



MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT

14306 Park Avenue Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

TERMINATED

B012415

Terminated type Permit has no description information.

EXPIRES LAST DAY OF: DECEMBER 2022

OWNER OF OPERATOR (Co.#2251)

Aemerge RedPak Services Southern California, LLC
9600 E Avenue
Hesperia, CA 92345

EQUIPMENT LOCATION (Fac.#3614)

Aemerge RedPak Services Southern California, LLC
9600 E Avenue
Hesperia, CA 92345

Description:

MEDICAL WASTE THERMAL OXIDIZER consisting of: A custom manufactured thermal oxidizer with 1 natural gas fired burner rated at 5.0 MMBtu/hour. This unit is used to burn the combustible synthetic gas (SynGas) produced by the Pyrolyzer/Gasifier described in District Permit B012414 to produce working heat (for a heat recovery steam generator to be installed at a future date). The estimated 70 MMBtu/hour heat input from the SynGas is not currently being included in the permit fees for this equipment. Nominal operating temperature is 1750 degrees Fahrenheit and nominal operating vacuum is 4 inches water column.

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 1302]
2. This equipment shall only be operated when the Air Pollution Control Device described in District Permit C012416 is operating and properly functioning. [District Rules 1302 and 1320]
3. Only Medical Waste (MW) as defined in the California Medical Waste Management Act (California Health and Safety Code Sections 117600 - 118360) or as authorized by the California Department of Public health and agreed to in writing by the District, shall be introduced into the system. [CA HSC 11760 et seq., District Rule 204]

Fee Schedule: 2 (d)

Rating: 5000000 Btu

SIC: 4953

SCC: 10101202

Location/UTM(Km):
473E/3808N

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.

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

4. A maximum of 5,800 pounds of Medical Waste may be introduced into the Pyrolyzer described in District Permit B012414 in any one hour.

[District Rules 204 and 1302]

5. This equipment shall not be operated for more than 175 hours in any consecutive 12 month period, beginning with the month of August, 2019.

[District Rules 204 and 1303]

6. The operating temperature of this oxidizer shall be no less than 1700 degrees Fahrenheit, measured at the oxidizer outlet. This requirement does not apply during conditions of startup and shutdown.

[District Rules 204, 1303, and 1320]

7. The vacuum in this oxidizer shall not be greater than 4.5 inches water column.

[District Rules 430 and 1302]

8. All piping, valves, and flanges shall be properly maintained to minimize emissions of air pollutants to the atmosphere.

[District Rules 1302 and 1320]

9. This equipment must meet the following emission limits while the equipment is operating at all normal operating loads. These emission limits apply at all times:

// Pollutant // Emission Limit // Test Method(s)

Cadmium (Cd) // 18 micrograms per dscm nor more than 7.02E-05 lbs/hour // USEPA Reference Method 29

Carbon Monoxide (CO) // 40 ppmvd nor more than 0.15 lbs/hour // USEPA Reference Method 10 or 10B and CEMS

Dioxins/Furans (total basis) // 33 nanograms per dscm nor more than 2.34E-08 lbs/hour // USEPA Reference Method 23

Hydrogen Chloride (HCl) // 15 ppmvd nor more than 0.50 lbs/hour // USEPA Reference Method 26 or 26A

Lead (Pb) // 226 micrograms per dscm nor more than 2.14E-04 lbs/hour // USEPA Reference Method 29

Mercury (Hg) // 74 micrograms per dscm nor more than 2.28E-03 lbs/hour // USEPA Reference Method 29

Hexavalent Chromium // 0.50 micrograms per dscm nor more than 1.5E-05 lbs/hour // USEPA Reference Method 23

Opacity // 10 percent // USEPA Reference Method 9

Oxides of Nitrogen (NOx) // 82 ppmvd nor more than 5.58 lbs/hour // USEPA Reference Method 7 or 7E

Particulate Matter // 0.013 grains per dscf nor more than 1.00 lbs/hour // USEPA Reference Method 5, 26A, or 29

Sulfur Dioxide (SO₂) // 3.1 ppmvd nor more than 0.87 lbs/hour // USEPA Reference Method 6 or 6C

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Note 1: dscm means dry standard cubic meter

Note 2: ppmvd means parts per million by dry volume

Note 3: dscf means dry standard cubic foot

Note 4: Use of a Bag Leak Detection System in accordance with 40 CFR 60.57c(h) may be used as an alternative demonstration of compliance with both the PM standards and opacity requirements

Note 5: All pollutant concentrations shall be adjusted to twelve percent (12%) oxygen

These emission limits shall be measured, tested, and monitored at the exhaust stack of the air pollution control device described in District Permit C012416.

[District Rules 1302, 1303, and 1320]

10. The owner/operator must conduct a compliance test (source test) for NO_x, Dioxins/Furans, Hexavalent Chromium, and all baseline substances necessary to properly calculate the NO_x, Dioxins/Furans, and Hexavalent Chromium testing. This testing must be completed and the results approved by the District prior to increasing the annual operating from 175 hours in any consecutive 12 month period as discussed in Condition #5.

The owner/operator must submit a source test protocol at least thirty (30) days prior to the scheduled source test date for District review and approval, and the owner/operator must conduct all required tests in accordance with the District-approved test protocol.

The owner/operator must notify the District a minimum of ten (10) days prior to the first day of testing so that an observer may be present.

The final source 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 Rules 204, 1302 and 1320]

11. The District shall conduct a HARP Prioritization Score analysis upon receipt of the source test results discussed in condition #10. If the Prioritization Score analysis requires such, the facility shall conduct a full Health Risk Analysis (HRA). If an HRA is required, it must be performed within 60 days of the District receiving the final source test results or within 60 days of the approval date for the HRA Plan, whichever is later. If an HRA Plan has not yet been approved for use, one must be submitted to the District for approval within 30 days of the District receiving the final source test report.

The District will use the HRA results to determine if any further operational restrictions are required.
[District Rules 204, 1302 and 1320]

12. Results of the source tests will be used in conjunction with currently established throughput limits to determine emission offset applicability.
[District Rules 1303, 1304, and 1305]

13. The owner/operator must maintain an operations log for each day this equipment is operated. This log shall be maintained current, kept for a total of three (3) years and be provided to authorized personnel upon request. The log shall contain the following at a minimum:

- The daily throughput and hourly charge rates, in pounds.
- CEMS data.
- Times and durations of malfunctions, a description of each malfunction, and the corrective action taken for each malfunction.
- Records of the calibration of all monitoring devices.
- The results of all initial, annual, and all subsequent source tests.
- Equipment vendor specifications and related operation and maintenance requirements for the pyrolyzer, thermal oxidizer, emission controls, and monitoring equipment.

[District Rules 204 and 1302]

14. The facility shall not emit NOx, VOCs, PM10, CO, H2S, Pb, SOx, or HAPS into the atmosphere at a rate exceeding the following limits in any consecutive 12 month period to remain below the USEPA's Synthetic Minor - 80% (SM-80) threshold:

- NOx: 20 tons
- VOC: 20 tons
- PM10: 12 tons
- CO: 80 tons
- H2S: 8 tons
- Pb: 0.48 tons
- SOx: 20 tons
- Any single HAP: 8 tons
- Total of all HAPS: 20 tons

[District Rules 1302 and 1303]

15. Once the owner/operator has conducted two consecutive annual source tests for all pollutants listed in Condition #7 that demonstrates compliance with the emission limits of Condition #9, then testing for those pollutants may be conducted every two years following the last compliant test.
If any test shows noncompliance, then retesting must be done until compliance is achieved and then annually again for two years before relaxing to every two years.
[District Rules 204, 1302, and 1320]

16. In the event of a malfunction of any part of the pyrolyzer, thermal oxidizer, or air pollution control system, the entire process line must be shut down as soon as safely possible and shall not be restarted until all malfunctions have been corrected. Equipment breakdowns shall be reported to the District in accordance with District Rule 430.
[District Rules 430 and 1302]

17. 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]