MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
14306 Park Avenue Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

RENEWAL

C013802

Renewal type Permit has no description information.

EXPIRES LAST DAY OF: JUNE 2026

OWNER OF OPERATOR (Co.#1834)

Mako Industries
1280 North Red Gum Street
Anaheim, CA 92806

EQUIPMENT LOCATION (Fac.#4001)

Mako Industries - Former Nuway Cleaners
15595 8th Street
Victorville, CA 92392

Description:
SOIL VAPOR EXTRACTION AND CARBON VAPOR ADSORPTION TREATMENT SYSTEM consisting of: Soil vapor extraction and treatment system, manufactured by Mako Industries, Model no. 400 VES, Serial no. MIM616, for halogenated total volatile organic compounds, in-situ soil remediation, consisting of: Vapor extraction well(s) and duct(s); inlet entrained liquid/vapor separator (52 gallon working capacity); one (1) extraction blower with a maximum flow rate of 300 scfm; three (3) adsorption vessels, operated in series (single pass) containing 1000 lbs each of Granular Reactivated Carbon (minimum CTC of 60%); and a 13 foot height, 4 inch diameter vertical exhaust stack.

CONDITIONS:

1. The equipment shall be installed, operated and maintained in accordance with the manufacturer's instruction and good engineering practices. Operation must be in compliance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below.
[District Rule 204]

2. This equipment shall be properly maintained and kept in good operating condition at all times.
[District Rule 204]

3. Upon completion, any vapor extraction wells and ducts shall be capped to prevent vapors from venting to the atmosphere. Vapors shall not be extracted from the soil unless they are vented to the vapor control system, with no detectable leak between the outlet of the extraction blower and the outlet of the vapor control system.

Fee Schedule: 7 (h)	Rating: 1 device	SIC: 1799	SCC: 50410313	Location/UTM(Km): 473E/3821N

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.

Mako Industries
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Anaheim, CA 92806

By: **COPY**
Brad Poiriez
Executive Director

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

4. Prior to connecting any vapor extraction wells to the collection system, the completed wells shall be capped to prevent vapors from venting to the atmosphere.
[District Rules 204 and 1320]

5. An identification tag or nameplate shall be displayed on the equipment to show manufacturer, model no. and serial no. The tag(s) or plate(s) shall be issued by the manufacturer and shall adhere to the equipment in a permanent and conspicuous position.
[District Rule 204]

6. The most current contact person name, company and phone number shall be displayed in a permanent and conspicuous location.
[District Rule 204]

7. A flow indicator shall be installed and maintained at all inlet streams to the vapor control system to indicate the total vapor flow rate in cubic feet per minute (SCFM). The soil vapor flow rate shall not exceed 300 SCFM. If a pressure sensor device is used in place of the flow indicator, a conversion chart shall be made available to indicate the correspondent flow rate, in CFM, to the pressure reading. The flow rate at the inlet to the vapor control system shall be measured and recorded at least once during each monitoring visit while the equipment is operating.
[District Rules 204 and 1320]

8. The extraction blower shall only be operated when all extracted vapors are vented to the vapor treatment system, which includes three (3) vapor adsorbers, connected in series, with 3000 lbs total of granulated activated carbon. These vessels shall not be bypassed. In no event shall the owner/operator emit tetrachloroethene or trichloroethene emissions to the atmosphere exceeding 25 lbs/day.
[District Rules 1303 and 1320]

9. The activated carbon used in the adsorbers shall have a carbon tetrachloride activity number (CTC) of not less than 60% as measured by ASTM Method D3467-99 or a butane activity number of not less than 23.5% as measured by ASTM Method 5228-02.
[District Rules 204 and 1320]

10. The concentration of Total Organic Compounds (TOC) at the inlet of the carbon adsorption system shall not exceed 25 ppmv, measured as hexane.
[District Rules 204 and 1320]

11. The concentrations of the carcinogenic compound Tetrachloroethene (PCE) measured in the final exhaust, and after the third carbon adsorption canister, shall not exceed 1.6 ppmv.
[District Rules 204 and 1320]

12. Daily concentrations of Total Organic Compounds (TOC) shall be measured at the outlet of the soil remediation system during the first seven days of operation, and once every seven days thereafter, by using a Flame Ionization Detector (FID) or a Photo Ionization Detector (PID) or an MDAQMD approved Organic Vapor Analyzer (OVA) calibrated in parts per million by volume (ppmv) as hexane. If another calibrating agent is used, it shall be correlated to and expressed as hexane. In the event that a correction factor is used in the determination of concentrations, the output from the analyzer shall be recorded both pre and post-correction, and post-correction values shall be used to demonstrate compliance with permit limitations. Documentation supporting the application of this correction factor for this specific measurement device shall be maintained with the facility records, and made available to District, State, or Federal personnel upon request. The analyzer shall be maintained and calibrated per EPA Method 21. Calibration shall be performed prior to each monitoring visit.
[District Rules 204 and 1320]

13. To determine compliance with conditions 7, 10, and 11, within ten days after start-up of this equipment, the owner/operator of this source shall:
a. Analyze inlet gas stream to determine the flow rate and concentration of Total Organic Compounds (TOC) present (speciated as

tetrachloroethene and trichloroethene);
b. Analyze exhaust gas stream to determine the flow rate, and the concentration of TOC present (speciated as tetrachloroethene and trichloroethene);
c. Calculate the tetrachloroethene and trichloroethene emission rates in pounds per day based on the exhaust gas analysis and the operating exhaust flow rate. The owner/operator shall decrease the soil vapor flow rate, if necessary, to demonstrate compliance with conditions 7, 10, and 11;
d. Calculate the TOC abatement efficiency based on the inlet and outlet exhaust gas analysis. For the purpose of determining compliance with condition 10, the TOC concentration shall be reported as hexane, or a MDAQMD Permit Engineering Division approved analog compound.
e. Submit to the MDAQMD's Permit Engineering Divisions the test results and emission calculations within one (1) month of the testing date. Samples shall be analyzed according to modified USEPA test methods 8021 and 8260 or their equivalent to determine the concentrations of TOC. Submissions shall be submitted electronically toreporting@mdaqmd.ca.gov.
[District Rules 204 and 1320]

14. The operator shall maintain a file containing all measurements, records and other data that are required to be collected pursuant to the various provisions of this conditional Permit to Operate. All measurements, records and data required to be maintained by the operator shall be retained for at least two years following the date the data is recorded, and shall be made available to District personnel upon request.
[District Rule 204]

15. This equipment shall only exhaust through a vertical stack with a height of at least 13 feet above ground level and with no weather cap.
[District Rules 204 and 1320]

16. This equipment shall not be operated within 1000 feet of the outer boundary of any K-12 school. 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 may be met.
[California Health & Safety Code 42301.6]

17. Spent carbon removed from the system shall be stored in closed containers prior to disposal and disposed in accordance with hazardous materials rules and regulations.
[District Rules 204 and 1320]

18. 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), H&S Code 39607 & 44341-44342, and 40 CFR 51, Subpart A]