



MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT

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

INACTIVE

B012418

Inactive type Permit has no description information.

EXPIRES LAST DAY OF: DECEMBER 2019

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:

HMIW PYROLYZER/GASIFIER #2 consisting of: A custom manufactured pyrolysis unit (Gasifier) with 12 natural gas fired burners, each rated at 750,000 Btu/hour for a total maximum heat input of 9.0 MMBtu/hour. The combustible synthetic gas (SynGas) produced by this process is routed to the thermal oxidizer described in District Permit B012415 where it is burned to produce working heat (for a heat recovery steam generator to be installed at a future date). The facility can process up to a maximum of 7,750 pounds of Hospital/Medical Infectious Waste (HMIW) per hour. This system is part of a Large HMIW Incinerator as defined in 40 CFR 60 Subpart Ec.

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. [40 CFR 60.52c, District Rule 1302]

2. This equipment shall only be operated when the Thermal Oxidizer and Air Pollution Control Device described in District Permits B012415 and C012416 are operating and properly functioning. [District Rules 1302 and 1320]

3. Only Hospital/Medical/Infectious Waste (HMIW) as defined in 40 CFR 60.51c, shall be introduced into the system. [40 CFR 60.51c, District Rules 204 and 1320]

4. A combined maximum of 7,750 pounds of Hospital/Medical Infectious Waste (HMIW) may be introduced into this pyrolyzer and the pyrolyzer described in District permit B012414 in any one hour. The method(s) used to measure/calculate the hourly throughputs must

Fee Schedule: 2 (d) Rating: 9000000 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.

Aemerge RedPak Services Southern
California, LLC
9600 E Avenue
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By: **COPY**
Brad Poiriez
Air Pollution Control Officer

be approved by the District prior to startup.
[District Rules 204 and 1302]

5.All piping, valves, and flanges shall be properly maintained to minimize emissions of air pollutants to the atmosphere.
[District Rules 1302 and 1320]

6.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) // 0.00013 milligrams per dscm // USEPA Reference Method 29

Carbon Monoxide (CO) // 11 ppmvd // USEPA Reference Method 10 or 10B and CEMS

Dioxins/furans (total or TEQ basis) // 9.3 nanograms per dscm total or 0.035 nanograms per dscm TEQ // USEPA Reference Method 23

Hydrogen Chloride (HCl) // 5.1 ppmvd // USEPA Reference Method 26 or 26A

Lead (Pb) // 0.00069 milligrams per dscm // USEPA Reference Method 29

Mercury (Hg) // 0.0013 milligrams per dscm // USEPA Reference Method 29

Opacity // 10 percent // USEPA Reference Method 9

Oxides of Nitrogen (NOx) // 140 ppmvd // USEPA Reference Method 7 or 7E

Particulate Matter // 18 milligrams per dscm // USEPA Reference Method 5, 26A, or 29

Sulfur Dioxide (SO₂) // 8.1 ppmv // 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 (BLDS) 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 seven percent(7%) oxygen

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

[40 CFR 60.56c and Table District Rules 1302, 1303, and 1320]

7.The owner/operator must conduct an initial performance test (source test) for all pollutants listed in Condition # 6 within 60 days of achieving full production rate but not later than 180 days of first introducing any HMIW into the system:

a. The procedures and test methods listed in 40 CFR 60.56c(b)(1) through 40 CFR 60.56c(b)(6) and 40 CFR 60.56c(b)(9) through 40 CFR 60.56c(b)(14) shall be adhered to at all times.

b. Use of the emergency flare described in District Permit C012421 during any performance test shall invalidate that test.

c. The owner/operator shall forward the following information to the District within 60 days after completing initial source testing:

1. Initial performance test data required by 40 CFR 60.56c(b)(1) through 40 CFR 60.56c(b)(6) and 40 CFR 60.56c(b)(9) through 40 CFR 60.56c(b)(14).

2. A waste management plan as specified in 40 CFR 60.55c.

3. Analysis and supporting documentation demonstrating conformance with EPA guidance and specifications for the facility's Bag Leak Detection System as specified in 40 CFR 60.57c(h).

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

[40 CFR 60.55C, 40 CFR 60.56C, 40 CFR 60.57C, 40 CFR 60.8, District Rules 1302 and 1320]

8.The owner/operator shall establish the following maximum and minimum operating parameters during the initial performance testing discussed in condition #7. Furthermore, the facility shall establish procedures and provide equipment necessary to meet the following required measurement and recording frequencies:

// Operating Parameter // Minimum Data Measurement Frequency // Minimum Data Recording Frequency

Maximum Charge Rate // Continuous // Once per Hour

Maximum Fabric filter Inlet Temperature // Continuous // Once per Minute

Maximum Flue Gas Temperature // Continuous // Once per Minute

Minimum Secondary Chamber Temperature // Continuous // Once per Minute

Minimum Dioxin/Furan Sorbent Flow Rate // Hourly // Once per Hour

Minimum HCl Sorbent Flow Rate // Hourly // Once per Hour

Minimum Hg Sorbent Flow Rate // Hourly // Once per Hour

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Once these operating parameters are determined, operating this system outside of the established parameters will result in a violation per 40 CFR 60.56c. The values for these parameters shall be submitted to the District within 60 days of completing initial source testing and shall include a description, including sample calculations, of how the operating parameters were established.

[40 CFR 60.56c, 40 CFR 60.57c, and 40 CFR 60.58c]

9. The District shall conduct a HARP Prioritization Score analysis upon receipt of the initial performance test results discussed in condition #7. If the Prioritization Score analysis requires such, the facility shall conduct a full Health Risk Analysis (HRA). If an HRA is performed, the District will use the HRA results to determine if any further operational restrictions are required.

[District Rules 1302 and 1320]

10. Results of the initial performance tests discussed in condition #7 will be used in conjunction with currently established throughput limits to determine emission offset applicability.

[District Rules 1303, 1304, and 1305]

11. Following the initial performance tests required in condition #7, the following recurring performance tests shall be conducted using the test methods referenced in condition #6:

a. Determine compliance with the opacity limit by conducting an annual performance test with no more than 12 months following the previous test. b. Determine compliance with the PM, CO and HCl emission limits by conducting an annual performance test with no more than 12 months following the previous test: If all three performance tests over a thirty six month period indicate compliance for any of these three pollutants, then the owner/operator may forego the performance test for that pollutant for the next twenty four months. At a minimum, a performance test for PM, CO and HCl shall be conducted no more than 36 months following the previous test. If a performance test conducted every third year indicated compliance with the respective emission limit for that pollutant (PM, CO, or HCl) the owner/operator may forego the performance test for that pollutant for the next twenty four months. If any test indicates noncompliance, then the annual performance testing cycle starts over.

c. Determine compliance with the visible emissions limit for fugitive emissions from flyash/bottom ash storage and handling by conducting an annual performance test with no more than 12 months following the previous test using USEPA Reference Method 22.

[40 CFR 60.56c]

12. The entire portion of this system that is in contact with HMIW, starting with the grinder, shall be both under constant vacuum of at least 2.50 inches water column and nitrogen blanketed whenever any HMIW is present.

[District Rules 1302 and 1320]

13. In the event of a malfunction of any part of this pyrolyzer, 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]

14. The owner/operator shall not discharge any gases into the atmosphere that exhibit an opacity of greater than 6 percent in a six-minute block average. Furthermore, visible emissions from the ash handling system, including conveyor transfer points, shall not exceed 5 percent opacity (i.e. 9 minutes per 3 hour period).

[40 CFR 60.52c(2)]

15. This equipment shall not be operated unless there is a fully trained and qualified HMIWI Operator either onsite at the facility or available within one hour. Training records shall be kept for a total of five (5) years and on-site for a minimum of two (2) years and be provided to authorized District, State, or Federal personnel upon request.

[40 CFR 60.53c]

16. 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 five (5) years and on-site for a minimum of two (2) years and be provided to authorized District, State, or Federal personnel upon request. The log shall contain the following at a minimum:

- a. The daily throughput and hourly charge rates, in pounds.
 - b. Data collected for all operating parameters used to determine compliance with the operating limits.
 - c. Times and durations of malfunctions, and a description of the malfunction and the corrective action taken.
 - d. Records of the calibration of all monitoring devices.
 - e. The results of all initial, annual, and all subsequent performance tests, including Method 9 and Method 22 observation results.
 - f. Equipment vendor specifications and related operation and maintenance requirements for the pyrolyzer, thermal oxidizer, emission controls, and monitoring equipment.
- [District Rules 204 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]

18.The United States Environmental Protection Agency (USEPA) has made a specific determination that this facility is subject to 40 CFR 60, subpart Ec - Standards of Performance for New stationary sources: Hospital/Medical/Infectious Waste Incinerators.
[Office of the Regional Administrator, USEPA Region IX, letter dated April 07, 2017]