

### MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT

14306 Park AvenueVictorville,CA92392-2310 760.245.1661 -- 800.635.4617 -- FAX760.245.2022

# PERMIT TO OPERATE

B003664

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: MAY 2026**

## OWNER OF OPERATOR (Co.#502)

Soil Safe of California, Inc 12328 Hibiscus Avenue Adelanto,CA92301

### EQUIPMENT LOCATION (Fac.#1188)

Soil Safe - Adelanto 12328 Hibiscus Avenue Adelanto,CA92301

#### **Description:**

SOIL REMEDIATION SYSTEM consisting of:A rotary dryer that exhausts to an air pollution control system with a heat exchanger, a soil conditioning unit, and clean soil stacking, with ancillary control and recording equipment. The integral air pollution control system includes a cyclone, a thermal oxidizer operating at a nominal 1400 degrees Fahrenheit, an air-to-air heat exchanger, and a separately-permitted baghouse (C003663). Note that a lime injection system is present at the entrance of the fabric filter baghouse and baghouse filtrate is returned to the the soil conditioner by auger. This equipment may be fired on fuel oil and/or recycled used oil (in addition to natural gas), and this permit includes liquid fuel warmer, pumps, piping, valving necessary to use those liquid fuels. Emission limits have been calculated assuming 57,500 acfm max flow (and 50 ppm VOC, 100 ppm CO). Equipment Elevation is 2919 feet above sea level.

#### EQUIPMENT

Capacity	Equipment Description			
0	One Cold Feed Bin			
0.07	Conveyors, Screens (one small screen and one large screen with water sprayer) and Belt Scale, 30 hp			
49	Hauck 10' D by 45'1" L Dryer/Burner, rated 49 MMBtu/hr			
0.25	Dryer/Burner Chain Drive, rated 100 hp			
0.029	Dryer/Burner Air Blower, 15 hp			
44	Thernal Oxidizer, rated 44 MMBtu/hr			
0.12	Thermal Oxidizer Air Blower, 50 hp			
0.949	Three Heat Exchanger Cooling Air Fans, 125 hp each			
0.029	Heat Exchanger Make-up Air Blower, 15 hp			
edule:8 (e)	Rating:94690000Btu	SIC:4953	SCC:50410535	Location/UTM(Km):464E/382

#### Fee Schedule:8 (e)

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.

Soil Safe of California, Inc 12328 Hibiscus Avenue Adelanto,CA92301



Brad Poiriez Air Pollution Control Officer

Capacity	Equipment Description		
0.149	Two Discharge Pugmill Motors, 30 hp each		
0.029	Discharge Pugmill Conveyor Belt, 15 hp		
0.01	Fuel Pump, 5 hp		

#### **CONDITIONS:**

1. This equipment shall be installed, operated and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles in a manner consistent with good air pollution control practice for minimizing emissions. 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)(2)(a)]

2. The equipment shall not process material defined as hazardous waste by CalEPA. Compliance with this condition shall be demonstrated with documentation for each material shipment accepted. [District Rule 1320]

3. The owner/operator (o/o) shall maintain a current, on-site operations log, which shall be retained for five (5) years and shall be provided to Federal, state or District personnel upon request. This operations log shall, at a minimum, include the following information: a. Documentation of each soil consignment specifying overall weight, nature of contamination and percent of petroleum contamination;

b. Amount of material fed into the rotary dryer each hour (in tons);

c. Amount of natural gas combusted each day (in therms, Btus, or millions of cubic feet);

d. Amount and nature of liquid fuel combusted each day (in gallons or pounds);

e. Sulfur and chlorine content of any liquid fuel combusted (as combusted through composite sample test per condition 5), sulfur as weight percentage and chlorine as concentration;

f. Daily emissions of SOx, NOx, and PM10 (in pounds), calculated on a monthly basis;

g. Annual emissions of SOx, NOx and PM10 (in tons), calculated on a calendar year basis;

h. Calendar year HAP emissions in tons;

i. Hourly calcium hydroxide (lime) injection rate in pounds per ton of feed;

j. Oxidizer outlet temperature during each operational hour; and,

k. Documentation ensuring compliance with condition 2, above.

[District Rule 1302]

4. This facility shall emit to the atmosphere less than the following limits, demonstrated with periodic source tests, material tests and calculation:

a. NOx: 11.1 pounds per hour and 20 tons per calendar year;

- b. VOC: 10.1 pounds per hour (as propane) and 20 tons per calendar year;
- c. PM10: 9.4 pounds per hour and 41.2 tons per calendar year (filterable and condensible);
- d. SOx: 41.7 pounds per hour and 24.9 tons per calendar year;

e. CO: 12.9 pounds per hour;

- f. Chlorine: 4.76 pounds per hour (as hydrogen chloride);
- g. Total Chromium: 0.00257 pounds per hour;
- h. Lead: 0.0129 pounds per hour; and,

i. 8 tons per year or more of any single Hazardous Air Pollutant (HAP) and 20 tons per

year or more of any combination of HAPs.

Compliance with this condition shall be demonstrated through calculations using the most recent source test results, production records and/or fuel records.

[District Rule 1302]

5. The o/o shall only combust natural gas, fuel oil and/or USEPA "on-specification" recycled used oil in this equipment whose sulfur content does not exceed 0.45 percent by weight and whose total organic halogen (typically chlorine) content does not exceed 1000 ppm. Compliance with this condition shall be verified by taking a grab sample from each storage tank after it has been newly filled, generating a composite sample at least once every two weeks of every non-composited grab sample, and testing the composite sample for sulfur and chlorine.

[District Rule 1302]

6.Not later than 2008 and no less frequently than once every three years thereafter, the o/o shall conduct emissions tests for at least the following parameters in addition to the annual source test requirement:

a. Hydrogen chloride in pounds per hour;

b. Total chromium in pounds per hour;

c. Lead in pounds per hour;

d. NOx in pounds per hour;

e. VOC in pounds per hour;

f. SOx (as SO2) in pounds per hour; and,

g. CO in pounds per hour.

[District Rule 1302]

7. The o/o shall not introduce more than 70 tons of material into the rotary dryer per hour, and the introduced material shall not have a content of petroleum contamination in excess of two percent by weight. For compliance purposes these limits may be demonstrated on a 24 hour average basis. [District Rule 1302]

8. This equipment shall not be operated without exhausting through the properly operating oxidizer baghouse (C003663), through a stack at least 55 feet above ground level. [District Rule 1302]

9. This permit unit shall demonstrate PM-10 compliance through emission compliance testing at least once every twelve (12) month period and an all inclusive source test every three years. The owner/operator must submit a compliance/certification test protocol at least thirty (30) days prior to the compliance/certification test date. The owner/operator must conduct all required compliance/certification tests in accordance with a District-approved test protocol. The owner/operator must notify the District a minimum of ten (10) days prior to the compliance/certification test date so that an observer may be present. The final compliance/certification test results must be submitted to the District within forty-five (45) days of completion of the test. All compliance/certification test notifications, protocols, and results may be submitted electronically to reporting@mdaqmd.ca.gov. [District Rule 204]

10.Calcium hydroxide may be injected into the process stream to reduce NOx and SOx emissions. During any hour the calcium hydroxide injection rate is at least 6.8 pounds per ton of feed the o/o may calculate a 17.43 percent reduction in NOx and an 86.33 percent reduction in SOx emissions for that hour, as demonstrated in the January 2005 source test. [District Rule 1302]

11. The o/o shall maintain an oxidizer outlet temperature of at least 1400 degrees Fahrenheit whenever the rotary dryer is charged with material. [District Rule 1302]

12.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]