



MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT

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

AUTHORITY TO CONSTRUCT

C004609

If construction is not completed by the expiration date of this permit, it may be renewed for one additional year upon payment of applicable fees. Any additional extension will require the written approval of the Air Pollution Control Officer. This Authority to Construct may serve as a temporary Permit to Operate provided the APCO is given prior notice of intent to operate and the Permit to Operate is not specifically denied.

EXPIRES LAST DAY OF: NOVEMBER 2024

OWNER OF OPERATOR (Co.#2577)

Merit Aluminum Foundry, Inc.
10774 Primrose Road
Adelanto, CA 92301

EQUIPMENT LOCATION (Fac.#1584)

Merit Aluminum Foundry, Inc.
10774 Primrose Road
Adelanto, CA 92301

Description:

BAGHOUSE, ALUMINUM REVERBERATORY FURNACE consisting of: One Nederman Mikro-Pulsaire Dust Collector Model J-10-840. This unit is equipped with an automatic pulse clean system, holds 840 eight-foot filter bags with 1,817 square feet of filter area and an air-to-media ratio of 8:1 at 50,800 cfm.

CONDITIONS:

1. At all times, the owner/operator must operate and maintain this baghouse, in a manner consistent with safety and good air pollution control practices for minimizing emissions.
[District Rules 1303 and 1320]
2. The owner/operator must operate this equipment when the Aluminum Reverberatory Furnaces permitted under B004608 and B014553 are operating, including when the furnace door is open and charge and/or product is being inserted or removed.[District Rules 1303 and 1320]
[17 CCR 93107(b)]
[40 CFR 63 Subpart RRR 63.1506]
3. This air pollution control device is required to meet a minimum 99% control efficiency. Compliance with this control efficiency requirement shall be demonstrated as specified in Condition #8.
[17CCR 93107(b)(2)(A)]

Fee Schedule: 7 (h)

Rating: 1 device

SIC: 3341

SCC: 30400102

Location/UTM(Km):
460E/3822N

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.

Merit Aluminum Foundry, Inc.
2480 Railroad Street
Corona, CA 92880

By: **COPY**
Brad Poiriez
Air Pollution Control Officer

4. The owner/operator shall institute a program of maintenance which embraces at least monthly visual inspections of all associated equipment (inclusive of the bags and their suspensions system) and regular (to be determined with experience with this unit) measurements of the pressure across the bags.

[District Rules 1303 and 1320]

[17 CCR 93107(b)]

5. The owner/operator must have, on-site at all times, a minimum inventory of replacement filters to maintain compliance with these conditions at all times.

[District Rules 1303 and 1320]

6. The owner/operator must operate this air pollution control device must be equipped with a differential pressure gauge, which must be maintained between 1 and 5 inches of water column during operation. Results shall be logged daily and maintained pursuant to Condition #11.

[District Rules 1303 and 1320]

[17 CCR 93107(b)]

7. This air pollution control device must be operated such that no visible emissions from the equipment result in an opacity greater than 10 percent or Number 1 on the Ringelmann Chart for a period or periods aggregating more than three (3) minutes in any one hour. Compliance with this condition shall be demonstrated by monthly Visible Emission Determinations (VED) using USEPA Method 22, and USEPA Method 9 if necessary.

[District Rule 401(a)]

[17 CCR 93107]

8. The owner/operator must conduct an initial and subsequent annual (one every 12 month period) source testing as follows:

A. PM₁₀, CARB Method 5 - demonstrating compliance with the 99% control efficiency specified in Condition 3 [40 CFR 63 Subpart RRR 63.1512]

B. HCl using EPA Method 0050 - to establish emission factors to be used for toxics review/comprehensive emission inventory submittals [40 CFR 63 Subpart RRR 63.1512]

C. dioxins and furans using EPA Method 23 or CARB Method 428 - to establish emission factor to be used for toxics review/comprehensive emission inventory submittals [40 CFR 63 Subpart RRR 63.1512]

D. aluminum alloy composition, as specified in 17 CCR 93107(f)

E. volumetric flow rate demonstration using Method 1 and 2 or verification of a permanent total enclosure using EPA Method 204 [40 CFR 63 Subpart RRR 63.1510]

The test shall be conducted in accordance with the procedures specified in the MDAQMD Compliance Test Procedural Manual and 17 CCR 93107 within 180 days of commencing operation. 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 sixty (60) days of completion of the test. All compliance/certification test notifications, protocols, and results may be submitted electronically to reporting@mdaqmd.ca.gov.

Test results from both the initial and subsequent tests must be kept for five years onsite and available upon request.

[District Rules 1320 and 1520]

[17 CCR 93107]

9. The owner/operator must conduct a minimum program of inspection and maintenance on this equipment inclusive of the following:

A. Each day the equipment is operated the pressure drop reading must be recorded in inches of water column.

B. Once a week a calibration check on the pressure gauge must be recorded by checking for a 'zero reading' before the unit is in operation.

C. A monthly Visible Emission Determination (VED) and result must be recorded using the following procedures: Ensure that the observer's back is to the sun or artificial light, the observation spot provides a clear view of the emission point(s), observe the emission point(s) for a period of one minute, and designate the emission point(s) as "dusting" or "not dusting". If "dusting" is occurring, owner/operator must conduct a Visible Emission Evaluation using USEPA Method 22, and USEPA Method 9, on each dusting emission point if necessary, or shut down the equipment immediately; and,

D. Monthly bag/filter and bag/filter suspension system inspections.

E. Annual inspection of all emission capture, collection, and transport systems to ensure that systems continue to operate in accordance with ACGIH Guidelines. Inspection includes volumetric flow rate measurements or verification of a permanent total enclosure using EPA

Method 204 accomplished in conjunction with the annual source test.[40 CFR 63 Subpart RRR 63.1510]
[District Rule 1302 (C)(2)(a)]

10. An operations log must be maintained for this equipment, which, at a minimum, contains the information specified below. This log shall be maintained current and on-site for a minimum of five (5) years, and must be provided to District personnel upon request.

- A. The daily operating pressure drop readings and dates as required by conditions 6 and 9;
- B. The weekly 'zero reading' calibration dates as required by condition 9;
- C. The monthly Visible Emission Evaluation dates, locations, and results as required by conditions 7 and 9; and,
- D. The dates and results of the monthly bag/filter and bag/filter suspension system inspections as required by condition 9.
- E. Bag leak detection system alarm percentages as required by condition 12.

[District Rules 1303 and 1320]

11. Theowner/operator is required to install, operate and maintain a bag leak detection system in accordance with the requirements specified in 63.1510(f).

- A. The owner/operator must install and operate a bag leak detection system for each exhaust stack of a fabric filter.
- B. Each bag leak detection system must be installed, calibrated, operated, and maintained according to the manufacturer's operating instructions.
- C. The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less. The owner/operator is required to keep the manufacturer's certification on site and shall produce the certification upon request.
- D. The bag leak detection system sensor must provide output of relative or absolute PM loadings.
- E. The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.
- F. The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.
- G. For positive pressure fabric filter systems, a bag leak detection system must be installed in each baghouse compartment or cell. For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter.
- H. Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.
- I. The baseline output must be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time.
- J. Following initial adjustment of the system, the owner or operator must not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time except as detailed in the OM&M plan. In no case may the sensitivity be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless such adjustment follows a complete fabric filter inspection which demonstrates that the fabric filter is in good operating condition.

[40 CFR 60 Subpart RRR]

12. The owner/operator must operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.

[40 CFR 63 Subpart RRR 63.1506(m)]

13. The owner/operator must install, calibrate, maintain, and operate a device to continuously monitor and record the temperature of the fabric filter inlet gases consistent with the requirements for continuous monitoring systems. The monitoring system must record the temperature in 15-minute block averages and calculate and record the average temperature for each 3-hour block period.

[40 CFR 63 Subpart RRR 63.1510(h)]

[17 CCR 93107(b)(2)(B)]

14. The temperature of the gas entering this baghouse system shall not exceed 360 degrees Fahrenheit. The o/o shall install and maintain a temperature gauge within the gas stream prior to the baghouse and shall establish an operating temperature set point for that location that is less than 360 degrees F; this device shall automatically shut-off the furnace when this temperature set point is reached or exceeded.

[District Rules 1303 and 1320]

[17 CCR 93107(b)(2)(B)]

15. Material collected by this emissions control system shall be discharged into closed containers or an enclosed system that iscompletely sealed to prevent any dust from getting out.

[17 CCR 93107]

16. 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]