MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY
AIR QUALITY DIVISION

October 18, 2024

PERMIT TO INSTALL
63-19C

ISSUED TO
Real Alloy Specification, LLC

LOCATED AT
368 W Garfield Avenue (North Plant) and 267 North Fillmore Road (South Plant)
Coldwater, Michigan 49036

IN THE COUNTY OF
Branch

STATE REGISTRATION NUMBER
N5957

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environment, Great Lakes, and Energy. This permit is hereby issued in accordance with and subject to Section 5505(1) of Article II, Chapter I, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Pursuant to Air Pollution Control Rule 336.1201(1), this permit constitutes the permittee's authority to install the identified emission unit(s) in accordance with all administrative rules of the Department and the attached conditions. Operation of the emission unit(s) identified in this Permit to Install is allowed pursuant to Rule 336.1201(6).

DATE OF RECEIPT OF ALL INFORMATION REQUIRED BY RULE 203: **July 15, 2024**	
DATE PERMIT TO INSTALL APPROVED: **October 18, 2024**	SIGNATURE:
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

PERMIT TO INSTALL

Table of Contents

COMMON ACRONYMS

AQD	Air Quality Division
BACT	Best Available Control Technology
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
COMS	Continuous Opacity Monitoring System
Department/department/EGLE	Michigan Department of Environment, Great Lakes, and Energy
EU	Emission Unit
FG	Flexible Group
GACS	Gallons of Applied Coating Solids
GC	General Condition
GHGs	Greenhouse Gases
HVLP	High Volume Low Pressure*
ID	Identification
IRSL	Initial Risk Screening Level
ITSL	Initial Threshold Screening Level
LAER	Lowest Achievable Emission Rate
MACT	Maximum Achievable Control Technology
MAERS	Michigan Air Emissions Reporting System
MAP	Malfunction Abatement Plan
MSDS	Material Safety Data Sheet
NA	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standard for Hazardous Air Pollutants
NSPS	New Source Performance Standards
NSR	New Source Review
PS	Performance Specification
PSD	Prevention of Significant Deterioration
PTE	Permanent Total Enclosure
PTI	Permit to Install
RACT	Reasonable Available Control Technology
ROP	Renewable Operating Permit
SC	Special Condition
SCR	Selective Catalytic Reduction
SNCR	Selective Non-Catalytic Reduction
SRN	State Registration Number
TBD	To Be Determined
TEQ	Toxicity Equivalence Quotient
USEPA/EPA	United States Environmental Protection Agency
VE	Visible Emissions

POLLUTANT / MEASUREMENT ABBREVIATIONS

acfm	Actual cubic feet per minute
BTU	British Thermal Unit
°C	Degrees Celsius
CO	Carbon Monoxide
CO_2e	Carbon Dioxide Equivalent
dscf	Dry standard cubic foot
dscm	Dry standard cubic meter
°F	Degrees Fahrenheit
gr	Grains
HAP	Hazardous Air Pollutant
Hg	Mercury
hr	Hour
HP	Horsepower
H_2S	Hydrogen Sulfide
kW	Kilowatt
lb	Pound
m	Meter
mg	Milligram
mm	Millimeter
MM	Million
MW	Megawatts
NMOC	Non-Methane Organic Compounds
NO_x	Oxides of Nitrogen
ng	Nanogram
PM	Particulate Matter
PM10	Particulate Matter equal to or less than 10 microns in diameter
PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter
pph	Pounds per hour
ppm	Parts per million
ppmv	Parts per million by volume
ppmw	Parts per million by weight
psia	Pounds per square inch absolute
psig	Pounds per square inch gauge
scf	Standard cubic feet
sec	Seconds
SO_2	Sulfur Dioxide
TAC	Toxic Air Contaminant
Temp	Temperature
THC	Total Hydrocarbons
tpy	Tons per year
µg	Microgram
µm	Micrometer or Micron
VOC	Volatile Organic Compounds
yr	Year

GENERAL CONDITIONS

1. The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. **(R 336.1201(1))**

2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environment, Great Lakes, and Energy, P.O. Box 30260, Lansing, Michigan 48909-7760, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. **(R 336.1201(4))**

3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to Rule 210 (R 336.1210), operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. **(R 336.1201(6)(b))**

4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. **(R 336.1201(8), Section 5510 of Act 451, PA 1994)**

5. The terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to Rule 219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b), and (c) of Rule 219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environment, Great Lakes, and Energy. **(R 336.1219)**

6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. **(R 336.1901)**

7. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). **(R 336.1912)**

8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.

9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.

10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.

11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of Rule 301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with Rule 303 (R 336.1303). **(R 336.1301)**
    a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
    b) A visible emission limit specified by an applicable federal new source performance standard.
    c) A visible emission limit specified as a condition of this Permit to Install.

12. Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2). **(R 336.1370)**

13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001. **(R 336.2001)**

EMISSION UNIT SPECIAL CONDITIONS

EMISSION UNIT SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
EUALFURN1	A reverberatory melting furnace with an hourly charge capacity of 18,000 pounds. Heat for melting is generated by natural gas burners having combined heat input rating of 28 MMBTU/hr. Uncontrolled emissions from Furnace 1 Flue are vented through SVALFURN1. Emissions from fluxing and melting are controlled by a 60,000 CFM lime-injected baghouse and are vented from SVALBH1.	01-01-1991/ 04-04-2003/ 07-20-2010/ 11-18-2013	FGCAMUNITS FGMACTRRR
EUALFURN2	A reverberatory holding furnace with 120,000 pound holding capacity and no charge well. Heat for melting is generated by natural gas burners having combined heat input rating of 8 MMBTU/hr. Emissions from natural gas combustion and the molten metal are vented uncontrolled from SVALFURN2.	01-01-1991/ 04-04-2003/ 07-20-2010/ 11-18-2013	FGMACTRRR
EUALFURN7/8	Two reverberatory melting furnaces (EUALFURN7 and EUALFURN8) with a combined hourly charge capacity of 17,000 pounds. Heat for melting is generated by natural gas burners having combined heat input rating of 30 MMBTU/hr. Emissions from natural gas combustion are controlled by a 90,000 CFM lime-injected baghouse through SVALFURN7/8. Emissions from fluxing and melting are controlled by a 65,000 CFM lime-injected baghouse and are vented from SVALBH7/8.	01-01-1992/ 04-04-2003/ 02-13-2008/ 06-30-2008/ 07-20-2010/ 11-18-2013 07-20-2015	FGCAMUNITS FGMACTRRR
EUALDRYER3	A rotating drum dryer capable of handling up to 15,000 pounds per hour of metal chips. The system is equipped with an afterburner, cyclone, and 43,000 CFM baghouse. Controlled emissions are vented through SVALDRY3OX.	01-01-1991/ 08-23-2004/ 05-13-2011	FGCAMUNITS FGMACTRRR
EUALSHREDDER	A 25,000 lb/hr shredder equipped with a 34,000 CFM baghouse. The shredder baghouse also controls emissions from the drum seals of EUALDRYER3. Controlled emissions are vented through SVALSHRDBH.	04-01-1991/ 04-04-2003	FGCAMUNITS FGMACTRRR
EUALDROSS	Dross handling operations. Emissions are controlled with a 50,000 CFM baghouse and vented through SVALDROSSBH.	04-04-2003	FGCAMUNITS

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
EUALCRUCIBLES	Ten gas-fired crucible stations rated at 1.5 MMBTU/hr each.	01-01-1991	NA
EUIMHOTDROSS	Salt cake/hot dross handling and loadout equipped with a 40,000 CFM baghouse and vented through SVIMDROSSBH.	11-14-1996/ 08-03-1998	FGCAMUNITS
EUIMREVERBFURN	A reverberatory melting furnace having a charge capacity of 15,000 pounds per hour. Heat for melting is generated by natural gas burners having combined heat input rating of 32 MMBTU/hr. Emissions from natural gas combustion are emitted uncontrolled through SVIMREVFLUE. Emissions from fluxing and melting are controlled by a 70,000 CFM lime-injected baghouse and are vented from SVIMREVBH. (Note that this is a new name for this stack, formerly known as SVIMDRY/REVBH)	11-14-1996/ 08-03-1998/ 01-15-2008/ 07-20-2010	FGCAMUNITS FGMACTRRR
EUIMROTFURN1/2	Two formerly separate furnaces that have become commonly controlled (EUIMROTFURN1 and EUIMROTFURN2). These are rotary melting furnaces have a combined hourly charge capacity of 42,000 pounds. Heat for melting is generated by natural gas burners having combined heat input rating of 56 MMBTU/hr. Emissions from EUIMROTFURN1/2 are controlled by oxy-fuel burners and an 80,000 CFM lime-injected baghouse through SVIMROT1/2BH.	11-14-1996/ 08-03-1998 07-20-2010 07-20-2015	FGCAMUNITS FGMACTRRR
EUIMCRUCIBLES	Eight gas-fired crucible stations rated at 1.5 MMBTU/hr each.	11-14-1996/ 08-03-1998	NA

Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1291.

EUALFURN1
EMISSION UNIT CONDITIONS

DESCRIPTION

A reverberatory melting furnace with an hourly charge capacity of 18,000 pounds. Heat for melting is generated by natural gas burners having combined heat input rating of 28 MMBTU/hr. Uncontrolled emissions from Furnace 1 Flue vented through SVALFURN1.

Flexible Group ID: FGCAMUNITS, FGMACTRRR

POLLUTION CONTROL EQUIPMENT

Lime-injected 60,000 CFM Baghouse No. 2 vented from SVALBH1.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Hydrogen Chloride (HCl)	0.40 lb/ton of feed/charge	Hourly	EUALFURN1 emissions from SVALBH1	SC V.1	R 336.1225, 40 CFR Part 63, Subpart RRR
2. Hydrogen Chloride (HCl)	8.4 tpy[1]	12-month rolling time period as determined at the end of each calendar month	EUALFURN1 emissions from SVALBH1	SC VI.2	R 336.1225
3. Hydrogen Chloride (HCl)	0.40 lb/ton of feed/charge	Hourly	EUALFURN1 emissions from SVALFURN1	SC V.1	R 336.1225, R 336.1205(1) (a) & (3)
4. Hydrogen Chloride (HCl)	8.4 tpy	12-month rolling time period as determined at the end of each calendar month	EUALFURN1 emissions from SVALFURN1	SC VI.2	R 336.1225, R 336.1205(1)(a) & (3)
5. Chlorine	0.10 lb/ton of feed/charge	Hourly	EUALFURN1 emissions from SVALBH1	SC V.1	R 336.1225, R 336.1205(1)(a) & (3)
6. Chlorine	2.10 tpy	12-month rolling time period as determined at the end of each calendar month	EUALFURN1 emissions from SVALBH1	SC VI.2	R 336.1225, R 336.1205(1)(a) & (3)
7. Chlorine	0.06 lb/ton of feed/charge	Hourly	EUALFURN1 emissions from SVALFURN1	SC V.1	R 336.1225, R 336.1205(1)(a) & (3)
8. Chlorine	1.26 tpy	12-month rolling time period as determined at the end of each calendar month	EUALFURN1 emissions from SVALFURN1	SC VI.2	R 336.1225, R 336.1205(1)(a) & (3)
9. NO_x	0.10 lb/ton of feed/charge	Hourly	EUALFURN1 emissions from SVALBH1	SC V.2	R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
10. NO_x	2.10 tpy	12-month rolling time period as determined at the end of each calendar month	EUALFURN1 emissions from SVALBH1	SC VI.2	R 336.1205(1)(a) & (3)
11. NO_x	0.40 lb/ton of feed/charge	Hourly	EUALFURN1 emissions from SVALFURN1	SC V.2	R 336.1205(1)(a) & (3), 40 CFR 52.21 (c) & (d)
12. NO_x	8.40 tpy	12-month rolling time period as determined at the end of each calendar month	EUALFURN1 emissions from SVALFURN1	SC VI.2	R 336.1205(1)(a) & (3)
13. SO_2	0.20 lb/ton of feed/charge	Hourly	EUALFURN1 emissions from SVALBH1	SC V.2	R 336.1205(1) (a) & (3), 40 CFR 52.21(c) & (d)
14. SO_2	4.20 tpy	12-month rolling time period as determined at the end of each calendar month	EUALFURN1 emissions from SVALBH1	SC VI.2	R 336.1205(3)
15. PM10	0.10 lb/ton of feed/charge	Hourly	EUALFURN1 emissions from SVALBH1	SC V.1	R 336.2810, R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d), Consent Order AQD No. 2019-29, Paragraph 9B
16. PM10	2.10 tpy	12-month rolling time period as determined at the end of each calendar month	EUALFURN1 emissions from SVALBH1	SC VI.2	R 336.2810, Consent Order AQD No. 2019-29, Paragraph 9B
17. PM10	0.5 lb/ton of feed/charge	Hourly	EUALFURN1 emissions from SVALFURN1	SC V.1	R 336.2810, 40 CFR 52.21(c) & (d)
18. PM10	10.5 tpy	12-month rolling time period as determined at the end of each calendar month	EUALFURN1 emissions from SVALFURN1	SC VI.2	R 336.2810
19. PM2.5	0.10 lb/ton of feed/charge	Hourly	EUALFURN1 emissions from SVALBH1	SC V.1	R 336.2810, 40 CFR 52.21(c) & (d)
20. PM2.5	2.10 tpy	12-month rolling time period as determined at the end of each calendar month	EUALFURN1 emissions from SVALBH1	SC VI.2	R 336.1205(1)(a) & (3)
21. PM2.5	0.5 lb/ton of feed/charge	Hourly	EUALFURN1 emissions from SVALFURN1	SC V.1	R 336.2810, 40 CFR 52.21 (c) & (d)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
22. PM2.5	10.5 tpy	12-month rolling time period as determined at the end of each calendar month	EUALFURN1 emissions from SVALFURN1	SC VI.2	R 336.2810
23. PM	0.10 lb/ton of feed/charge	Hourly	EUALFURN1 emissions from SVALBH1	SC V.1	R 336.2810, Consent Order AQD No. 2019-29, Paragraph 9B
24. PM	2.10 tpy	12-month rolling time period as determined at the end of each calendar month	EUALFURN1 emissions from SVALBH1	SC VI.2	R 336.1205(1)(a) & (3), Consent Order AQD No. 2019-29, Paragraph 9B
25. PM	0.6 lb/ton of feed/charge	Hourly	EUALFURN1 emissions from SVALFURN1	SC V.1	R 336.2810
26. PM	12.60 tpy	12-month rolling time period as determined at the end of each calendar month	EUALFURN1 emissions from SVALFURN1	SC VI.2	R 336.2810
27. THC, as propane	0.8 lb/ton of feed/charge	Hourly	EUALFURN1 emissions from SVALBH1	SC V.1	R 336.2810
28. THC, as propane	16.80 tpy	12-month rolling time period as determined at the end of each calendar month	EUALFURN1 emissions from SVALBH1	SC VI.2	R 336.2810
29. THC, as propane	0.12 lb/ton of feed/charge	Hourly	EUALFURN1 emissions from SVALFURN1	SC V.1	R 336.2810
30. THC, as propane	2.52 tpy	12-month rolling time period as determined at the end of each calendar month	EUALFURN1 emissions from SVALFURN1	SC VI.2	R 336.2810
31. Dioxins and Furans (D/F)	0.00021 gr of D/F TEQ* per ton of feed/charge	Hourly	EUALFURN1 emissions from SVALBH1	SC V.1	40 CFR Part 63, Subpart RRR
32. Hydrogen Fluoride (HF)	0.098 lb/ton of feed/charge	Hourly	EUALFURN1 emissions from SVALFURN1	SC V.1	R 336.1225, R 336.1205(1)(a) & (3)
33. HF	2.06 tpy	12-month rolling time period as determined at the end of each calendar month	EUALFURN1 emissions from SVALFURN1	SC VI.2	R 336.1225, R 336.1205(1)(a) & (3)

* TEQ means the international method of expressing toxicity equivalents for D/F as defined in “Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and -Dibenzofurans (CDDs and CDFs) and 1989 Update” (EPA-625/3-89-016).

II. MATERIAL LIMIT(S)

Material	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Feed/Charge	42,000 tpy	12 month rolling time period as determined at the end of each calendar month	EUALFURN1	SC VI. 1	R 336.1205(1)(a) & (3)
2. Feed/Charge	350,000 lbs/day	Daily	EUALFURN1	SC VI. 1	R 336.1205(1)(a) & (3)

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall operate the burners using natural gas only. **(R 336.1205(1)(a) & (3))**

2. The permittee shall initiate corrective action within one hour of a bag leak detection system alarm. **(40 CFR Part 63, Subpart RRR)**

3. The permittee shall maintain the three-hour block average inlet temperature for each fabric filter at or below the average temperature established during the performance test, plus 14°C (plus 25°F). **(40 CFR Part 63, Subpart RRR)**

4. The permittee shall maintain free-flowing lime in the hopper to the feed device at all times and maintain the lime flow rate at, or above, the same level established during the performance test. **(40 CFR 63.1506(m)(4))**

5. The permittee shall maintain the level of molten aluminum above the top of the passage between the sidewall and hearth during reactive flux injection and record in an operating log for each charge of a sidewall furnace. **(40 CFR Part 63, Subpart RRR)**

6. The permittee shall install, calibrate, monitor, continuously operate a bag leak detection system alarm, and complete the corresponding corrective action procedure in accordance with the submitted OM & M plan in compliance with 40 CFR 63.1510 (b). **(40 CFR Part 63, Subpart RRR)**

7. The permittee shall operate each fabric filter system, such that the bag leak detection system alarm does not sound more than five percent of the operating time during a six-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 one hour. If the owner or operator takes longer than one 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 Part 63, Subpart RRR)**

8. The permittee shall not charge to the main hearth of EUALFURN1 any reactive flux or material other than clean charge, or internal scrap, as defined by 40 CFR Part 63, Subpart RRR. This condition is necessary to avoid requirements of 40 CFR Part 63, Subpart RRR, National Emission Standard for Hazardous Air Pollutants (NESHAP) for Secondary Aluminum Production. **(R 336.1224, R 336.1225, 40 CFR Part 63, Subpart RRR)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate the EUALFURN1 unless the baghouse is installed and operating in accordance with the submitted OM & M plan in compliance with 40 CFR 63.1510(b). **(R 336.1205, R 336.1910, 40 CFR Part 63, Subpart RRR)**

2. The permittee shall not operate EUALFURN1 unless the system for the capture and collection of emissions is installed, maintained, and operated in accordance with the NESHAP standards or USEPA approved alternatives. **(R 336.1910, 40 CFR Part 63, Subpart RRR)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. Within 2 years after permit issuance, and thereafter every five years, the permittee shall verify PM10, and PM2.5 emission rates from EUALFURN1 by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM10/PM2.5	40 CFR Part 51, Appendix M

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205(3), R 336.1225, R 336.2001, R 336.2003, R 336.2004, 40 CFR 63.1506, 40 CFR 52.21(c) & (d), Consent Order AQD No. 2019-29, Paragraph 9F)**

2. Within five years from the date of the last test, and thereafter every five years, the permittee shall verify PM, NO_x, SO_2, THC, D/F, HCl, HF, and Chlorine emission rates from EUALFURN1 by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
NO_x	40 CFR Part 60, Appendix A
SO_2	40 CFR Part 60, Appendix A
THC	40 CFR Part 60, Appendix A
D/F	40 CFR Part 60, Appendix A
HCl	40 CFR Part 60, Appendix A
HF	40 CFR Part 60, Appendix A
Chlorine	40 CFR Part 60, Appendix A

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205(3), R 336.1225, R 336.2001, R 336.2003, R 336.2004, 40 CFR 63.1506, 40 CFR 52.21(c) & (d), Consent Order AQD No. 2019-29, Paragraph 9F)**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall keep records of the feed/charge to EUALFURN1 excluding molten transfers accounted for in the feed/charge records of the furnace in which it was melted. These records shall be based on daily average and 12-month rolling time periods as determined at the end of each calendar month. The monthly average shall only include those days for which EUALFURN1 was in operation. **(R 336.1205(1)(a) & (3))**

2. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period emission calculation records for EUALFURN1. The permittee shall keep all records on file at the facility and make them available to the department upon request. **(R 336.1205(1)(a) & (3))**

3. The permittee shall keep monthly record of the amount of natural gas usage at EUALFURN1. Records of monthly and 12-month rolling usage rates of natural gas shall be kept on file for a period of at least five years and made available to the AQD upon request. **(R 336.1205(1)(a) & (3))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVALBH1	68	95	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
2. SVALFURN1	32	104	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subparts A and RRR for Secondary Aluminum Production. **(40 CFR Part 63, Subparts A and RRR)**

EUALFURN2
EMISSION UNIT CONDITIONS

DESCRIPTION

A reverberatory holding furnace with 120,000 pound holding capacity and no charge well. Heat for melting is generated by natural gas burners having combined heat input rating of 8 MMBTU/hr. Emissions from natural gas combustion and the molten metal are vented uncontrolled from SVALFURN2.

Flexible Group ID: FGMACTRRR

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. NO_x	0.46 pph	Hourly	EUALFURN2	SC V.2	R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d), Consent Order AQD No. 2019-29, Paragraph 9E
2. NO_x	2.01 tpy	12-month rolling time period as determined at the end of each calendar month	EUALFURN2	SC VI.2	R 336.1205(1)(a) & (3), Consent Order AQD No. 2019-29, Paragraph 9E
3. PM	0.35 pph	Hourly	EUALFURN2	SC V.1	R 336.2810, Consent Order AQD No. 2019-29, Paragraph 9E
4. PM	1.53 tpy	12-month rolling time period as determined at the end of each calendar month	EUALFURN2	SC VI.2	R 336.1205(1)(a) & (3), Consent Order AQD No. 2019-29, Paragraph 9E
5. PM10	0.35 pph	Hourly	EUALFURN2	SC V.1	R 336.2810, 40 CFR 52.21(c) & (d)
6. PM10	1.53 tpy	12-month rolling time period as determined at the end of each calendar month	EUALFURN2	SC VI.2	R 336.1205(1)(a) & (3)
7. PM2.5	0.35 pph	Hourly	EUALFURN2	SC V.1	R 336.2810, 40 CFR 52.21(c) & (d)
8. PM2.5	1.53 tpy	12-month rolling time period as determined at the end of each calendar month	EUALFURN2	SC VI.2	R 336.1205(1)(a) & (3)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
9. THC, as propane	0.15 pph	Hourly	EUALFURN2	SC V.1	R 336.2810
10. THC, as propane	0.66 tpy	12-month rolling time period as determined at the end of each calendar month	EUALFURN2	SC VI.2	R 336.1205(1)(a) & (3)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall operate the burners using natural gas only. **(R 336.1205(1)(a) & (3))**

2. The permittee shall not melt in EUALFURN2 any material other than clean charge, or internal scrap, as defined by 40 CFR Part 63, Subpart RRR. This condition is necessary to avoid requirements of 40 CFR Part 63, Subpart RRR, NESHAP for Secondary Aluminum Production. **(R 336.1224, R 336.1225, 40 CFR Part 63, Subpart RRR)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. Within five years from the date of the last test, and thereafter every five years, the permittee shall verify PM, PM10, PM2.5, NO_x, and THC emission rates from EUALFURN2 by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM10/PM2.5	40 CFR Part 51, Appendix M
NO_x	40 CFR Part 60, Appendix A
THC	40 CFR Part 60, Appendix A

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205(3), R 336.1225, R 336.2001, R 336.2003, R 336.2004, 40 CFR 63.1506, 40 CFR 52.21(c) & (d))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall keep records of the feed/charge to each furnace of EUALFURN2 based on a 12-month rolling time period as determined at the end of each calendar month. **(R 336.1205(1)(a) & (3))**

2. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period emission calculation records for EUALFURN2. The permittee shall keep all records on file at the facility and make them available to the department upon request. **(R 336.1205(1)(a) & (3))**

3. The permittee shall keep monthly record of the amount of natural gas usage at EUALFURN2. Records of monthly and 12-month rolling usage rates of natural gas shall be kept on file for a period of at least five years and made available to the AQD upon request. **(R 336.1205(1)(a) & (3))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
SVALFURN2	41	51	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subparts A and RRR for Secondary Aluminum Production. **(40 CFR Part 63, Subparts A and RRR)**

Footnotes:
[1] This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

EUALFURN7/8
EMISSION UNIT CONDITIONS

DESCRIPTION

Two reverberatory melting furnaces (EUALFURN7 and EUALFURN8) with a combined hourly charge capacity of 17,000 pounds. Heat for melting is generated by natural gas burners having combined heat input rating of 30 MMBTU/hr.

Flexible Group ID: FGCAMUNITS, FGMACTRRR

POLLUTION CONTROL EQUIPMENT

Emissions from natural gas combustion are controlled by a 90,000 CFM lime-injected baghouse through SVALFURN7/8. Emissions from fluxing and melting are controlled by a 65,000 CFM lime-injected baghouse and are vented from SVALBH7/8.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. HCl	0.40 lb/ton of feed/charge	Hourly	Emissions through SVALBH7/8	SC V.1	R 336.1225, 40 CFR Part 63, Subpart RRR
2. HCl	9.0 tpy[1]	12-month rolling time period as determined at the end of each calendar month	Emissions through SVALBH7/8	SC VI.2	R 336.1225
3. HCl	0.40 lb/ton of feed/charge	Hourly	Emissions through SVALFURN7/8	SC V.1	R 336.1225, R 336.1205(1)(a) & (3), 40 CFR Part 63, Subpart RRR
4. HCl	9.0 tpy	12-month rolling time period as determined at the end of each calendar month	Flue gases through SVALFURN7/8	SC VI.2	R 336.1225, R 336.1205(1)(a) & (3)
5. NO_x	0.40 lb/ton of feed/charge	Hourly	Flue gases through SVALFURN7/8	SC V.2	R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d)
6. NO_x	9.0 tpy	12-month rolling time period as determined at the end of each calendar month	Flue gases through SVALFURN7/8	SC VI.2	R 336.1205(1)(a) & (3)
7. NO_x	0.15 lb/ton of feed/charge	Hourly	Emissions through SVALBH7/8	SC V.2	R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d), Consent Order AQD No. 2019-29, Paragraph 9D

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
8. NO_x	3.38 tpy	12-month rolling time period as determined at the end of each calendar month	Emissions through SVALBH7/8	SC VI.2	R 336.1205(1)(a) & (3), Consent Order AQD No. 2019-29, Paragraph 9D
9. SO_2	0.20 lb/ton of feed/charge	Hourly	Emissions through SVALBH7/8	SC V.2	R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d), Consent Order AQD No. 2019-29, Paragraph 9D
10. SO_2	4.5 tpy	12-month rolling time period as determined at the end of each calendar month	Emissions through SVALBH7/8	SC VI.2	R 336.1205(1)(a) & (3), Consent Order AQD No. 2019-29, Paragraph 9D
11. PM	0.35 lb/ton of feed/charge	Hourly	Flue gases through SVALFURN7/8	SC V.1	R 336.2810
12. PM	7.88 tpy	12-month rolling time period as determined at the end of each calendar month	Flue gases through SVALFURN7/8	SC VI.2	R 336.2810
13. PM	0.10 lb/ton of feed/charge	Hourly	Emissions through SVALBH7/8	SC V.1	R 336.2810, Consent Order AQD No. 2019-29, Paragraph 9D
14. PM	2.25 tpy	12-month rolling time period as determined at the end of each calendar month	Emissions through SVALBH7/8	SC VI.2	R 336.2810, Consent Order AQD No. 2019-29, Paragraph 9D
15. PM10	0.15 lb/ton of feed/charge	Hourly	Emissions through SVALBH7/8	SC V.1	R 336.2810, 40 CFR 52.21 (c) & (d), Consent Order AQD No. 2019-29, Paragraph 9D
16. PM10	3.38 tpy	12-month rolling time period as determined at the end of each calendar month	Emissions through SVALBH7/8	SC VI.2	R 336.2810, Consent Order AQD No. 2019-29, Paragraph 9D
17. PM10	0.15 lb/ton of feed/charge	Hourly	Flue gases through SVALFURN7/8	SC V.1	R 336.2810, 40 CFR 52.21(c) & (d)
18. PM10	3.38 tpy	12-month rolling time period as determined at the end of each calendar month	Flue gases through SVALFURN7/8	SC VI.2	R 336.2810
19. PM2.5	0.15 lb/ton of feed/charge	Hourly	Emissions through SVALBH7/8	SC V.1	R 336.2810, 40 CFR 52.21(c) & (d)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
20. PM2.5	3.38 tpy	12-month rolling time period as determined at the end of each calendar month	Emissions through SVALBH7/8	SC VI.2	R 336.2810
21. PM2.5	0.15 lb/ton	Hourly	Flue gases through SVALFURN7/8	SC V.1	R 336.2810, 40 CFR 52.21(c) & (d)
22. PM2.5	3.38 tpy	12-month rolling time period as determined at the end of each calendar month	Flue gases through SVALFURN7/8	SC VI.2	R 336.2810
23. THC, as propane	0.10 lb/ton of feed/charge	Hourly	Flue gases through SVALFURN7/8	SC V.1	R 336.2810
24. THC, as propane	2.25 tpy	12-month rolling time period as determined at the end of each calendar month	Flue gases through SVALFURN7/8	SC VI.2	R 336.2810
25. THC, as propane	0.60 lb/ton of feed/charge	Hourly	Emissions through SVALBH7/8	SC V.1	R 336.2810
26. THC, as propane	13.50 tpy	12-month rolling time period as determined at the end of each calendar month	Emissions through SVALBH7/8	SC VI.2	R 336.2810
27. D/F	0.00021 gr of D/F TEQ* per ton of feed/charge	Hourly	Emissions through SVALBH7/8	SC V.1	40 CFR Part 63, Subpart RRR

* TEQ means the international method of expressing toxicity equivalents for D/F as defined in “Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and -Dibenzofurans (CDDs and CDFs) and 1989 Update” (EPA-625/3-89-016).

II. MATERIAL LIMIT(S)

Material	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Feed/Charge	45,000 tpy	12 month rolling time period as determined at the end of each calendar month	EUALFURN7/8	SC VI.1	R 336.1205(1) (a) & (3)
2. Feed/Charge	480,000 lb/day	Daily	EUALFURN7/8	SC VI.1	R 336.1205(1) (a) & (3)

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall initiate corrective action within one hour of a bag leak detection system alarm. **(40 CFR Part 63, Subpart RRR)**

2. The permittee shall maintain the three-hour block average inlet temperature for each fabric filter at or below the average temperature established during the performance test, plus 14°C (plus 25°F). **(40 CFR Part 63, Subpart RRR)**

3. The permittee shall maintain free-flowing lime in the hopper to the feed device at all times and maintain the lime flow rate at, or above, the same level established during the performance test. **(40 CFR 63.1506(k)(3))**

4. The permittee shall maintain the level of molten aluminum above the top of the passage between the sidewall and hearth during reactive flux injection and record in an operating log for each charge of a sidewall furnace. **(40 CFR Part 63, Subpart RRR)**

5. The permittee shall install, calibrate, monitor, continuously operate a bag leak detection system alarm, and complete the corresponding corrective action procedure in accordance with the submitted OM & M plan in compliance with 40 CFR 63.1510 (b). **(40 CFR Part 63, Subpart RRR)**

6. The permittee shall operate each fabric filter system, such that the bag leak detection system alarm does not sound more than five percent of the operating time during a six-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 one hour. If the owner or operator takes longer than one 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 Part 63, Subpart RRR)**

7. The permittee shall operate the burners using natural gas only. **(R 336.1205(3))**

8. The permittee shall not charge to the main hearth of EUALFURN7/8 any reactive flux or material other than clean charge, or internal scrap, as defined by 40 CFR Part 63, Subpart RRR. This condition is necessary to avoid requirements of 40 CFR Part 63, Subpart RRR, NESHAP for Secondary Aluminum Production. **(R 336.1224, R 336.1225, 40 CFR Part 63, Subpart RRR)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate EUALFURN7/8 unless the associated baghouses are installed and operating in accordance with the submitted OM & M plan in compliance with 40 CFR 63.1510 (b). **(R 336.1205, R 336.1910, 40 CFR Part 63, Subpart RRR)**

2. The permittee shall not operate EUALFURN7/8 unless the system for the capture and collection of emissions is installed, maintained, and operated in accordance with the NESHAP standards or USEPA approved alternatives. **(R 336.1910, 40 CFR Part 63, Subpart RRR)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. Within five years from the date of the last test, , and thereafter every five years, the permittee shall verify PM, PM10, PM2.5, NO_x, SO_2, THC, D/F, and HCl emission rates from EUALFURN7/8 by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM10/PM2.5	40 CFR Part 51, Appendix M
NO_x	40 CFR Part 60, Appendix A
SO_2	40 CFR Part 60, Appendix A
THC	40 CFR Part 60, Appendix A
D/F	40 CFR Part 60, Appendix A
HCl	40 CFR Part 60, Appendix A

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing,

including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205(3), R 336.1225, R 336.2001, R 336.2003, R 336.2004, 40 CFR 63.1506, 40 CFR 52.21(c) &(d), Consent Order AQD No. 2019-29, Paragraph 9F)**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall keep records of the feed/charge to EUALFURN7/8 excluding molten transfers accounted for in the feed/charge records of the furnace in which it was melted. These records shall be based on daily average and 12-month rolling time periods as determined at the end of each calendar month. The monthly average shall include only those days for which EUALFURN7/8 operated. **(R 336.1205(1)(a) & (3))**

2. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period emission calculation records for EUALFURN7/8. The permittee shall keep all records on file at the facility and make them available to the department upon request. **(R 336.1205(1)(a) & (3))**

3. The permittee shall keep monthly record of the amount of natural gas usage at EUALFURN7/8. Records of monthly and 12-month rolling usage rates of natural gas shall be kept on file for a period of at least five years and made available to the AQD upon request. **(R 336.1205(1)(a) & (3))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVALBH7/8	68	61.3	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
2. SVALFURN7/8	52	95	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subparts A and RRR for Secondary Aluminum Production. **(40 CFR Part 63, Subparts A and RRR)**

Footnotes:
[1] This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

EUALDRYER3
EMISSION UNIT CONDITIONS

DESCRIPTION

A rotating drum dryer capable of handling up to 15,000 pounds per hour of metal chips. Controlled emissions are vented through SVALDRY3OX. Heat for drying is generated by natural gas burners having combined heat input rating of 16.6 MMBTU/hr.

Flexible Group ID: FGCAMUNITS, FGMACTRRR

POLLUTION CONTROL EQUIPMENT

The chip dryer is controlled by an afterburner, cyclone, and 43,000 CFM baghouse system.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. NO_x	0.55 lb/ton of feed/charge	Hourly	EUALDRYER3	SC V.2	R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d)
2. NO_x	7.43 tpy	12-month rolling time period as determined at the end of each calendar month	EUALDRYER3	SC VI.2	R 336.1205(1)(a) & (3)
3. PM	0.39 lb/ton of feed/charge	Hourly	EUALDRYER3	SC V.1	R 336.2810
4. PM	5.27 tpy	12 month rolling time period as determined at the end of each calendar month	EUALDRYER3	SC VI.2	R 336.1205(1)(a) & (3)
5. PM10	0.485 lb/ton of feed/charge	Hourly	EUALDRYER3	SC V.1	R 336.2810, 40 CFR 52.21(c) & (d)
6. PM10	6.55 tpy	12-month rolling time period as determined at the end of each calendar month	EUALDRYER3	SC VI.2	R 336.2810

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
7. PM2.5	0.485 lb/ton of feed/charge	Hourly	EUALDRYER3	SC V.1	R 336.2810, 40 CFR 52.21(c) & (d)
8. PM2.5	6.55 tpy	12-month rolling time period as determined at the end of each calendar month	EUALDRYER3	SC VI.2	R 336.2810
9. THC, as propane	0.2 lb/ton of feed/charge	Hourly	EUALDRYER3	SC V.1	R 336.2810
10. THC, as propane	2.70 tpy	12-month rolling time period as determined at the end of each calendar month	EUALDRYER3	SC VI.2	R 336.2810
11. D/F	3.5×10^{-5} grain of D/F TEQ* per ton of feed/charge	Hourly	EUALDRYER3	SC V.1	40 CFR Part 63, Subpart RRR

* TEQ means the international method of expressing toxicity equivalents for D/F as defined in "Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and -Dibenzofurans (CDDs and CDFs) and 1989 Update" (EPA-625/3-89-016).

II. MATERIAL LIMIT(S)

Material	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Feed/Charge	27,000 tpy	12-month rolling time period as determined at the end of each calendar month	EUALDRYER3	SC VI. 1	R 336.1205(1)(a) & (3)
2. Feed/Charge	250,200 lbs/day	Daily	EUALDRYER3	SC VI. 1	R 336.1205(1)(a) & (3)

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall maintain the three-hour block average operating temperature of the afterburner at or above the average temperature established during the performance test. **(40 CFR Part 63, Subpart RRR)**

2. The permittee shall operate EUALDRYER3 using only unpainted aluminum chips as feedstock. **(40 CFR Part 63, Subpart RRR)**

3. The permittee shall install, calibrate, monitor, and continuously operate a bag leak detection system alarm and complete the corresponding corrective action procedure in accordance with a submitted OM & M plan in compliance with 40 CFR 63.1510(b). **(40 CFR Part 63, Subpart RRR)**

4. The permittee shall operate each fabric filter system, such that the bag leak detection system alarm does not sound more than five percent of the operating time during a six-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 one hour. If the owner or operator takes longer than one 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 Part 63, Subpart RRR)**

5. In the event of a malfunction of the EUALDRYER3 dryer system, the permittee may vent emissions through SVALDRY3BYPASS for a period not to exceed a total of 80 hours per year, based on a 12-month rolling time period as determined at the end of each calendar month. Malfunction means a time when material is in the dryer and the dryer is operating and exhaust gas is vented through SVALDRYER3BYPASS. **(R 336.1225, R 336.1912(1))**

6. The permittee shall not charge any material into EUALDRYER3 during startup or shutdown of the dryer system. **(R 336.1225, R 336.1912(1))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate the EUALDRYER3 unless its associated afterburner, cyclone and baghouse system are installed and operating in accordance with the submitted OM & M plan in compliance with 40 CFR 63.1510(b). **(R 336.1910, 40 CFR Part 63, Subpart RRR, R 336.1205)**

2. The permittee shall not operate EUALDRYER3 unless the system for the capture and collection of emissions is installed, maintained, and operated in accordance with the NESHAP standards or USEPA approved alternatives. **(R 336.1910, 40 CFR Part 63, Subpart RRR)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. Within five years from the date of the last test, , and thereafter every five years, the permittee shall verify PM, PM10, PM2.5, NO_x, THC and D/F emission rates from EUALDRYER3 by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM10/PM2.5	40 CFR Part 51, Appendix M
NO_x	40 CFR Part 60, Appendix A
THC	40 CFR Part 60, Appendix A
D/F	40 CFR Part 60, Appendix A

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205(3), R 336.2001, R 336.2003, R 336.2004, 40 CFR 63.1506, 40 CFR 52.21(c) & (d))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall keep records of the feed/charge to EUALDRYER3. These records shall be based on a daily average and 12 month rolling time period as determined at the end of each calendar month. The monthly average shall only include those days for which EUALDRYER3 was in operation. **(R 336.1205(1)(a) & (3))**

2. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period NO_x, PM, PM10, PM2.5 and THC emission calculation records for EUALDRYER3, as required by SC I.2, I.4, I.6, I.8, and I.10. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205(1)(a) & (3))**

3. The permittee shall keep monthly record of the amount of natural gas usage from EUALDRYER3 combustion process fuel. Records of monthly and 12-month rolling usage rates of natural gas shall be kept on file for a period of at least five years and made available to the AQD upon request. **(R 336.1205(1)(a) & (3))**

4. The permittee shall record the time and duration of dryer operation and the type of material being processed in EUALDRYER3 for each malfunction during which emissions are vented through SVALDRY3BYPASS. The permittee shall make all records available to the Department upon request. **(R 336.1225, R 336.1910, R 336.1911, R 336.1912)**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVALDRY3OX	42	63	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
2. SVALDRY3BYPASS	48	28.5	40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subparts A and RRR for Secondary Aluminum Production. **(40 CFR Part 63, Subparts A and RRR)**

Footnotes:
[1] This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

EUALSHREDDER
EMISSION UNIT CONDITIONS

DESCRIPTION

A 25,000 lb/hr shredder. Controlled emissions are vented through SVALSHRDBH.

Flexible Group ID: FGCAMUNITS, FGMACTRRR

POLLUTION CONTROL EQUIPMENT

A 34,000 CFM baghouse (this baghouse also collects emissions from the chip dryer (EUALDRYER3) (seals) and is equipped with bag leak detection system).

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. PM10	0.10 lb/ton of feed/charge	Hourly	EUALSHREDDER	SC V.1	R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d)
2. PM10	2.35 tpy	12-month rolling time period as determined at the end of each calendar month	EUALSHREDDER	SC VI.2	R 336.1205(1)(a) & (3)
3. PM2.5	0.10 lb/ton of feed/charge	Hourly	EUALSHREDDER	SC V.1	R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d)
4. PM2.5	2.35 tpy	12-month rolling time period as determined at the end of each calendar month	EUALSHREDDER	SC VI.2	R 336.1205(1)(a) & (3)
5. THC, as propane	0.10 lb/ton of feed/charge	Hourly	EUALSHREDDER	SC V.1	R 336.1205(1)(a) & (3)
6. THC, as propane	2.35 tpy	12-month rolling time period as determined at the end of each calendar month	EUALSHREDDER	SC VI.2	R 336.1205(1)(a) & (3)
7. PM	0.10 lb/ton of feed/charge	Hourly	EUALSHREDDER	SC V.1	R 336.1205(1)(a) & (3)
8. PM	2.35 tpy	12-month rolling time period as determined at the end of each calendar month	EUALSHREDDER	SC VI.2	R 336.1205(1)(a) & (3)
9. NO_x	0.25 lb/hr	Hourly	EUALSHREDDER	SC V.2	R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
10. NO_x	1.09 tpy	12-month rolling time period as determined at the end of each calendar month	EUALSHREDDER	SC VI.2	R 336.1205(1)(a) & (3)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Feed/Charge	47,000 tpy	12-month rolling time period as determined at the end of each calendar month	EUALSHREDDER	SC VI.1	R 336.1205(1)(a) & (3)
2. Feed/Charge	450,000 lbs/day	Daily	EUALSHREDDER	SC VI.1	R 336.1205(1)(a) & (3)

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall install, calibrate, monitor, continuously operate a bag leak detection system alarm, and complete the corresponding corrective action procedure in accordance with the submitted OM & M plan in compliance with 40 CFR 63.1510 (b). **(40 CFR Part 63, Subpart RRR)**

2. The permittee shall operate each fabric filter system, such that the bag leak detection system alarm does not sound more than five percent of the operating time during a six-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 one hour. If the owner or operator takes longer than one 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 Part 63, Subpart RRR)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate the EUALSHREDDER unless its associated baghouse is installed and operating in accordance with the approved OM & M plan in compliance with 40 CFR 63.1510(b). **(R 336.1910, 40 CFR Part 63, Subpart RRR)**

2. The permittee shall not operate EUALSHREDDER unless the system for the capture and collection of emissions is installed, maintained, and operated in accordance with the NESHAP standards or USEPA approved alternatives. **(R 336.1910, 40 CFR Part 63, Subpart RRR)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. Within five years from the date of the last test, , and thereafter every five years, the permittee shall verify PM, PM10, PM2.5 NO_x, and THC emission rates from EUALSHREDDER by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules

PM10/PM2.5	40 CFR Part 51, Appendix M
NO_x	40 CFR Part 60, Appendix A
THC	40 CFR Part 60, Appendix A

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205(3), R 336.2001, R 336.2003, R 336.2004, 40 CFR 63.1506, 40 CFR 52.21(c) & (d))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall keep a record of the feed/charge to EUALSHREDDER based on a daily average and 12-month rolling time period, as determined at the end of each calendar month. The monthly average shall only include those days for which EUALSHREDDER was in operation. **(R 336.1205(1)(a) & (3), R 336.1205)**

2. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period PM, PM2.5, PM10, NO_x and THC emission calculation records for EUALSHREDDER, as required by SC I.2, SC 1.4, SC 1.6, SC 1.8 and SC I.10. The permittee shall keep all records on file at the facility and make them available to the department upon request. **(R 336.1205(1)(a) & (3))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVALSHRDBH	36	52	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subparts A and RRR for Secondary Aluminum Production. **(40 CFR Part 63, Subparts A and RRR)**

Footnotes:
[1] This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

EUALDROSS
EMISSION UNIT CONDITIONS

DESCRIPTION

Dross handling operations. Emissions vented through SVALDROSSBH.

Flexible Group ID: FGCAMUNITS

POLLUTION CONTROL EQUIPMENT

A 50,000 CFM baghouse.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. PM	0.115 pph	Hourly	EUALDROSS	SC V.1	R 336.1205(1)(a) & (3)
2. PM	0.50 tpy	12-month rolling time period as determined at the end of each calendar month	EUALDROSS	SC VI.4	R 336.1205(1)(a) & (3)
3. PM10	0.8 pph	Hourly	EUALDROSS	SC V.2	R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d)
4. PM10	3.50 tpy	12-month rolling time period as determined at the end of each calendar month	EUALDROSS	SC VI.4	R 336.1205(1)(a) & (3)
5. PM2.5	0.8 pph	Hourly	EUALDROSS	SC V.2	R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d)
6. PM2.5	3.50 tpy	12-month rolling time period as determined at the end of each calendar month	EUALDROSS	SC VI.4	R 336.1205(1)(a) & (3)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate the EUALDROSS unless its associated baghouse is installed and operating in accordance with the manufacturer's operation and maintenance manual and/or good engineering practices (as documented in facility procedures). **(R 336.1910)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. Within five years from the date of the last test, and thereafter every five years, the permittee shall verify PM, PM10, PM2.5 emission rates from EUALDROSS by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM10/PM2.5	40 CFR Part 51, Appendix M

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205(3), R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

. The permittee shall verify the presence of visible emissions by taking a visible emission reading from EUALDROSS lasting at least six-minutes, a minimum of once per day. Either a certified or non-certified reader shall take the visible emission reading during routine operating conditions. Multiple stacks may be observed simultaneously. If the permittee observes any visible emissions, the permittee shall immediately implement the following procedures. **(R 336.1301, R 336.1910)**

a) The permittee shall repeat the six-minute visible emission reading at least once every 30 minutes until emissions are no longer visible or until emissions have been observed for more than two hours.

b) If visible emissions have been observed for more than two hours, a certified reader shall determine the opacity using Federal Reference Test Method 9 (40 CFR Part 60, Appendix A).

c) If the results of the Federal Reference Test Method 9 visible emission observation indicate a violation of the opacity standard specified in GC 11, the permittee shall immediately initiate corrective actions.

2. The permittee shall keep, in a satisfactory manner, records of all visible emission readings from EUALDROSS in the maintenance log. At a minimum, records shall include the date, time, name of observer/reader, whether the reader is certified, and status of visible emissions. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1301, R 336.1303, R 336.1910)**

3. The permittee shall monitor and record the pressure drop across the baghouse at least once per shift during operation. **(R 336.1205(1)(a) & (3), R 336.1301, R 336.1331, R 336.1910)**

4. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period PM, PM10 and PM2.5 emission calculation records for EUALDROSS, as required by SC I.2, I.4, and I.6. The permittee shall keep all records on file at the facility and make them available to the department upon request. **(R 336.1331, R 336.1910))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVALDROSSBH	40	51	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:
[1] This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

EUALCRUCIBLES
EMISSION UNIT CONDITIONS

DESCRIPTION

Ten gas-fired crucible stations rated at 1.5 MMBTU/hr each.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. NO_x	100.0 lb/MMcf	Hourly	EUALCRUCIBLES	SC VI.1	R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d)
2. NO_x	6.441 tpy	12-month rolling time period as determined at the end of each calendar month	EUALCRUCIBLES	SC VI.1	R 336.1205(1)(a) & (3)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not charge to EUALCRUCIBLES any reactive flux or material other than clean charge, or internal scrap, as defined by 40 CFR Part 63 Subpart RRR. This condition is necessary to avoid requirements of 40 CFR Part 63 Subpart RRR, NESHAP. **(R 336.1224, R 336.1225, 40 CFR Part 63, Subpart RRR)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall keep monthly record of the amount of natural gas usage from EUALCRUCIBLES in determination of annual emissions. Records of monthly and 12-month rolling usage rates of natural gas and NOx emission calculation records shall be kept on file for a period of at least five years and made available to the AQD upon request. **(R 336.1205(1)(a) & (3))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:
[1] This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

EUIMHOTDROSS
EMISSION UNIT CONDITIONS

DESCRIPTION

Salt cake/hot dross handling and loadout. Controlled emissions vented through SVIMDROSSBH.

Flexible Group ID: FGCAMUNITS

POLLUTION CONTROL EQUIPMENT

A 40,000 CFM baghouse.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. PM	0.90 pph	Hourly	EUIMHOTDROSS	SC V.1	R 336.1205(1)
2. PM	3.942 tpy	12-month rolling time period as determined at the end of each calendar month	EUIMHOTDROSS	SC VI.4	R 336.1205(3)
3. PM10	0.90 pph	Hourly	EUIMHOTDROSS	SC V.1	R 336.1205(3)
4. PM10	3.942 tpy	12-month rolling time period as determined at the end of each calendar month	EUIMHOTDROSS	SC VI.4	R 336.1205(3)
5. PM2.5	0.90 pph	Hourly	EUIMHOTDROSS	SC V.1	R 336.1205(3)
6. PM2.5	3.942 tpy	12-month rolling time period as determined at the end of each calendar month	EUIMHOTDROSS	SC VI.4	R 336.1205(3)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate the EUIMHOTDROSS unless the associated baghouse is installed and operating in accordance with the manufacturer's operation and maintenance manual and/or good engineering practices (as documented in facility procedures). **(R 336.1910)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. Within five years from the date of the last test, , and thereafter every five years, the permittee shall verify PM, PM10, and PM2.5 emission rates from EUIMHOTDROSS by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM10/PM2.5	40 CFR Part 51, Appendix M

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205(3), R 336.1331(1)(a) Table 31(J), R 336.2001, R 336.2003, R 336.2004)**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall verify the presence of visible emissions by taking a visible emission reading from EUIMHOTDROSS lasting at least six minutes, a minimum of once per day. Either a certified or non-certified reader shall take the visible emission reading during routine operating conditions. Multiple stacks may be observed simultaneously. If the permittee observes any visible emissions, the permittee shall immediately implement the following procedures: **(R 336.1301, R 336.1910)**

   a) The permittee shall repeat the six-minute visible emission reading at least once every 30 minutes until emissions are no longer visible or until emissions have been observed for more than two hours.

   b) If visible emissions have been observed for more than two hours, a certified reader shall determine the opacity using Federal Reference Test Method 9 (40 CFR Part 60, Appendix A).

   c) If the results of the Federal Reference Test Method 9 visible emission observation indicate a violation of the opacity standard specified in GC 11, the permittee shall immediately initiate corrective actions.

2. The permittee shall keep, in a satisfactory manner, records of all visible emission readings from EUIMHOTDROSS in the maintenance log. At a minimum, records shall include the date, time, name of observer/reader, whether the reader is certified, and status of visible emissions. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1301, R 336.1303, R 336.1910)**

3. The permittee shall monitor and record the pressure drop across the baghouse at least once per shift during operation. **(R 336.1205(1)(a) & (3), R 336.1301, R 336.1331, R 336.1910)**

4. The permittee shall keep, in a satisfactory manner 12-month rolling time period PM, PM10, and PM2.5 emission calculation records for EUIMHOTDROSS, as required by SC I.2, I.4, and I.6. The permittee shall keep all records on file at the facility and make them available to the department upon request. **(R 336.1205(1)(a) & (3))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVIMDROSSBH	51	75	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:
[1] This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

EUIMREVERBFURN
EMISSION UNIT CONDITIONS

DESCRIPTION

A reverberatory melting furnace having a charge capacity of 15,000 pounds per hour. Heat for melting is generated by natural gas burners having combined heat input rating of 32 MMBTU/hr. Emissions from natural gas combustion are emitted uncontrolled through SVIMREVFLUE.

Flexible Group ID: FGCAMUNITS, FGMACTRRR

POLLUTION CONTROL EQUIPMENT

Emissions from fluxing and melting are controlled by a 70,000 CFM lime-injected baghouse and are vented from SVIMREVBH.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. NO_x	0.40 lb/ton of feed/charge	Hourly	EUIMREVERBFURN emissions vented through SVIMREVFLUE	SC V.2	R 336.1205(1)(a) & (3), Consent Order AQD No. 2019-29, Paragraph 9A
2. NO_x	2.4 tpy	12-month rolling time period as determined at the end of each calendar month	EUIMREVERBFURN emissions vented through SVIMREVFLUE	SC VI.2	R 336.1205(1)(a) & (3), Consent Order AQD No. 2019-29, Paragraph 9A
3. NO_x	0.20 lb/ton of feed/charge	Hourly	EUIMREVERBFURN emissions vented through SVIMREVBH	SC V.2	R 336.1205(1)(a) & (3)
4. NO_x	1.2 tpy	12-month rolling time period as determined at the end of each calendar month	EUIMREVERBFURN emissions vented through SVIMREVBH	SC VI.2	R 336.1205(1)(a) & (3)
5. SO_2	0.60 lb/ton of feed/charge	Hourly	EUIMREVERBFURN emissions vented through SVIMREVBH	SC V.2	R 336.1205(1)(a) & (3)
6. SO_2	3.6 tpy	12-month rolling time period as determined at the end of each calendar month	EUIMREVERBFURN emissions vented through SVIMREVBH	SC VI.2	R 336.1205(1)(a) & (3)
7. PM10	0.25 lb/ton of feed/charge	Hourly	EUIMREVERBFURN emissions vented through SVIMREVBH	SC V.1	R 336.1205(1)(a) & (3)
8. PM10	1.50 tpy	12-month rolling time period as determined at the end of each calendar month	EUIMREVERBFURN emissions vented through SVIMREVBH	SC VI.2	R 336.1205(1)(a) & (3)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
9. PM10	2.6 lb/ton of feed/charge	Hourly	EUIMREVERBFURN emissions vented through SVIMREVFLUE	SC V.1	R 336.2810, 40 CFR 52.21(j), Consent Order AQD No. 2019-29, Paragraph 9A
10. PM10	15.6 tpy	12-month rolling time period as determined at the end of each calendar month	EUIMREVERBFURN emissions vented through SVIMREVFLUE	SC VI.2	R 336.2810, 40 CFR 52.21(j), Consent Order AQD No. 2019-29, Paragraph 9A
11. PM	0.25 lb/ton feed/charge	Hourly	EUIMREVERBFURN emissions vented through SVIMREVBH	SC V.1	R 336.1205(1)(a) & (3)
12. PM	1.50 tpy	12-month rolling time period as determined at the end of each calendar month	EUIMREVERBFURN emissions vented through SVIMREVBH	SC VI.2	R 336.1205(1)(a) & (3)
13. PM	3.25 lb/ton of feed/charge	Hourly	EUIMREVERBFURN emissions vented through SVIMREVFLUE	SC V.1	R 336.2810, 40 CFR 52.21(j)
14.. PM	19.50 tpy	12-month rolling time period as determined at the end of each calendar month	EUIMREVERBFURN emissions vented through SVIMREVFLUE	SC VI.2	R 336.2810, 40 CFR 52.21(j)
15. PM2.5	0.25 lb/ton feed/charge	Hourly	EUIMREVERBFURN emissions vented through SVIMREVBH	SC V.1	R 336.1205(1)(a) & (3)
16. PM2.5	1.50 tpy	12-month rolling time period as determined at the end of each calendar month	EUIMREVERBFURN emissions vented through SVIMREVBH	SC VI.2	R 336.1205(1)(a) & (3)
17. PM2.5	2.6 lb/ton of feed/charge	Hourly	EUIMREVERBFURN emissions vented through SVIMREVFLUE	SC V.1	R 336.2810, 40 CFR 52.21(j)
18. PM2.5	15.6 tpy	12-month rolling time period as determined at the end of each calendar month	EUIMREVERBFURN emissions vented through SVIMREVFLUE	SC VI.2	R 336.2810, 40 CFR 52.21(j)
19. THC, as propane	0.4 lb/ton feed/charge	Hourly	EUIMREVERBFURN emissions vented through SVIMREVBH	SC V.1	R 336.1205(1)(a) & (3)
20. THC, as propane	2.40 tpy	12-month rolling time period as determined at the end of each calendar month	EUIMREVERBFURN emissions vented through SVIMREVBH	SC VI.2	R 336.1205(1)(a) & (3)
21. THC, as propane	0.2 lb/ton of feed/charge	Hourly	EUIMREVERBFURN emissions vented through SVIMREVFLUE	SC V.1	R 336.2810, 40 CFR 52.21(j)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
22. THC, as propane	1.20 tpy	12-month rolling time period as determined at the end of each calendar month	EUIMREVERBFURN emissions vented through SVIMREVFLUE	SC VI.2	R 336.2810, 40 CFR 52.21(j)
23. HCl	0.40 lb/ton of feed/charge	Hourly	EUIMREVERBFURN emissions vented through SVIMREVBH	SC V.1	R 336.1225, 40 CFR Part 63, Subpart RRR
24. HCl	2.4 tpy	12-month rolling time period as determined at the end of each calendar month	EUIMREVERBFURN emissions vented through SVIMREVBH	SC VI.2	R 336.1205(1)(a) & (3), R 336.1225
25. HCl	1.648 lb/ton of feed/charge	Hourly	EUIMREVERBFURN emissions vented through SVIMREVFLUE	SC V.1	R 336.1205(1)(a) & (3), R 336.1225, Consent Order AQD No. 2019-29, Paragraph 9A
26. HCl	9.89 tpy	12-month rolling time period as determined at the end of each calendar month	EUIMREVERBFURN emissions vented through SVIMREVFLUE	SC VI.2	R 336.1205(1) (a) & (3), R 336.1225, Consent Order AQD No. 2019-29, Paragraph 9A
27. D/F	0.00021 grain of D/F TEQ* per ton of feed/charge	Hourly	EUIMREVERBFURN emissions vented through SVIMREVBH	SC V.1	40 CFR Part 63, Subpart RRR
28. HF	0.126 lb/ton of feed/charge	Hourly	EUIMREVERBFURN emissions vented through SVIMREVFLUE	SC V.1	R 336.1205(1)(a) & (3), R 336.1225
29. HF	0.76 tpy	12-month rolling time period as determined at the end of each calendar month	EUIMREVERBFURN emissions vented through SVIMREVFLUE	SC VI.2	R 336.1205(1)(a) & (3), R 336.1225

* TEQ means the international method of expressing toxicity equivalents for D/F as defined in “Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and -Dibenzofurans (CDDs and CDFs) and 1989 Update” (EPA-625/3-89-016).

II. MATERIAL LIMIT(S)

Material	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Feed/Charge	12,000 tpy	12-month rolling time period as determined at the end of each calendar month	EUIMREVERBFURN	SC VI.1	R 336.1205(1)(a) & (3)
2. Feed/Charge	200,000 lbs/day	Daily	EUIMREVERBFURN	SC VI.1	R 336.1205(1)(a) & (3)

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall operate the burners using natural gas only. **(R 336.1205(1)(a) & (3))**

2. The permittee shall initiate corrective action within one hour of a bag leak detection system alarm. **(40 CFR Part 63, Subpart RRR)**

3. The permittee shall maintain the three-hour block average inlet temperature for each fabric filter at or below the average temperature established during the performance test, plus 14ºC (plus 25ºF). **(40 CFR Part 63, Subpart RRR)**

4. The permittee shall maintain free-flowing lime in the hopper to the feed device at all times and maintain the lime feeder setting at the same level established during the performance test. **(40 CFR Part 63, Subpart RRR)**

5. The permittee shall maintain the level of molten aluminum above the top of the passage between the sidewell and hearth during reactive flux injection and record in an operating log for each charge of a sidewell furnace. **(40 CFR Part 63, Subpart RRR)**

6. The permittee shall install, calibrate, monitor, continuously operate a bag leak detection system alarm, and complete the corresponding corrective action procedure in accordance with the submitted OM & M plan in compliance with 40 CFR 63.1510 (b). **(40 CFR Part 63, Subpart RRR)**

7. The permittee shall not charge to the main hearth of EUIMREVERBFURN any reactive flux or material other than clean charge, or internal scrap, as defined by 40 CFR Part 63, Subpart RRR. This condition is necessary to avoid requirements of 40 CFR Part 63, Subpart RRR, NESHAP. **(R 336.1224, R 336.1225, 40 CFR Part 63, Subpart RRR)**

8. The permittee shall operate each fabric filter system, such that the bag leak detection system alarm does not sound more than five percent of the operating time during a six-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 one hour. If the owner or operator takes longer than one 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 Part 63, Subpart RRR)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate the EUIMREVERBFURN unless the associated baghouse is installed and operating in accordance with the submitted OM & M plan in compliance with 40 CFR 63.1510 (b). **(R 336.1910, 40 CFR Part 63, Subpart RRR)**

2. The permittee shall not operate EUIMREVERBFURN unless the system for the capture and collection of emissions is installed, maintained, and operated in accordance with the NESHAP standards or USEPA approved alternatives. **(R 336.1910, 40 CFR Part 63, Subpart RRR)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. Within five years from the date of the last test, , and thereafter every five years, the permittee shall verify PM, PM10, PM2.5, NO_x, SO_2, THC, HCl, HF, D/F emission rates from EUIMREVERBFURN by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM10/PM2.5	40 CFR Part 51, Appendix M

NO_x	40 CFR Part 60, Appendix A
SO_2	40 CFR Part 60, Appendix A
THC	40 CFR Part 60, Appendix A
D/F	40 CFR Part 60, Appendix A
HCl	40 CFR Part 60, Appendix A
HF	40 CFR Part 60, Appendix A

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205(3), R 336.1225, R 336.2001, R 336.2003, R 336.2004, R 336.2810, 40 CFR52.21(c) and (d), 40 CFR 63.1506), Consent Order AQD No. 2019-29, Paragraph 9F)**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall keep records of the feed/charge to EUIMREVERBFURN excluding molten transfers accounted for in the feed/charge records of the furnace in which it was melted. These records shall be based on daily average and 12-month rolling time period as determined at the end of each calendar month. The monthly average shall include only those days for which EUIMREVERBFURN operated. **(R 336.1205(1)(a) & (3))**

2. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period emission calculation records for EUIMREVERBFURN. The permittee shall keep all records on file at the facility and make them available to the department upon request. **(R 336.1205(1)(a) & (3))**

3. The permittee shall keep monthly record of the amount of natural gas usage for EUIMREVERBFURN. Records of monthly and 12-month rolling usage rates of natural gas shall be kept on file for a period of at least five years and made available to the AQD upon request. **(R 336.1205(1)(a) & (3))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVIMREVBH	71	78	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
2. SVIMREVFLUE	65	105	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subparts A and RRR for Secondary Aluminum Production. **(40 CFR Part 63 Subparts A and RRR)**

Footnotes:
[1] This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

EUIMROTFURN1/2
EMISSION UNIT CONDITIONS

DESCRIPTION

Two formerly separate furnaces that have become commonly controlled (EUIMROTFURN1 and EUIMROTFURN2). These are rotary melting furnaces with a combined hourly charge capacity of 42,000 pounds. Heat for melting is generated by natural gas burners having combined heat input rating of 56 MMBTU/hr. Emissions from EUIMROTFURN1/2 are vented through SVIMROT1/2BH.

Flexible Group ID: FGCAMUNITS, FGMACTRRR

POLLUTION CONTROL EQUIPMENT

Emissions from EUIMROTFURN1/2 are controlled by oxy-fuel burners and an 80,000 CFM lime-injected baghouse.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. NO_x	0.50 lb/ton feed/charge	Hourly	EUIMROTFURN1/2	SC V.2	R 336.1205(1)(a) & (3)
2. NO_x	26.13 tpy	12-month rolling time period as determined at the end of each calendar month	EUIMROTFURN1/2	SC VI.2	R 336.1205(1)(a) & (3)
3. SO_2	1.0 lb/ton feed/charge	Hourly	EUIMROTFURN1/2	SC V.2	R 336.1205(1)(a) & (3)
4. SO_2	52.25 tpy	12-month rolling time period as determined at the end of each calendar month	EUIMROTFURN1/2	SC VI.2	R 336.1205(1)(a) & (3)
5. PM	0.40 lb/ton feed/charge	Hourly	EUIMROTFURN1/2	SC V.1	R 336.2810, 40 CFR 52.21(j), 40 CFR Part 63, Subpart RRR
6. PM	20.90 tpy	12-month rolling time period as determined at the end of each calendar month	EUIMROTFURN1/2	SC VI.2	R 336.2810, 40 CFR 52.21(j), 40 CFR Part 63, Subpart RRR
7. HCl	0.080 lb/ton of feed/charge[1]	Hourly	EUIMROTFURN1/2	SC V.1	R 336.1225

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
8. HCl	4.18 tpy[1]	12-month rolling time period as determined at the end of each calendar month	EUIMROTFURN1/2	SC VI.2	R 336.1225
9. D/F	0.00021 gr of D/F TEQ* per ton of feed/charge	Hourly	EUIMROTFURN1/2	SC V.1	40 CFR Part 63, Subpart RRR
10. PM10	0.40 lb/ton of feed/charge	Hourly	EUIMROTFURN1/2	SC V.1	R 336.2810, 40 CFR 52.21(j)
11. PM10	20.90 tpy	12-month rolling time period as determined at the end of each calendar month	EUIMROTFURN1/2	SC VI.2	R 336.2810, 40 CFR 52.21(j)
12. THC, as propane	0.80 lb/ton of feed/charge	Hourly	EUIMROTFURN1/2	SC V.1	R 336.2810, 40 CFR 52.21(j)
13. THC, as propane	41.80 tpy	12-month rolling time period as determined at the end of each calendar month	EUIMROTFURN1/2	SC VI.2	R 336.2810, 40 CFR 52.21(j)
14. PM2.5	0.40 lb/ton of feed/charge	Hourly	EUIMROTFURN1/2	SC V.1	R 336.1205(1)(a) & (3)
15. PM2.5	20.90 tpy	12-month rolling time period as determined at the end of each calendar month	EUIMROTFURN1/2	SC VI.2	R 336.1205(1)(a) & (3)

* TEQ means the international method of expressing toxicity equivalents for D/F as defined in “Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and -Dibenzofurans (CDDs and CDFs) and 1989 Update” (EPA-625/3-89-016).

II. MATERIAL LIMIT(S)

Material	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Feed/Charge	104,500 tpy	12-month rolling time period as determined at the end of each calendar month	EUIMROTFURN1/2	SC VI.1	R 336.1205(1)(a) & (3)
2. Feed/Charge	360 tons/day	Daily	EUIMROTFURN1/2	SC VI.1	R 336.1205(1)(a) & (3)

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall operate the burners using natural gas only. **(R 336.1205(1)(a) & (3))**

2. The permittee shall operate each fabric filter system such that the bag leak detection system alarm does not sound more than five percent of the operating time during a six-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 one hour. If the owner or operator takes longer than one 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 Part 63, Subpart RRR)**

3. The permittee shall initiate corrective action within one hour of a bag leak detection system alarm. **(40 CFR Part 63, Subpart RRR)**

4. The permittee shall maintain the three-hour block average inlet temperature for each fabric filter at or below the average temperature established during the performance test, plus 14ºC (plus 25ºF). **(40 CFR Part 63, Subpart RRR)**

5. The permittee shall maintain free-flowing lime in the hopper to the feed device at all times and maintain the lime feeder setting at the same level established during the performance test. **(40 CFR Part 63, Subpart RRR)**

6. The permittee shall install, calibrate, monitor, continuously operate a bag leak detection system alarm, and complete the corresponding corrective action procedure in accordance with the submitted OM & M plan in compliance with 40 CFR 63.1510 (b). **(40 CFR Part 63, Subpart RRR)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate the EUIMROTFURN1/2 unless the associated baghouses are installed and operating in accordance with the submitted OM & M plan in compliance with 40 CFR 63.1510 (b). **(R 336.1910, 40 CFR Part 63, Subpart RRR)**

2. The permittee shall not operate EUIMROTFURN1/2 unless the system for the capture and collection of emissions is installed, maintained, and operated in accordance with the NESHAP standards or USEPA approved alternatives. **(R 336.1910, 40 CFR Part 63, Subpart RRR)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. Within five years from the date of the last test, and thereafter every five years, the permittee shall verify PM, PM10, PM2.5, NO_x, SO_2, HCl, THC, and D/F emission rates from EUIMROTFURN1/2 by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM10/PM2.5	40 CFR Part 51, Appendix M
NO_x	40 CFR Part 60, Appendix A
SO_2	40 CFR Part 60, Appendix A
THC	40 CFR Part 60, Appendix A
D/F	40 CFR Part 60, Appendix A
HCl	40 CFR Part 60, Appendix A

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District

Office within 60 days following the last date of the test. **(R 336.1205(3), R 336.2001, R 336.2003, R 336.2004, R 336.2810, 40 CFR 52.21(j))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

The permittee shall keep record of the feed/charge to EUIMROTFURN1/2 excluding molten transfers accounted for in the feed/charge records of the furnace in which it was melted. These records shall be based on daily average and 12-month rolling time periods, as determined at the end of each calendar month. The monthly average shall include only those days in which EUIMROTFURN1/2 operated. **(R 336.1205(1)(a) & (3))**

2. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period emission calculation records for EUIMROTFURN1/2. The permittee shall keep all records on file at the facility and make them available to the department upon request. **(R 336.1205(1)(a) & (3))**

3. The permittee shall keep monthly record of the amount of natural gas usage for EUIMROTFURN1/2. Records of monthly and 12-month rolling usage rates of natural gas shall be kept on file for a period of at least five years and made available to the AQD upon request. **(R 336.1205(1)(a) & (3))**

4. The permittee shall complete all required records and calculations on file at the facility in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1205(1)(a) & (3))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVIMROT1/2BH	70	80	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subparts A and RRR for Secondary Aluminum Production. **(40 CFR Part 63, Subparts A and RRR)**

Footnotes:
[1] This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

EUIMCRUCIBLES
EMISSION UNIT CONDITIONS

DESCRIPTION

Eight gas-fired crucible stations rated at 1.5 MMBTU/hr each.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. NO_x	100.000 lb/MMcf	Hourly	EUIMCRUCIBLES	SC VI.1	R 336.1205(1) (a) & (3)
2. NO_x	5.153 tpy	12-month rolling time period	EUIMCRUCIBLES	SC VI.1	R 336.1205(1) (a) & (3)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not charge to EUIMCRUCIBLES any reactive flux or material other than clean charge, or internal scrap, as defined by 40 CFR Part 63, Subpart RRR. This condition is necessary to avoid requirements of 40 CFR Part 63, Subpart RRR, NESHAP. **(R 336.1224, R 336.1225, 40 CFR Part 63, Subpart RRR)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall keep monthly record of the amount of natural gas usage from EUIMCRUCIBLES combustion process fuel in determination of annual emissions. Records of monthly and 12-month rolling usage rates of natural gas and NOx emission calculation records shall be kept on file for a period of at least five years and made available to the AQD upon request. **(R 336.1205(1)(a) & (3))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:
[1] This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

FGFACILITY CONDITIONS

DESCRIPTION

The following conditions apply source-wide to all process equipment including equipment covered by other permits, grand-fathered equipment, and exempt equipment.

POLLUTION CONTROL EQUIPMENT

Individual Control devices within each emission unit.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
PM	88.3 tpy	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.5	R 336.1205(1)(a) & (3)
PM10	78.6 tpy	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.5	R 336.1205(1)(a) & (3)
PM2.5	77.5 tpy	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.5	R 336.1205(1)(a) & (3)
NO_x	88.5 tpy	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.5	R 336.1205(1)(a) & (3)
CO	82.9 tpy	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.5	R 336.1205(1)(a) & (3)
VOC	89.7 tpy	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.5	R 336.1205(1)(a) & (3)

II. MATERIAL LIMIT(S)

NA.

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall operate the process or process equipment covered by this permit as indicated in the OM & M plan as specified in 40 CFR 63.1506 and 40 CFR 63.1510 and as submitted to the AQD District Supervisor. **(R 336.1205, 40 CFR 63.1506, 40 CFR 52.21(c) & (d))**

2. The permittee must inspect the labels for each group 1 furnace, group 2 furnace, and scrap dryer at least once per calendar month to confirm that posted labels as required by the operational standard in 40 CFR 63.1506(b) are intact and legible. **(40 CFR Part 63, Subpart RRR)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The total maximum heat input of exempt natural gas burning equipment such as space heaters, hot water heaters and process heaters, shall not exceed 59 MMBTU/hr. **(R 336.1205(1)(a) & (3))**

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1205(1)(a) & (3))**

2. The permittee shall insure that the accuracy of the feed/charge weight measurement devices is 100 percent $\pm$ one percent of weight measured. **(40 CFR Part 63, Subpart RRR)**

3. The permittee shall calibrate the feed/charge measurement devices at least once every six months. **(40 CFR Part 63, Subpart RRR)**

4. The permittee shall monitor and record emissions and operating information as required by the NESHAP regulations specified in 40 CFR 63.1510. **(R 336.1201, 40 CFR 63.1510)**

5. The permittee shall keep the following information on a monthly basis for the Source:
   a) PM emission calculations determining the monthly emission rate in tons per calendar month.
   b) PM emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.
   c) PM10 emission calculations determining the monthly emission rate in tons per calendar month.
   d) PM10 emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.
   e) PM2.5 emission calculations determining the monthly emission rate in tons per calendar month.
   f) PM2.5 emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.
   g) NO_x emission calculations determining the monthly emission rate in tons per calendar month.
   h) NO_x emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.
   i) CO emission calculations determining the monthly emission rate in tons per calendar month.
   j) CO emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.
   k) VOC emission calculations determining the monthly emission rate in tons per calendar month.

l) VOC emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records on file at the facility, in a format acceptable to the AQD District Supervisor, and make them available to the Department upon request. **(R 336.1205(1)(a) & (3))**

6. Within 90 days of permit issuance and within 30 days of completing installation on any new equipment, the permittee shall submit a list of exempt natural gas burning equipment not listed in this permit or that is exempt from Permit to Install requirements, as limited in SC IV.1, to the AQD District Supervisor. This list shall include the installation date and the size of the equipment and shall be maintained at the facility in a format acceptable to the AQD District Supervisor and make them available to the Department upon request. **(R 336.1205(1)(a) & (3))**

VII. REPORTING

1. The permittee shall submit semiannual excess emission/summary reports within 60 days after the end of each six-month period. Each report must contain the information specified in 40 CFR 63.10(c). When no deviations of parameters have occurred, the permittee must submit a report stating that no excess emissions occurred during the reporting period. **(40 CFR Part 63, Subpart RRR)**

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subparts A and RRR for Secondary Aluminum Production.[2] **(40 CFR Part 63, Subparts A and RRR)**

Footnotes:
[1] This condition is state only enforceable and was established pursuant to Rule 201(1)(b).