



## 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

B014553

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 2025**

#### **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:**

FURNACE, ALUMINUM REVERBERATORY consisting of: 110,000 lb capacity reverberatory furnace fired by four low NOx Fives North American burners, two model HiRAM LNI burners model 4575-10-B rated at 7.3 MMBtu/hour each and two TwinBed II burners model 4343-9-B rated at 4.5 MMBtu/hour each. This unit is equipped with its own stirrers, electrical and instrumentation for proper use and necessary piping, valving and electrical/instrumentation. Facility Elevation is 2967 feet above sea level.

#### **CONDITIONS:**

1. At all times, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[40 CFR 63.1506(a)(5)]

[District Rule 204]

1. At all times, the owner/operator must operate and maintain this furnace, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.

[District Rule 1302(C)(2)(a)]

Fee Schedule: 8 (e)

Rating: 15000000 Btu

SIC: 3341

SCC: 30400199

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

2.This furnace shall only be fired with Public Utility regulated natural gas.

[District Rule 1302(C)(2)(a)]

2.No activity associated with metal melting at this facility including furnace operation, casting, emission control system operation, and the storage, handling, or transfer of any materials (except new sand) shall discharge into the air any air contaminant, other than uncombined water vapor, for a period aggregating more than three minutes in any hour which is half as dark or darker in shade as that designated as Number 1 on the Ringlemann Chart or of such opacity as to obscure an observer's view to a degree equal to or greater than 10% opacity.

[District Rule 401(a)]

[17 CCR 93107(b)(3)]

3.No activity associated with metal melting at this facility including furnace operation, casting, emission control system operation, and the storage, handling, or transfer of any materials (except new sand) shall discharge into the air any air contaminant, other than uncombined water vapor, for a period aggregating more than three minutes in any hour which is half as dark or darker in shade as that designated as Number 1 on the Ringlemann Chart or of such opacity as to obscure an observer's view to a degree equal to or greater than 10% opacity.

[17 CCR 93107(b)(3)]

3.This furnace shall not be fired or otherwise operated unless the baghouse serving this unit under valid District permit number C004609 is properly functioning and in operation.

[District Regulation XIII - NSR, District Rule 1520]

[17 CCR 93107(b)]

4.This furnace shall only be fired with Public Utility regulated natural gas.

[District Rule 204]

4.This furnace shall not be fired or otherwise operated unless the baghouse serving this unit under valid District permit number C004609 is properly functioning and in operation.

[District Regulation XIII - NSR, District Rule 1520]

[17 CCR 93107(b)]

[40 CFR 63 Subpart RRR 63.1506]

5.The furnace under B014553 shall not use more than 176.30 MMCf of natural gas in any consecutive 12 month period; and, shall not use more than 0.483 MMCf of natural gas in any consecutive 24 hour period.

[District Rule 1320]

[District Rule 1303 - BACT limiting]

5.The owner/operator (o/o) shall limit combined throughput processed in B004608 and B014553 to:

A. 160 tons of scrap aluminum charge in any calendar day

B. 8250 tons of painted aluminum scrap in any consecutive twelve month period

C. 55,000 tons of clean/painted aluminum scrap in any consecutive twelve month period

[District Regulation XIII - NSR]

6.Processing any material other than as specified in condition 5 is prohibited and requires submission of a permit application package and issuance of modified permits PRIOR to processing any other material to avoid compliance action. The application package submitted will be subject to New Source Review and will require an update to the Facility's Health Risk Assessment.

[District Regulation XIII - NSR]

6.The owner/operator (o/o) shall limit combined throughput processed in B004608 and B014553 to:

A. 160 tons of total (clean/painted) scrap aluminum charge in any calendar day

B. 8,250 tons of painted aluminum scrap in any consecutive twelve month period

C. 55,000 tons of clean/painted aluminum scrap in any consecutive twelve month period

[District Regulation XIII - NSR]

7.Processing any material other than as specified in condition 6 is prohibited and requires submission of a permit application package and issuance of modified permits PRIOR to processing any other material to avoid compliance action. The application package submitted will be subject to New Source Review and will require an update to the Facility's Health Risk Assessment.  
[District Regulation XIII - NSR]

7.An operations log must be maintained for this furnace, 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. Weight of each charge as required by condition 10.

B. The owner/operator must record the daily and monthly totals of the weight of the clean charge (in tons or pounds). The calendar month totals of charge weight must be summed for each consecutive twelve-month period.

C. The owner/operator must keep, for all clean charge material processed, documentation that classifies that the material meets the definition of clean scrap/charge as defined in 40 CFR 63 Subpart RRR 63.105 and 17 CCR 93107(a)

D. The owner/operator must record the daily and monthly totals of the weight of the painted charge (in tons or pounds). The calendar month totals of charge weight must be summed for each consecutive twelve-month period.

E. The owner/operator must record the daily and monthly totals of the recovered aluminum produced (in tons or pounds). The calendar month totals of the recovered aluminum weight must be summed for each consecutive twelve-month period.

F. The owner/operator must record the amount of natural gas burned, in gallons, on a calendar month basis and the total for each consecutive twelve-month period.

G. The owner/operator shall record the lime delivery system inspections required by condition 15

H. The owner/operator shall record the lime injection rate on a monthly basis and show that it is within 90% of the rate that was used during the most recent district approved source test as required by condition 16.

I. Type and amount of other degassing or fluxing materials used per month (in pounds).

J. Flux rate as required by condition 12 (in lb/ton).

K. The owner/operator must keep records of maintenance and repairs made to the equipment.

L. Monthly inspection of required labels per condition 11 [40 CFR 63.1510(c)]

[District Regulation XIII - NSR]

8.An operations log must be maintained for this furnace, 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. Weight of each charge as required by condition 11.

B. The owner/operator must record the daily and monthly totals of the weight of the clean charge (in tons or pounds). The calendar month totals of charge weight must be summed for each consecutive twelve-month period.

C. The owner/operator must keep, for all clean charge material processed, documentation that classifies that the material meets the definition of clean scrap/charge as defined in 40 CFR 63 Subpart RRR 63.105 and 17 CCR 93107(a)

D. The owner/operator must keep, for all painted charge material processed, documentation of periodic scrap inspections as specified in the most current approved OM&M plan confirming that the material processed contains 1% or less of coating [District Rule 1320]

E. The owner/operator must record the daily and monthly totals of the weight of the painted charge (in tons or pounds). The calendar month totals of charge weight must be summed for each consecutive twelve-month period.

F. The owner/operator must record the daily and monthly totals of the recovered aluminum produced (in tons or pounds). The calendar month totals of the recovered aluminum weight must be summed for each consecutive twelve-month period.

G. The owner/operator must record the amount of natural gas burned, in MMcf, on a daily basis to demonstrate compliance with the BACT limiting limit specified in condition 5 (B014553 only) and calendar month basis and the total for each consecutive twelve-month period.

H. The owner operator shall record the lime addition rate on a monthly basis and show that it is within 90% of the rate that was used during the most recent district approved source test as required by condition 14.

I. Type and amount of other degassing or fluxing materials used per month (in pounds).

J. Flux addition rate as required by condition 13 (in lb/ton).

K. Lime addition rate as required by condition 14 (in lb/ton).

L. The owner/operator must keep records of maintenance and repairs made to the equipment.

M. Monthly inspection of required labels per condition 11 [40 CFR 63.1510(c)]

[District Regulation XIII - NSR]

8.This facility is required to submit an approvable Operation Maintenance and Monitoring (OM&M) Plan no later than 4/1/24. The plan must include all applicable requirements pursuant to 40 CFR 63 Subpart RRR and 17 CCR 93107.

[17 CCR 93107]

[40 CFR 63, Subpart RRR]

9.This facility is required to submit an approvable Operation Maintenance and Monitoring (OM&M) Plan no later than 3/1/25. The plan must include all applicable requirements pursuant to 40 CFR 63 Subpart RRR and 17 CCR 93107.

[17 CCR 93107]  
[40 CFR 63.1510(b)]

9. This facility is subject to the requirements of 17 CCR 93107 Non-Ferrous Metal Melting Airborne Toxic Control Measure and 40 CFR 63 Subpart RRR National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production. In the event of a conflict between these conditions and the ATCM or NSPS, the more stringent requirements shall govern.  
[District Rule 1302]

10. This facility is subject to the requirements of 17 CCR 93107 - Non-Ferrous Metal Melting Airborne Toxic Control Measure and 40 CFR 63, Subpart RRR - National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production. In the event of a conflict between these conditions and the ATCM or NSPS, the more stringent requirements shall govern.  
[District Rule 1302]

10. The owner/operator shall operate a device that records the weight of each charge. This equipment shall be operated in accordance with the approved OM&M plan as outlined in 40 CFR 63.1510(b). The equipment shall operate with a minimum accuracy of +/- 1% and shall be calibrated at least every six months.  
[40 CFR 63.1506(d)(1)]

11. The owner/operator shall operate a device that records the weight of each charge. This equipment shall be operated in accordance with the approved OM&M plan as outlined in 40 CFR 63.1510(b). The equipment shall operate with a minimum accuracy of +/- 1% and shall be calibrated at least every six months.  
[40 CFR 63.1506(d)(1)]  
[40 CFR 63.1510(e)]

11. The owner/operator is required to meet the labeling requirements specified in 40 CFR 63.1506(b) which include source identification, operating parameter ranges and operating requirements. Labels are to be posted at the furnace, in-line fluxing equipment and at the control device under C004609. O/o to inspect labels on a monthly basis to confirm that the labels are intact and legible.  
[40 CFR 63.1506(d)(1)]

12. The owner/operator is required to meet the labeling requirements specified in 40 CFR 63.1506(b) which include source identification, operating parameter ranges and operating requirements. Labels are to be posted at the furnace and at the control device under C004609. The owner/operator must inspect labels on a monthly basis to confirm that the labels are intact and legible.  
[40 CFR 63.1506(d)(1)]

12. The owner/operator shall maintain the reactive flux injection rate, in kg/Mg or lb/ton, at or below the rate used during the most recent approved test for each furnace cycle.  
[District Rule 1320]

13. The o/o shall maintain the reactive flux addition rate, in kg/Mg or lb/ton, at or below the rate used during the most recent approved test for each furnace cycle.  
[District Rule 1320]

13. Flux may be added only to the sidewall of the furnace.  
[40 CFR 63 Subpart RRR 63.1505(i)]

14. The owner/operator must verify that the lime addition rate (in lb/hr) is maintained at a minimum of 90% the addition rate used in the most recent approved performance test at least once per month.  
[District Rule 1320]

14. The owner/operator to maintain the level of molten aluminum above the top of the passage between sidewall and hearth during flux injection.

15. This equipment is subject to the following emissions standards pursuant to 40 CFR 63, Subpart RRR:

Group 1 furnace:

D/F 15.0 micrograms TEQ/Mg of feed [40 CFR 63 Subpart RRR 63.1505]

15. The owner/operator must verify that lime is always free-flowing by inspecting the lime delivery system at least once each 8-hour period and record the results of each inspection. If the lime is not free-flowing, the frequency of inspections must be increased to once every 4-hour period for the next three days then return to 8-hour inspections if corrective action results in no further blockage during 3-day period.

[District Rule 1320]

[40 CFR 63 Subpart RRR, Table 3]

16. In the event of a malfunction of any emissions related part of this furnace including the baghouse under C004609, furnace operations 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]

16. The owner/operator must verify that the lime injection rate (in lb/hr) is maintained at 90% above the injection rate used in the most recent approved performance test at least once per month.

[40 CFR 63 Subpart RRR]

[District Rule 1320]

17. Surfaces that are subject to vehicular or foot traffic shall be vacuumed, hand swept or otherwise maintained on a schedule specified in the district-approved OM&M plan such that the facility complies with the opacity requirements of 17 CCR 93107(b)(3)(A).

[17 CCR 93107]

17. This equipment is subject to the following emissions standards pursuant to 40 CFR 63 Subpart RRR:

Group 1 furnace:

PM: 0.40 lb/ton of feed

HCl 0.40 lb/ton of feed or 10% of the HCl measured prior to the control device

D/F 15.0 micrograms TEQ/Mg of feed

In-line Fluxer:

HCl: 0.04 lb/ton of feed

PM 0.01 lb/ton of feed

The owner/operator may show compliance for the Secondary Aluminum Processing Unit as a whole using the method specified in 63.1505 Equation 1.

[40 CFR 63 Subpart RRR 63.1505]

18. The owner/operator shall submit an initial notification as specified in 63.1515(a) within 30 days of permit issuance.

[40 CFR 63 Subpart RRR]

18. In the event of a malfunction of any emissions related part of this furnace including the baghouse under C004609, furnace operations 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]

19. The owner/operator shall submit a Notification of Compliance Status Report within 90 days of completion of the initial source tests.

[40 CFR 63.151(b)]

19. Surfaces that are subject to vehicular or foot traffic shall be vacuumed, wet mopped, or otherwise maintained in accordance with a

district-approved OMM plan such that the facility complies with the opacity requirements of 17 CCR 93107(b)(3)(A).  
[17 CCR 93107]

20.The owner/operator shall submit excess emissions/summary reports every six months commencing 60 days after the end of the first six month period of operation. If there were any malfunctions during the reporting period, the owner/operator shall also submit a malfunction report as specified in 40 CFR 63.1516(d) in conjunction with the excess emissions/summary report for the six month period during which the malfunction(s) occurred.  
[40 CFR 63.1516(b) and (d)]

20.The owner/operator shall submit an initial notification as specified in 63.1515(a) within 30 days of permit issuance.  
[40 CFR 63 Subpart RRR]

21.Emissions from this facility shall be less than the following:

- A. 20 tons/year of NO<sub>x</sub>
  - B. 20 tons per year of VOC
  - C. 14.9 tons per year of PM<sub>10</sub>
  - D. 8 tons per year for any single HAP and 20 tons per year for any combination of HAPs calculated on a rolling twelve-month basis.
- HAPs are defined in 40 CFR 61.01 and are the chemical compounds listed in section 112(b) of the Clean Air Act (Act).

Compliance with the annual emission limits shall be demonstrated via 12 month rolling sum and the most recent approved comprehensive emission inventory reports for all criteria pollutants and HAP.  
[District Rules 1303 - Offsets, 1201 - Definitions, 1202 - Applications]

21.The owner/operator shall submit a Notification of Compliance Status Report within 90 days of completion of the initial source tests.  
[40 CFR 63 Subpart RRR 63.151(b)]

22.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]

22.The owner/operator shall submit excess emissions/summary reports every six months commencing 60 days after the end of the first six month period of operation. If there were any malfunctions during the reporting period, the o/o shall also submit a malfunction report as specified in 63.1516(d) in conjunction with the excess emissions/summary report for the six month period during which the malfunction(s) occurred.  
[40 CFR 63 Subpart RRR 63.1516(b) and (d)]

23.Emissions from this facility shall be less than the following:

- A. 20 tons/year of NO<sub>x</sub>
  - B. 20 tons per year of VOC
  - C. 14.9 tons per year of PM<sub>10</sub>
  - D. 8 tons per year for any single HAP and 20 tons per year for any combination of HAPs calculated on a rolling twelve-month basis.
- HAPs are defined in 40 CFR 61.01 and are the chemical compounds listed in section 112(b) of the Clean Air Act (Act).

Compliance with the annual emission limits shall be demonstrated via 12 month rolling sum and the most recent approved comprehensive emission inventory reports for all criteria pollutants and HAP.  
[District Rules 1303 - Offsets, 1201 - Definitions, 1202 - Applications]

24.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]