5) years; and, must be made available for review upon request by District, State, and/or Federal personnel.

[District Rules 221(B), 1201(S) and 1303(B) - basis: offsets for NO_x, VOC, PM₁₀ and H₂S only]

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, (August 2, 1996)]

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. 567, 4650, 4651, 4652 and 4653) 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 & 44341-44342; 17 CCR 93400 et seq.; and 40 CFR 51, Subpart A]