

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

EFFECTIVE DATE: October 27, 2022

ISSUED TO

Real Alloy Specification, LLC

State Registration Number (SRN): N5957

LOCATED AT

368 West Garfield Avenue and 267 North Filmore Road, Coldwater, Branch County, Michigan 49036

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-N5957-2022

Expiration Date: October 27, 2027

Administratively Complete ROP Renewal Application Due Between
April 27, 2026 and April 27, 2027

This Renewable Operating Permit (ROP) is issued in accordance with and subject to Section 5506(3) of Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451). Pursuant to Rule 210(1) of the administrative rules promulgated under Act 451, this ROP constitutes the permittee's authority to operate the stationary source identified above in accordance with the general conditions, special conditions and attachments contained herein. Operation of the stationary source and all emission units listed in the permit are subject to all applicable future or amended rules and regulations pursuant to Act 451 and the federal Clean Air Act.

SOURCE-WIDE PERMIT TO INSTALL

Permit Number: MI-PTI-N5957-2022

This Permit to Install (PTI) is issued in accordance with and subject to Section 5505(1) of Act 451. Pursuant to Rule 214a of the administrative rules promulgated under Act 451, the terms and conditions herein, identified by the underlying applicable requirement citation of Rule 201(1)(a), constitute a federally enforceable PTI. The PTI terms and conditions do not expire and remain in effect unless the criteria of Rule 201(6) are met. Operation of all emission units identified in the PTI is subject to all applicable future or amended rules and regulations pursuant to Act 451 and the federal Clean Air Act.

Michigan Department of Environment, Great Lakes, and Energy

Rex Lane, Kalamazoo District Supervisor

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AUTHORITY AND ENFORCEABILITY

For the purpose of this permit, the **permittee** is defined as any person who owns or operates an emission unit at a stationary source for which this permit has been issued. The **department** is defined in Rule 104(d) as the Director of the Michigan Department of Environment, Great Lakes, and Energy (EGLE) or his or her designee.

The permittee shall comply with all specific details in the permit terms and conditions and the cited underlying applicable requirements. All terms and conditions in this ROP are both federally enforceable and state enforceable unless otherwise footnoted. Certain terms and conditions are applicable to most stationary sources for which an ROP has been issued. These general conditions are included in Part A of this ROP. Other terms and conditions may apply to a specific emission unit, several emission units which are represented as a flexible group, or the entire stationary source which is represented as a Source-Wide group. Special conditions are identified in Parts B, C, D and/or the appendices.

In accordance with Rule 213(2)(a), all underlying applicable requirements are identified for each ROP term or condition. All terms and conditions that are included in a PTI are streamlined, subsumed and/or is state-only enforceable will be noted as such.

In accordance with Section 5507 of Act 451, the permittee has included in the ROP application a compliance certification, a schedule of compliance, and a compliance plan. For applicable requirements with which the source is in compliance, the source will continue to comply with these requirements. For applicable requirements with which the source is not in compliance, the source will comply with the detailed schedule of compliance requirements that are incorporated as an appendix in this ROP. Furthermore, for any applicable requirements effective after the date of issuance of this ROP, the stationary source will meet the requirements on a timely basis, unless the underlying applicable requirement requires a more detailed schedule of compliance.

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

This permit does not relieve the permittee from any responsibilities or obligations imposed on the permittee, at this source, under Consent Order AQD No. 2019-29, entered on November 26, 2019, between EGLE and the permittee.

A. GENERAL CONDITIONS

Permit Enforceability

- All conditions in this permit are both federally enforceable and state enforceable unless otherwise noted. **(R 336.1213(5))**
- Those conditions that are hereby incorporated in a state-only enforceable Source-Wide PTI pursuant to Rule 201(2)(d) are designated by footnote one. **(R 336.1213(5)(a), R 336.1214a(5))**
- Those conditions that are hereby incorporated in a federally enforceable Source-Wide PTI pursuant to Rule 201(2)(c) are designated by footnote two. **(R 336.1213(5)(b), R 336.1214a(3))**

General Provisions

1. The permittee shall comply with all conditions of this ROP. Any ROP noncompliance constitutes a violation of Act 451, and is grounds for enforcement action, for ROP revocation or revision, or for denial of the renewal of the ROP. All terms and conditions of this ROP that are designated as federally enforceable are enforceable by the Administrator of the United States Environmental Protection Agency (USEPA) and by citizens under the provisions of the federal Clean Air Act (CAA). Any terms and conditions based on applicable requirements which are designated as "state-only" are not enforceable by the USEPA or citizens pursuant to the CAA. **(R 336.1213(1)(a))**
2. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this ROP. **(R 336.1213(1)(b))**
3. This ROP may be modified, revised, or revoked for cause. The filing of a request by the permittee for a permit modification, revision, or termination, or a notification of planned changes or anticipated noncompliance does not stay any ROP term or condition. This does not supersede or affect the ability of the permittee to make changes, at the permittee's own risk, pursuant to Rule 215 and Rule 216. **(R 336.1213(1)(c))**
4. The permittee shall allow the department, or an authorized representative of the department, upon presentation of credentials and other documents as may be required by law and upon stating the authority for and purpose of the investigation, to perform any of the following activities: **(R 336.1213(1)(d))**
 - a. Enter, at reasonable times, a stationary source or other premises where emissions-related activity is conducted or where records must be kept under the conditions of the ROP.
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the ROP.
 - c. Inspect, at reasonable times, any of the following:
 - i. Any stationary source.
 - ii. Any emission unit.
 - iii. Any equipment, including monitoring and air pollution control equipment.
 - iv. Any work practices or operations regulated or required under the ROP.
 - d. As authorized by Section 5526 of Act 451, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the ROP or applicable requirements.
5. The permittee shall furnish to the department, within a reasonable time, any information the department may request, in writing, to determine whether cause exists for modifying, revising, or revoking the ROP or to determine compliance with this ROP. Upon request, the permittee shall also furnish to the department copies of any records that are required to be kept as a term or condition of this ROP. For information which is claimed by the permittee to be confidential, consistent with the requirements of the 1976 PA 442, MCL §15.231 et seq., and known as the Freedom of Information Act, the person may also be required to furnish the records directly to the USEPA together with a claim of confidentiality. **(R 336.1213(1)(e))**

6. A challenge by any person, the Administrator of the USEPA, or the department to a particular condition or a part of this ROP shall not set aside, delay, stay, or in any way affect the applicability or enforceability of any other condition or part of this ROP. **(R 336.1213(1)(f))**
7. The permittee shall pay fees consistent with the fee schedule and requirements pursuant to Section 5522 of Act 451. **(R 336.1213(1)(g))**
8. This ROP does not convey any property rights or any exclusive privilege. **(R 336.1213(1)(h))**

Equipment & Design

9. Any 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).² **(R 336.1370)**
10. Any air cleaning device shall be installed, maintained, and operated in a satisfactory manner and in accordance with the Michigan Air Pollution Control rules and existing law. **(R 336.1910)**

Emission Limits

11. Unless otherwise specified in this ROP, the permittee shall comply with Rule 301, which states, in part, "Except as provided in Subrules 2, 3, and 4 of this rule, a person shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of a density greater than the most stringent of the following:"² **(R 336.1301(1))**
 - a. A 6-minute average of 20% opacity, except for one 6-minute average per hour of not more than 27% opacity.
 - b. A limit specified by an applicable federal new source performance standard.

The grading of visible emissions shall be determined in accordance with Rule 303.

12. The permittee shall not cause or permit the emission of an air contaminant or water vapor in quantities that cause, alone or in reaction with other air contaminants, either of the following:
 - a. Injurious effects to human health or safety, animal life, plant life of significant economic value, or property.¹ **(R 336.1901(a))**
 - b. Unreasonable interference with the comfortable enjoyment of life and property.¹ **(R 336.1901(b))**

Testing/Sampling

13. The department may require the owner or operator of any source of an air contaminant to conduct acceptable performance tests, at the owner's or operator's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001(1).² **(R 336.2001)**
14. Any required performance testing shall be conducted in accordance with Rule 1001(2), Rule 1001(3) and Rule 1003. **(R 336.2001(2), R 336.2001(3), R 336.2003(1))**
15. Any required test results shall be submitted to the Air Quality Division (AQD) in the format prescribed by the applicable reference test method within 60 days following the last date of the test. **(R 336.2001(5))**

Monitoring/Recordkeeping

16. Records of any periodic emission or parametric monitoring required in this ROP shall include the following information specified in Rule 213(3)(b)(i), where appropriate. **(R 336.1213(3)(b))**
 - a. The date, location, time, and method of sampling or measurements.
 - b. The dates the analyses of the samples were performed.
 - c. The company or entity that performed the analyses of the samples.
 - d. The analytical techniques or methods used.
 - e. The results of the analyses.
 - f. The related process operating conditions or parameters that existed at the time of sampling or measurement.
17. All required monitoring data, support information and all reports, including reports of all instances of deviation from permit requirements, shall be kept and furnished to the department upon request for a period of not less than 5 years from the date of the monitoring sample, measurement, report or application. Support information includes all calibration and maintenance records and all original strip-chart recordings, or other original data records, for continuous monitoring instrumentation and copies of all reports required by the ROP. **(R 336.1213(1)(e), R 336.1213(3)(b)(ii))**

Certification & Reporting

18. Except for the alternate certification schedule provided in Rule 213(3)(c)(iii)(B), any document required to be submitted to the department as a term or condition of this ROP shall contain an original certification by a Responsible Official which state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. **(R 336.1213(3)(c))**
19. A Responsible Official shall certify to the appropriate AQD District Office and to the USEPA that the stationary source is and has been in compliance with all terms and conditions contained in the ROP except for deviations that have been or are being reported to the appropriate AQD District Office pursuant to Rule 213(3)(c). This certification shall include all the information specified in Rule 213(4)(c)(i) through (v) and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete. The USEPA address is: USEPA, Air Compliance Data - Michigan, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, Illinois 60604-3507. **(R 336.1213(4)(c))**
20. The certification of compliance shall be submitted annually for the term of this ROP as detailed in the special conditions, or more frequently if specified in an applicable requirement or in this ROP. **(R 336.1213(4)(c))**
21. The permittee shall promptly report any deviations from ROP requirements and certify the reports. The prompt reporting of deviations from ROP requirements is defined in Rule 213(3)(c)(ii) as follows, unless otherwise described in this ROP. **(R 336.1213(3)(c))**
 - a. For deviations that exceed the emissions allowed under the ROP, prompt reporting means reporting consistent with the requirements of Rule 912 as detailed in Condition 25. All reports submitted pursuant to this paragraph shall be promptly certified as specified in Rule 213(3)(c)(iii).
 - b. For deviations which exceed the emissions allowed under the ROP and which are not reported pursuant to Rule 912 due to the duration of the deviation, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe reasons for each deviation and the actions taken to minimize or correct each deviation.
 - c. For deviations that do not exceed the emissions allowed under the ROP, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe the reasons for each deviation and the actions taken to minimize or correct each deviation.

22. For reports required pursuant to Rule 213(3)(c)(ii), prompt certification of the reports is described in Rule 213(3)(c)(iii) as either of the following: **(R 336.1213(3)(c))**
 - a. Submitting a certification by a Responsible Official with each report which states that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
 - b. Submitting, within 30 days following the end of a calendar month during which one or more prompt reports of deviations from the emissions allowed under the ROP were submitted to the department pursuant to Rule 213(3)(c)(ii), a certification by a Responsible Official which states that; “based on information and belief formed after reasonable inquiry, the statements and information contained in each of the reports submitted during the previous month were true, accurate, and complete.” The certification shall include a listing of the reports that are being certified. Any report submitted pursuant to Rule 213(3)(c)(ii) that will be certified on a monthly basis pursuant to this paragraph shall include a statement that certification of the report will be provided within 30 days following the end of the calendar month.
23. Semiannually for the term of the ROP as detailed in the special conditions, or more frequently if specified, the permittee shall submit certified reports of any required monitoring to the appropriate AQD District Office. All instances of deviations from ROP requirements during the reporting period shall be clearly identified in the reports. **(R 336.1213(3)(c)(i))**
24. On an annual basis, the permittee shall report the actual emissions, or the information necessary to determine the actual emissions, of each regulated air pollutant as defined in Rule 212(6) for each emission unit utilizing the emissions inventory forms provided by the department. **(R 336.1212(6))**
25. 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 appropriate AQD District Office. The notice shall be provided not later than two business days after the start-up, shutdown, or discovery of the abnormal conditions or malfunction. Notice shall be by any reasonable means, including electronic, telephonic, or oral communication. Written reports, if required under Rule 912, must be submitted to the appropriate AQD District Supervisor 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 conditions or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5) and shall be certified by a Responsible Official in a manner consistent with the CAA.² **(R 336.1912)**

Permit Shield

26. Compliance with the conditions of the ROP shall be considered compliance with any applicable requirements as of the date of ROP issuance if either of the following provisions is satisfied. **(R 336.1213(6)(a)(i), R 336.1213(6)(a)(ii))**
 - a. The applicable requirements are included and are specifically identified in the ROP.
 - b. The permit includes a determination or concise summary of the determination by the department that other specifically identified requirements are not applicable to the stationary source.

Any requirements identified in Part E of this ROP have been identified as non-applicable to this ROP and are included in the permit shield.

27. Nothing in this ROP shall alter or affect any of the following:
 - a. The provisions of Section 303 of the CAA, emergency orders, including the authority of the USEPA under Section 303 of the CAA. **(R 336.1213(6)(b)(i))**
 - b. The liability of the owner or operator of this source for any violation of applicable requirements prior to or at the time of this ROP issuance. **(R 336.1213(6)(b)(ii))**
 - c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the CAA. **(R 336.1213(6)(b)(iii))**

- d. The ability of the USEPA to obtain information from a source pursuant to Section 114 of the CAA. **(R 336.1213(6)(b)(iv))**
28. The permit shield shall not apply to provisions incorporated into this ROP through procedures for any of the following:
- a. Operational flexibility changes made pursuant to Rule 215. **(R 336.1215(5))**
 - b. Administrative Amendments made pursuant to Rule 216(1)(a)(i)-(iv). **(R 336.1216(1)(b)(iii))**
 - c. Administrative Amendments made pursuant to Rule 216(1)(a)(v) until the amendment has been approved by the department. **(R 336.1216(1)(c)(iii))**
 - d. Minor Permit Modifications made pursuant to Rule 216(2). **(R 336.1216(2)(f))**
 - e. State-Only Modifications made pursuant to Rule 216(4) until the changes have been approved by the department. **(R 336.1216(4)(e))**
29. Expiration of this ROP results in the loss of the permit shield. If a timely and administratively complete application for renewal is submitted not more than 18 months, but not less than 6 months, before the expiration date of the ROP, but the department fails to take final action before the end of the ROP term, the existing ROP does not expire until the renewal is issued or denied, and the permit shield shall extend beyond the original ROP term until the department takes final action. **(R 336.1217(1)(c), R 336.1217(1)(a))**

Revisions

30. For changes to any process or process equipment covered by this ROP that do not require a revision of the ROP pursuant to Rule 216, the permittee must comply with Rule 215. **(R 336.1215, R 336.1216)**
31. A change in ownership or operational control of a stationary source covered by this ROP shall be made pursuant to Rule 216(1). **(R 336.1219(2))**
32. For revisions to this ROP, an administratively complete application shall be considered timely if it is received by the department in accordance with the time frames specified in Rule 216. **(R 336.1210(10))**
33. Pursuant to Rule 216(1)(b)(iii), Rule 216(2)(d) and Rule 216(4)(d), after a change has been made, and until the department takes final action, the permittee shall comply with both the applicable requirements governing the change and the ROP terms and conditions proposed in the application for the modification. During this time period, the permittee may choose to not comply with the existing ROP terms and conditions that the application seeks to change. However, if the permittee fails to comply with the ROP terms and conditions proposed in the application during this time period, the terms and conditions in the ROP are enforceable. **(R 336.1216(1)(c)(iii), R 336.1216(2)(d), R 336.1216(4)(d))**

Reopenings

34. A ROP shall be reopened by the department prior to the expiration date and revised by the department under any of the following circumstances:
- a. If additional requirements become applicable to this stationary source with three or more years remaining in the term of the ROP, but not if the effective date of the new applicable requirement is later than the ROP expiration date. **(R 336.1217(2)(a)(i))**
 - b. If additional requirements pursuant to Title IV of the CAA become applicable to this stationary source. **(R 336.1217(2)(a)(ii))**
 - c. If the department determines that the ROP contains a material mistake, information required by any applicable requirement was omitted, or inaccurate statements were made in establishing emission limits or the terms or conditions of the ROP. **(R 336.1217(2)(a)(iii))**
 - d. If the department determines that the ROP must be revised to ensure compliance with the applicable requirements. **(R 336.1217(2)(a)(iv))**

Renewals

35. For renewal of this ROP, an administratively complete application shall be considered timely if it is received by the department not more than 18 months, but not less than 6 months, before the expiration date of the ROP. **(R 336.1210(9))**

Stratospheric Ozone Protection

36. If the permittee is subject to Title 40 of the Code of Federal Regulations (CFR), Part 82 and services, maintains, or repairs appliances except for motor vehicle air conditioners (MVAC), or disposes of appliances containing refrigerant, including MVAC and small appliances, or if the permittee is a refrigerant reclaimer, appliance owner or a manufacturer of appliances or recycling and recovery equipment, the permittee shall comply with all applicable standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F.
37. If the permittee is subject to 40 CFR Part 82 and performs a service on motor (fleet) vehicles when this service involves refrigerant in the MVAC, the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed by the original equipment manufacturer. The term MVAC as used in Subpart B does not include the air-tight sealed refrigeration system used for refrigerated cargo or an air conditioning system on passenger buses using Hydrochlorofluorocarbon-22 refrigerant.

Risk Management Plan

38. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall register and submit to the USEPA the required data related to the risk management plan for reducing the probability of accidental releases of any regulated substances listed pursuant to Section 112(r)(3) of the CAA as amended in 40 CFR 68.130. The list of substances, threshold quantities, and accident prevention regulations promulgated under 40 CFR Part 68, do not limit in any way the general duty provisions under Section 112(r)(1).
39. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall comply with the requirements of 40 CFR Part 68, no later than the latest of the following dates as provided in 40 CFR 68.10(a):
- June 21, 1999,
 - Three years after the date on which a regulated substance is first listed under 40 CFR 68.130, or
 - The date on which a regulated substance is first present above a threshold quantity in a process.
40. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall submit any additional relevant information requested by any regulatory agency necessary to ensure compliance with the requirements of 40 CFR Part 68.
41. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall annually certify compliance with all applicable requirements of Section 112(r) as detailed in Rule 213(4)(c)). **(40 CFR Part 68)**

Emission Trading

42. Emission averaging and emission reduction credit trading are allowed pursuant to any applicable interstate or regional emission trading program that has been approved by the Administrator of the USEPA as a part of Michigan's State Implementation Plan. Such activities must comply with Rule 215 and Rule 216. **(R 336.1213(12))**

Permit to Install (PTI)

43. The process or process equipment included in this permit shall not be reconstructed, relocated, or modified unless a PTI authorizing such action is issued by the department, except to the extent such action is exempt from the PTI requirements by any applicable rule.² **(R 336.1201(1))**
44. The department may, after notice and opportunity for a hearing, revoke PTI terms or conditions if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of the PTI or is violating the department's rules or the CAA.² **(R 336.1201(8), Section 5510 of Act 451)**
45. The terms and conditions of a PTI 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 the PTI. If a new owner or operator submits a written request to the department pursuant to Rule 219 and the department approves the request, this PTI 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. The written request shall be sent to the appropriate AQD District Supervisor, EGLE.² **(R 336.1219)**
46. If the installation, reconstruction, relocation, or modification of the equipment for which PTI terms and conditions have been approved has not commenced within 18 months of the original PTI issuance date, or has been interrupted for 18 months, the applicable terms and conditions from that PTI, as incorporated into the ROP, shall become void unless otherwise authorized by the department. Furthermore, the person to whom that PTI was issued, or the designated authorized agent, shall notify the department via the Supervisor, Permit Section, EGLE, AQD, P. O. Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, reconstruction, relocation, or modification of the equipment allowed by the terms and conditions from that PTI.² **(R 336.1201(4))**

Footnotes:

¹This condition is state-only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

B. SOURCE-WIDE CONDITIONS

Part B outlines the Source-Wide Terms and Conditions that apply to this stationary source. The permittee is subject to these special conditions for the stationary source in addition to the general conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply to this source, NA (not applicable) has been used in the table. If there are no Source-Wide Conditions, this section will be left blank.

SOURCE-WIDE CONDITIONS

DESCRIPTION

All process equipment at the stationary source including equipment covered by other permits, grandfathered 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
1. PM	87.3 tpy ²	12-month rolling time period as determined at the end of each calendar month	SOURCE WIDE	SC VI.5	R 336.1205(1) (a) & (3)
2. PM10	84.4 tpy ²	12-month rolling time period as determined at the end of each calendar month	SOURCE WIDE	SC VI.5	R 336.1205(1) (a) & (3)
3. PM2.5	83.4 tpy ²	12-month rolling time period as determined at the end of each calendar month	SOURCE WIDE	SC VI.5	R 336.1205(1) (a) & (3)
4. NO _x	99.3 tpy ²	12-month rolling time period as determined at the end of each calendar month	SOURCE WIDE	SC VI.5	R 336.1205(1) (a) & (3)
5. CO	82.9 tpy ²	12-month rolling time period as determined at the end of each calendar month	SOURCE WIDE	SC VI.5	R 336.1205(1) (a) & (3)
6. VOC	99.8 tpy ²	12-month rolling time period as determined at the end of each calendar month	SOURCE WIDE	SC VI.5	R 336.1205(1) (a) & (3)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 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.² **(R 336.1205, 40 CFR 63.1506, 40 CFR 52.21(c) & (d))**
- 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.² **(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.² **(R 336.1205(1)(a) & (3))**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

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.² **(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.² **(40 CFR Part 63, Subpart RRR)**
3. The permittee shall calibrate the feed/charge measurement devices at least once every six months.² **(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 63.1510.² **(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.² **(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.² **(R 336.1205(1)(a) & (3))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. 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.² **(40 CFR Part 63, Subpart RRR)**

See Appendix 8

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)**
2. The conditions contained in this ROP for which a Consent Order is the only identified underlying applicable requirement shall be considered null and void upon the effective date of termination of the Consent Order. The effective date of termination is defined for the purposes of this condition as the date upon which the Termination Order is signed by the AQD Division Director.

Footnotes:

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

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

C. EMISSION UNIT SPECIAL CONDITIONS

Part C outlines terms and conditions that are specific to individual emission units listed in the Emission Unit Summary Table. The permittee is subject to the special conditions for each emission unit in addition to the General Conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply, NA (not applicable) has been used in the table. If there are no conditions specific to individual emission units, this section will be left blank.

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

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
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
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
EUALROAD	North Plant roadway and material handling emissions.	01-01-1997	FGRULE290
EUIMROAD	South Plant roadway and material handling emissions.	11-14-1996	FGRULE290
EUIMDEOX	Deox casting operation with a maximum natural gas burner input of 0.646 MMBTU/hour.	01-17-2013	FGRULE290
EUALCOLDCLEANER	North Plant maintenance cold cleaner.	01-01-1991	FGCOLDCLEANERS
EUIMCOLDCLEANER	South Plant maintenance cold cleaner.	01-01-1997	FGCOLDCLEANERS

**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 ²	Hourly	EUALFURN1 emissions from SVALBH1	SC V.1	R 336.1225, 40 CFR Part 63, Subpart RRR
2. Hydrogen Chloride (HCl)	9.9 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 ²	Hourly	EUALFURN1 emissions from SVALFURN1	SC V.1	R 336.1225, R 336.1205(1) (a) & (3)
4. Hydrogen Chloride (HCl)	9.9 tpy ²	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	0.055 lb/ton of feed/charge ²	Hourly	EUALFURN1 emissions from SVALBH1	SC V.1	R 336.1225, R 336.1205(1) (a) & (3)
6. Chlorine	1.36 tpy ²	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	0.659 lb/ton of feed/charge ²	Hourly	EUALFURN1 emissions from SVALFURN1	SC V.1	R 336.1225, R 336.1205(1) (a) & (3)
8. Chlorine	16.31 tpy ²	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 ²	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	2.48 tpy ²	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 ²	Hourly	EUALFURN1 emissions from SVALFURN1	SC V.2	R 336.1205(1) (a) & (3), 40 CFR 52.21 (c) & (d)
12. NO _x	9.90 tpy ²	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 ²	Hourly	EUALFURN1 emissions from SVALBH1	SC V.2	R 336.1205(1) (a) & (3), 40 CFR 52.21 (c) & (d)
14. SO ₂	4.95 tpy ²	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 ²	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	2.48 tpy ²	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	0.327 lb/ton of feed/charge ²	Hourly	EUALFURN1 emissions from SVALFURN1	SC V.1	R 336.2810, 40 CFR 52.21 (c) & (d)
18. PM10	8.09 tpy ²	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 ²	Hourly	EUALFURN1 emissions from SVALBH1	SC V.1	R 336.2810, 40 CFR 52.21 (c) & (d)
20. PM2.5	2.48 tpy ²	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	0.327 lb/ton of feed/charge ²	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	8.09 tpy ²	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 ²	Hourly	EUALFURN1 emissions from SVALBH1	SC V.1	R 336.2810, Consent Order AQD No. 2019-29, Paragraph 9B
24. PM	2.48 tpy ²	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	0.53 lb/ton of feed/charge ²	Hourly	EUALFURN1 emissions from SVALFURN1	SC V.1	R 336.2810
26. PM	13.12 tpy ²	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	0.1 lb/ton of feed/charge ²	Hourly	EUALFURN1 emissions from SVALBH1	SC V.1	R 336.2810
28. THC, as propane	2.48 tpy ²	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 ²	Hourly	EUALFURN1 emissions from SVALFURN1	SC V.1	R 336.2810
30. THC, as propane	2.97 tpy ²	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 ²	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 ²	Hourly	EUALFURN1 emissions from SVALFURN1	SC V.1	R 336.1225, R 336.1205(1) (a) & (3)
33. HF	2.43 tpy ²	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	49,500 tpy ²	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 ²	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.² **(R 336.1205(1)(a) & (3))**
2. The permittee shall initiate corrective action within one hour of a bag leak detection system alarm.² **(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).² **(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.² **(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.² **(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).² **(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.² **(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.² **(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).² **(R 336.1205, R 336.1910, 40 CFR Part 63, Subpart RRR)**

- 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.² **(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 336.1213(3)(b)(ii))**

- By September 2023, and thereafter every five years, the permittee shall verify PM, PM10, PM2.5, THC, D/F, HCl, Chlorine and HF 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
PM10/PM2.5	40 CFR Part 51, Appendix M
THC	40 CFR Part 60, Appendix A
D/F	40 CFR Part 60, Appendix A
HCl	40 CFR Part 60, Appendix A
Chlorine	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.² **(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), R 336.1213(3), Consent Order AQD No. 2019-29, Paragraph 9F)**

- Within five years of the last approved stack test, the permittee shall verify NO_x and SO₂ 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 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.² **(R 336.1205(3), R 336.2001, R 336.2003, R 336.2004)**
- The permittee shall verify the PM, PM10, PM2.5, THC, D/F, HCl, Chlorine, HF, NO_x, and SO₂ emission rates from EUALFURN1 at a minimum, every five years from the date of the last test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**
- The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. **(R 336.1213(3))**

See Appendix 5

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

- 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.² **(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.² **(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.² **(R 336.1205(1)(a) & (3))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

See Appendix 8

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 ²	95 ²	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
2. SVALFURN1	48 ²	100 ²	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:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).
²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**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 ²	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 ²	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 ²	Hourly	EUALFURN2	SC V.1	R 336.2810, Consent Order AQD No. 2019-29, Paragraph 9E
4. PM	1.53 tpy ²	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 ²	Hourly	EUALFURN2	SC V.1	R 336.2810, 40 CFR 52.21 (c) & (d)
6. PM10	1.53 tpy ²	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 ²	Hourly	EUALFURN2	SC V.1	R 336.2810, 40 CFR 52.21 (c) & (d)
8. PM2.5	1.53 tpy ²	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	0.23 pph ²	Hourly	EUALFURN2	SC V.1	R 336.2810
10. THC, as propane	1.01 tpy ²	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.² **(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.² **(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 336.1213(3)(b)(ii))**

1. By September 2023, and thereafter every five years, the permittee shall verify PM, PM10, PM2.5, 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
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.² **(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))**

2. By September 2023, the permittee shall verify NO_x 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 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.² **(R 336.1205(3), R 336.2001, R 336.2003, R 336.2004)**

3. The permittee shall verify the PM, PM10, PM2.5, THC, and NO_x emission rates from EUALFURN2, at a minimum, every five years from the date of the last test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**
4. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. **(R 336.1213(3))**

See Appendix 5

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

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.² **(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.² **(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.² **(R 336.1205(1)(a) & (3))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

See Appendix 8

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. SVALFURN2	41 ²	51 ²	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:

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

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**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 ²	Hourly	Emissions through SVALBH7/8	SC V.1	R 336.1225, 40 CFR Part 63, Subpart RRR
2. HCl	12.00 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 ²	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	12.00 tpy ²	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 ²	Hourly	Flue gases through SVALFURN7/8	SC V.2	R 336.1205(1) (a) & (3), 40 CFR 52.21 (c) & (d)
6. NO _x	12.00 tpy ²	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 ²	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	4.5 tpy ²	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 ²	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	6.0 tpy ²	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	0.15 lb/ton of feed/charge ²	Hourly	Flue gases through SVALFURN7/8	SC V.1	R 336.2810
12. PM	4.50 tpy ²	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	0.15 lb/ton of feed/charge ²	Hourly	Emissions through SVALBH7/8	SC V.1	R 336.2810, Consent Order AQD No. 2019-29, Paragraph 9D
14. PM	4.50 tpy ²	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. PM ₁₀	0.27 lb/ton of feed/charge ²	Hourly	Emissions through SVALBH7/8	SC V.1	R 336.2810, 40 CFR 52.21 (c) and (d), Consent Order AQD No. 2019-29, Paragraph 9D
16. PM ₁₀	8.1 tpy ²	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. PM ₁₀	0.15 lb/ton of feed/charge ²	Hourly	Flue gases through SVALFURN7/8	SC V.1	R 336.2810, 40 CFR 52.21 (c) & (d)
18. PM ₁₀	4.5 tpy ²	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. PM _{2.5}	0.27 lb/ton of feed/charge ²	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	8.1 tpy ²	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 ²	Hourly	Flue gases through SVALFURN7/8	SC V.1	R 336.2810, 40 CFR 52.21 (c) &(d)
22. PM2.5	4.5 tpy ²	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 ²	Hourly	Flue gases through SVALFURN7/8	SC V.1	R 336.2810
24. THC, as propane	3.0 tpy ²	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	0.90 lb/ton of feed/charge ²	Hourly	Emissions through SVALBH7/8	SC V.1	R 336.2810
26. THC, as propane	27 tpy ²	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 ²	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	60,000 tpy ²	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 ²	Daily	EUALFURN7/8	SC VI.1	R 336.1205(1) (a) & (3)
3. Beryllium	0.01% of feed/charge ²	Each Furnace Batch Charge	Emissions through SVALFURN7/8 and SVALBH7/8	SC VI.4	R 336.1201(3)

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall initiate corrective action within one hour of a bag leak detection system alarm.² **(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).² **(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.² **(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.² **(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).² **(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.² **(40 CFR Part 63, Subpart RRR)**
7. The permittee shall operate the burners using natural gas only.² **(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.² **(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).² **(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.² **(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 336.1213(3)(b)(ii))**

1. By September 2023, and thereafter every five years, the permittee shall verify PM, PM10, PM2.5, 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
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.² **(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. By September 2023, the permittee shall verify NO_x and SO₂ 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 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.² **(R 336.1205(3), R 336.2001, R 336.2003, R 336.2004, Consent Order AQD No. 2019-29, Paragraph 9F)**
3. The permittee shall verify the PM, PM10, PM2.5, THC, D/F, HCl, NO_x, and SO₂ emission rates from EUALFURN7/8, at a minimum, every five years from the date of the last test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**
4. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. **(R 336.1213(3))**

See Appendix 5

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

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.² **(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.² **(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.² **(R 336.1205(1)(a) & (3))**
4. The permittee shall keep, in a satisfactory manner, beryllium content by weight calculations for each batch of feed/charge to EUALFURN7/8 that contains beryllium alloy sufficient to demonstrate compliance with SC II.3. The permittee shall keep all records on file at the facility and make them available to the department upon request. **(R 336.1213(3))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

- The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

See Appendix 8

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 ²	61.3 ²	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
2. SVALFURN7/8	52 ²	95 ²	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

- 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).

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**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.

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	0.60 lb/ton of feed/charge ²	Hourly	EUALDRYER3	SC V.2	R 336.1205(1) (a) & (3), 40 CFR 52.21 (c) & (d)
2. NO _x	12.42 tpy ²	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 ²	Hourly	EUALDRYER3	SC V.1	R 336.2810
4. PM	8.07 tpy ²	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 ²	Hourly	EUALDRYER3	SC V.1	R 336.2810, 40 CFR 52.21 (c) & (d)
6. PM10	10.04 tpy ²	12-month rolling time period as determined at the end of each calendar month	EUALDRYER3	SC VI.2	R 336.2810
7. PM2.5	0.485 lb/ton of feed/charge ²	Hourly	EUALDRYER3	SC V.1	R 336.2810, 40 CFR 52.21 (c) & (d)
8. PM2.5	10.04 tpy ²	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	0.65 lb/ton of feed/charge ²	Hourly	EUALDRYER3	SC V.1	R 336.2810
10. THC, as propane	13.46 tpy ²	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
11. D/F	3.5 x 10 ⁻⁵ grain of D/F TEQ* per ton of feed/charge ²	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	41,400 tpy ²	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 ²	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.² **(40 CFR Part 63, Subpart RRR)**
2. The permittee shall operate EUALDRYER3 using only unpainted aluminum chips as feedstock.² **(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).² **(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.² **(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.² **(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.² **(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).² **(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.² **(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 336.1213(3)(b)(ii))**

1. By September 2023, and thereafter every five years, the permittee shall verify PM, PM10, PM2.5, 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
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.² **(R 336.1205(3), R 336.2001, R 336.2003, R 336.2004, 40 CFR 63.1506, 40 CFR 52.21(c) & (d))**

2. By September 2023, the permittee shall verify NO_x 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 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.² **(R 336.1205(3), R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d))**
3. The permittee shall verify the PM, PM10, PM2.5, THC, D/F, NO_x, and SO₂ emission rates from EUALDRYER3 at a minimum, every five years from the date of the last test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**
4. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. **(R 336.1213(3))**

See Appendix 5

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

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.² **(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.² **(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.² **(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.² **(R 336.1225, R 336.1910, R 336.1911, R 336.1912)**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

See Appendix 8

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 ²	63 ²	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
2. SVALDRY3BYPASS	48 ²	28.5 ²	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:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).
²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**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 ²	Hourly	EUALSHREDDER	SC V.1	R 336.1205(1) (a) & (3), 40 CFR 52.21 (c) & (d)
2. PM10	2.74 tpy ²	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 ²	Hourly	EUALSHREDDER	SC V.1	R 336.1205(1) (a) & (3), 40 CFR 52.21 (c) & (d)
4. PM2.5	2.74 tpy ²	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 ²	Hourly	EUALSHREDDER	SC V.1	R 336.1205(1) (a) & (3)
6. THC, as propane	2.74 tpy ²	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 ²	Hourly	EUALSHREDDER	SC V.1	R 336.1205(1) (a) & (3)
8. PM	2.74 tpy ²	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 ²	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 ²	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	54,750 tpy ²	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 ²	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).² **(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.² **(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).² **(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.² **(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 336.1213(3)(b)(ii))**

1. By September 2023, and thereafter every five years, the permittee shall verify PM, PM10, PM2.5 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
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.² **(R 336.1205(3), R 336.2001, R 336.2003, R 336.2004, 40 CFR 63.1506, 40 CFR 52.21(c) & (d))**

2. By September 2023, the permittee shall verify NO_x emission rate 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 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.² **(R 336.1205(3), R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d))**
3. The permittee shall verify the PM, PM₁₀, PM_{2.5}, THC, and NO_x emission rates from EUALSHREDDER, at a minimum, every five years from the date of the last test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**
4. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. **(R 336.1213(3))**

See Appendix 5

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

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.² **(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, PM_{2.5}, 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.² **(R 336.1205(1)(a) & (3))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

See Appendix 8

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 ²	52 ²	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).
² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**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 lb/hour ²	Hourly	EUALDROSS	SC V.1	R 336.1205(1) (a) & (3)
2. PM	0.50 tpy ²	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 lb/hour ²	Hourly	EUALDROSS	SC V.2	R 336.1205(1) (a) & (3), 40 CFR 52.21 (c) & (d)
4. PM10	3.50 tpy ²	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 lb/hour ²	Hourly	EUALDROSS	SC V.2	R 336.1205(1) (a) & (3), 40 CFR 52.21 (c) & (d)
6. PM2.5	3.50 tpy ²	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)

- 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).² (R 336.1910)

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. By September 2023, the permittee shall verify PM emission rates from EUALDROSS by testing at the owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in 40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules. 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.² **(R 336.1205(3), R 336.2001, R 336.2003, R 336.2004)**
2. By September 2023, the permittee shall verify PM10 and PM2.5 emission rates from EUALDROSS by testing at the owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in 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.² **(R 336.1205(3), R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d))**
3. The permittee shall verify the PM, PM10, and PM2.5 emission rates from EUALDROSS at a minimum, every five years from the date of the last test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**
4. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. **(R 336.1213(3))**

See Appendix 5

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. 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.² **(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.² **(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.² **(R 336.1205(1)(a) & (3), R 336.1301, R 336.1331, R 336.1910)**

- 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.² **(R 336.1331, R 336.1910))**

VII. REPORTING

- Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
- Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
- Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
- The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

See Appendix 8

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 ²	51 ²	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).
²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**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	100.000 lb/MMcf ²	Hourly	EUALCRUCIBLES	SC VI.1	R 336.1205(1) (a) & (3), 40 CFR 52.21 (c) & (d)
2. NO _x	6.441 tpy ²	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.² (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 336.1213(3)(b)(ii))

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

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 NO_x emission calculation records shall be kept on file for a period of at least five years and made available to the AQD upon request.² (R 336.1205(1)(a) & (3))

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**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 ²	Hourly	EUIMHOTDROSS	SC V.1	R 336.1205(1)
2. PM	3.942 tpy ²	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 ²	Hourly	EUIMHOTDROSS	SC V.1	R 336.1205(3)
4. PM10	3.942 tpy ²	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 ²	Hourly	EUIMHOTDROSS	SC V.1	R 336.1205(3)
6. PM2.5	3.942 tpy ²	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).² **(R 336.1910)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. By September 2023, 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.² (R 336.1205(3), R 336.1331(1)(a) Table 31(J), R 336.2001, R 336.2003, R 336.2004)

2. The permittee shall verify the PM, PM10, and PM2.5 emission rates from EUIMHOTDROSS, at a minimum, every five years from the date of the last test. (R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)
3. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. (R 336.1213(3))

See Appendix 5

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

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:² (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.² (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.² (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.² (R 336.1205(1)(a) & (3))

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

See Appendix 8

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 ²	75 ²	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).

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**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 ²	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	1.2 tpy ²	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	0.40 lb/ton of feed/charge ²	Hourly	EUIMREVERBFURN emissions vented through SVIMREVBH	SC V.2	R 336.1205(1) (a) & (3)
4. NO _x	1.2 tpy ²	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 ²	Hourly	EUIMREVERBFURN	SC V.2	R 336.1205(1) (a) & (3)
6. SO ₂	1.8 tpy ²	12-month rolling time period as determined at the end of each calendar month	EUIMREVERBFURN	SC VI.2	R 336.1205(1) (a) & (3)
7. PM ₁₀	0.25 lb/ton of feed/charge ²	Hourly	EUIMREVERBFURN emissions vented through SVIMREVBH	SC V.1	R 336.1205(1) (a) & (3)
8. PM ₁₀	0.75 tpy ²	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 ²	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	7.8 tpy ²	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 ²	Hourly	EUIMREVERBFURN emissions vented through SVIMREVBH	SC V.1	R 336.1205(1) (a) & (3)
12. PM	0.75 tpy ²	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 ²	Hourly	EUIMREVERBFURN emissions vented through SVIMREVFLUE	SC V.1	R 336.2810, 40 CFR 52.21(j)
14.. PM	9.75 tpy ²	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 ²	Hourly	EUIMREVERBFURN emissions vented through SVIMREVBH	SC V.1	R 336.1205(1) (a) & (3)
16. PM2.5	0.75 tpy ²	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 ²	Hourly	EUIMREVERBFURN emissions vented through SVIMREVFLUE	SC V.1	R 336.2810, 40 CFR 52.21(j)
18. PM2.5	7.8 tpy ²	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	0.485 lb/ton feed/charge ²	Hourly	EUIMREVERBFURN emissions vented through SVIMREVBH	SC V.1	R 336.1205(1) (a) & (3)
20. THC, as propane	1.46 tpy ²	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	0.485 lb/ton of feed/charge ²	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	1.46 tpy ²	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 ²	Hourly	EUIMREVERBFURN emissions vented through SVIMREVBH	SC V.1	R 336.1225, 40 CFR Part 63, Subpart RRR
24. HCl	1.2 tpy ²	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 ²	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	4.94 tpy ²	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 ²	Hourly	EUIMREVERBFURN emissions vented through SVIMREVBH	SC V.1	40 CFR Part 63, Subpart RRR
28. HF	0.126 lb/ton of feed/charge ²	Hourly	EUIMREVERBFURN emissions vented through SVIMREVFLUE	SC V.1	R 336.1205(1) (a) & (3), R 336.1225
29. HF	1.38 tpy ²	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	6,000 tpy ²	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 ²	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.² **(R 336.1205(1)(a) & (3))**
2. The permittee shall initiate corrective action within one hour of a bag leak detection system alarm.² **(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).² **(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.² **(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.² **(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).² **(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.² **(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.² **(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).² **(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.² **(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 336.1213(3)(b)(ii))**

1. By September 2023, and thereafter every five years, the permittee shall verify PM, PM10, PM2.5, 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

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.² **(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)**

2. By September 2023, and thereafter every five years, the permittee shall verify NO_x and SO₂ 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 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.² **(R 336.1205(3), R 336.2001, R 336.2003, R 336.2004), Consent Order AQD No. 2019-29, Paragraph 9F)**
3. The permittee shall verify the PM, PM₁₀, PM_{2.5}, THC, D/F, HCl, HF, NO_x, and SO₂ emission rates from EUIMREVERBFURN, at a minimum, every five years from the date of the last test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**
4. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. **(R 336.1213(3))**

See Appendix 5

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

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.² **(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.² **(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.² **(R 336.1205(1)(a) & (3))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**

3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

See Appendix 8

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 ²	78 ²	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
2. SVIMREVFLUE	65 ²	105 ²	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall provide written notification to the District Supervisor prior to using liquid chlorine gas injection in EUIMREVERBFURN.² **(R 336.1205(1)(a))**
2. 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).

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**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	0.60 lb/ton feed/charge ²	Hourly	EUIMROTFURN1/2	SC V.2	R 336.1205(1) (a) & (3)
2. NO _x	27.162 tpy ²	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 ²	Hourly	EUIMROTFURN1/2	SC V.2	R 336.1205(1) (a) & (3)
4. SO ₂	45.27 tpy ²	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 ²	Hourly	EUIMROTFURN1/2	SC V.1	R 336.2810, 40 CFR 52.21(j), 40 CFR Part 63, Subpart RRR
6. PM	18.11 tpy ²	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
8. HCl	3.62 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 ²	Hourly	EUIMROTFURN1/2	SC V.1	40 CFR Part 63, Subpart RRR
10. PM ₁₀	0.50 lb/ton of feed/charge ²	Hourly	EUIMROTFURN1/2	SC V.1	R 336.2810, 40 CFR 52.21(j)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
11. PM10	22.64 tpy ²	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	0.90 lb/ton of feed/charge ²	Hourly	EUIMROTFURN1/2	SC V.1	R 336.2810, 40 CFR 52.21(j)
13. THC, as propane	40.74 tpy ²	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	0.50 lb/ton of feed/charge ²	Hourly	EUIMROTFURN1/2	SC V.1	R 336.1205(1) (a) & (3)
15. PM2.5	22.64 tpy ²	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	90,540 tpy ²	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 ²	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.² **(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.² **(40 CFR Part 63, Subpart RRR)**
3. The permittee shall initiate corrective action within one hour of a bag leak detection system alarm.² **(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 14°C (plus 25°F).² **(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.² **(40 CFR Part 63, Subpart RRR)**

- 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).² **(40 CFR Part 63, Subpart RRR)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

- 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).² **(R 336.1910, 40 CFR Part 63, Subpart RRR)**
- 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.² **(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 336.1213(3)(b)(ii))**

- By September 2023, and thereafter every five years, the permittee shall verify PM, PM10, PM2.5, 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
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.² **(R 336.1205(3), R 336.2001, R 336.2003, R 336.2004, R 336.2810, 40 CFR 52.21(j))**

- By September 2023, the permittee shall verify NO_x and SO₂ 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 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.² **(R 336.1205(3), R 336.2001, R 336.2003, R 336.2004)**
- The permittee shall verify the PM, PM10, PM2.5, HCl, THC, D/F, NO_x, and SO₂ emission rates from EUIMROTFURN1/2, at a minimum, every five years from the date of the last test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**
- The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. **(R 336.1213(3))**

See Appendix 5

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. 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.² **(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.² **(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.² **(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.² **(R 336.1205(1)(a) & (3))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

See Appendix 8

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 ²	80 ²	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:

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

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**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 ²	Hourly	EUIMCRUCIBLES	SC VI.1	R 336.1205(1)(a) & (3)
2. NO _x	5.153 tpy ²	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.² **(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 336.1213(3)(b)(ii))**

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

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 NO_x emission calculation records shall be kept on file for a period of at least five years and made available to the AQD upon request.² **(R 336.1205(1)(a) & (3))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**

2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8

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).

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

D. FLEXIBLE GROUP SPECIAL CONDITIONS

Part D outlines the terms and conditions that apply to more than one emission unit. The permittee is subject to the special conditions for each flexible group in addition to the General Conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply, NA (not applicable) has been used in the table. If there are no special conditions that apply to more than one emission unit, this section will be left blank.

FLEXIBLE GROUP SUMMARY TABLE

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

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGCAMUNITS	This flexible group consists of emission units that use a control device to achieve compliance with a federally enforceable emission limitation or standard for particulate matter. The emission units have potential pre-control emissions that are over 100% of the major source threshold amount (at a level considered to be major under the ROP program) for particulate matter.	EUALFURN1 EUALFURN7/8 EUALDRYER3 EUALSHREDDER EUMREVERBFURN EUMROTFURN1/2 EUALDROSS EUMHOTDROSS
FGMACTRRR	The affected source is a new or existing secondary aluminum production facility, that is (or is part of) a major source of hazardous air pollutant (HAP) emissions. The regulations cover emissions from metal melting furnaces, scrap shredders, dryers, delacquering/decoating kilns, rotary dross coolers, secondary aluminum processing units, and fugitive emissions from foundry operations.	EUALFURN1 EUFURN2 EUALFURN7/8 EUALDRYER3 EUALSHREDDER EUMREVERBFURN EUMROTFURN1/2
FGCOLDCLEANERS	Maintenance cold cleaners.	EUALCOLDCLEANER EUMCOLDCLEANER
FGRULE290	Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and 290.	EUALROAD EUMROAD EUMDEOX

FGCAMUNITS FLEXIBLE GROUP CONDITIONS

DESCRIPTION

This flexible group consists of emission units that use a control device to achieve compliance with a federally enforceable emission limitation or standard for particulate matter. The emission units have potential pre-control emissions that are over 100% of the major source threshold amount (at a level considered to be major under the ROP program) for particulate matter.

Emission Units: EUALFURN1, EUALFURN7/8, EUALDRYER3, EUALSHREDDER, EUIMREVERBFURN, EUIMROTFURN1/2, EUIMHOTDROSS, EUALDROSS

POLLUTION CONTROL EQUIPMENT

EUALFURN1 - Lime-injected 60,000 CFM Baghouse No. 2 vented from SVALBH1.

EUALFURN7/8 - Natural gas combustion emissions are controlled by a 90,000 CFM lime-injected baghouse through SVALFURN7/8. Fluxing and melting emissions are controlled by a 65,000 CFM lime-injected baghouse vented from SVALBH7/8.

EUALDRYER3 - Afterburner, cyclone and 43,000 CFM baghouse.

EUALSHREDDER - 34,000 CFM baghouse (this baghouse also collects emissions from EUALDRYER3 (seals) and is equipped with bag leak detection system).

EUIMREVERBFURN - Fluxing and melting emissions are controlled by a 70,000 CFM lime-injected baghouse and are vented from SVIMREVBH.

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

EUALDROSS - A 50,000 CFM baghouse.

EUIMHOTDROSS - A 40,000 CFM baghouse.

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall monitor the bag leak detection system (BLDS) on a continuous basis as an indicator of proper operation of the dust collector. The bag leak detection alarm settings are contained in the approved CAM plan. **(40 CFR 64.6(c)(1)(i) and (ii))**
2. The permittee shall verify the pressure drop across the baghouse at least once every four hours, not to exceed eight hours as an indication of proper operation of dust collector. The pressure drop ranges to ensure proper operation are contained in the approved CAM plan. **(40 CFR 64.6(c)(1)(i) and (ii))**
3. The permittee shall verify the lime flow setpoint in the lime injected baghouses at least once per day as an indicator of proper operation of dust collector. The lime flow setpoints to ensure proper operation are contained in the approved CAM plan. **(40 CFR 64.6(c)(1)(i) and (ii))**
4. The permittee shall verify the lime feed rate in the lime injected baghouses at least once per day as an indicator of proper operation of dust collectors. The lime feed rates to ensure proper operation are contained in the approved CAM plan. **(40 CFR 64.6(c)(1)(i) and (ii))**
5. The permittee shall visually check the lime flow a minimum of every 8 hours. If a blockage is found, the sampling frequency shall increase to at least once every 4 hours for a period of 3 days. Inspections will return to a minimum of once every 8 hours if corrective actions result in no further blockage during the 3-day period. **(40 CFR 64.6(c)(1)(i) and (ii))**
6. The permittee shall monitor the inlet temperature of gases to the dust collector on a continuous basis. Fifteen-minute block average temperatures and 3-hour block average temperatures shall be recorded. The 3-hour block average temperature will be used as an indicator of proper operation of the dust collector. Block average temperatures are contained in the approved CAM plan. **(40 CFR 64.6(c)(1)(i) and (ii))**
7. The permittee shall monitor the afterburner temperature on a continuous basis as an indicator of proper operation of the EUALDRYER3 dust collector. Fifteen-minute block average temperatures and 3-hour block average temperatures shall be recorded. The afterburner shall be set to a minimum of 1,443F for a 3-hour block average. **(40 CFR 64.6(c)(1)(i) and (ii))**
8. The permittee shall verify the reactive flux feed rate in EUIMROTFURN1/2 baghouse at least once per day while the facility is processing dross as an indicator of proper operation of dust collectors. The reactive flux feed rate is set at 267 pounds (Rate #1) and 262 pounds (Rate #2) while the facility is processing dross. **(40 CFR 64.6(c)(1)(i) and (ii))**
9. The permittee shall visually check the reactive flux in EUIMROTFURN1/2 baghouse a minimum of once per cycle. If a blockage is found, the sampling frequency shall increase to at least once every 4 hours for a period of 3 days. Inspections will return to a minimum of once every 8 hours if corrective actions result in no further blockage during the 3-day period. **(40 CFR 64.6(c)(1)(i) and (ii))**
10. For each control device in operation, the permittee shall conduct bypass monitoring for each bypass line such that the valve or closure method cannot be opened without creating an alarm condition for which a record shall be made. Records of the bypass line that was opened and the length of time the bypass line was opened shall be kept on file. **(40 CFR 64.3(a)(2))**
11. Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions) as specified in the Operation, Maintenance, and Monitoring Plan. **(40 CFR 64.7(d))**

12. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, in frequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. **(40 CFR 64.6(c)(3), 40 CFR 64.7(c))**
13. The permittee shall properly maintain the monitoring system, including keeping necessary parts for routine repair of the monitoring equipment. **(40 CFR 64.7(b))**
14. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan and any activities undertaken to implement a quality improvement plan, and other information such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions. **(40 CFR 64.9(b)(1))**
15. 40 CFR Part 63, Subpart RRR, Section 63.1506(p) and 63.1510(b)(6) requires corrective actions be initiated when a process parameter or air pollution control device deviates from the value that was established during the performance test. **(40 CFR Part 63.1506(p), 40 CFR 63.1510(b)(6))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. Each semiannual report of monitoring and deviations shall include summary information on the number, duration and cause of excursions and/or exceedances and the corrective actions taken. If there were no excursions and/or exceedances in the reporting period, then this report shall include a statement that there were no excursions and/or exceedances. **(40 CFR 64.9 (a)(2)(i))**
5. Each semiannual report of monitoring and deviations shall include summary information on monitor downtime. If there were no periods of monitor downtime in the reporting period, then this report shall include a statement that there were no periods of monitor downtime. **(40 CFR 64.9 (a)(2)(ii))**
6. Each semiannual report of monitoring and deviations shall include a description of the actions taken to implement a Quality Improvement Plan (QIP) during the reporting period (if appropriate). If a QIP has been completed the report shall include documentations that the plan has been implemented and if it has reduced the likelihood of excursions or exceedances. **(40 CFR 64.9 (a)(2)(iii))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the AQD and if necessary, submit a proposed modification of the CAM Plan to address the necessary monitoring changes. Such a modification may include but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. **(40 CFR 64.7(e))**
2. The permittee shall comply with all applicable requirements of 40 CFR Part 64. **(40 CFR Part 64)**

Footnotes:

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

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**FGMACTRRR
 EMISSION UNIT CONDITIONS**

DESCRIPTION

The affected source is a new or existing secondary aluminum production facility, that is (or is part of) a major source of hazardous air pollutant (HAP) emissions. The regulations cover emissions from group 1 and group 2 furnaces, scrap shredders, dryers, delacquering/decoating kilns, rotary dross coolers, and secondary aluminum processing units.

Emission Units: EUALFURN1, EUALFURN2, EUALFURN7/8, EUALDRYER3, EUALSHREDDER, EUIMREVERBFURN, EUIMROTFURN1/2

POLLUTION CONTROL EQUIPMENT

Baghouse, afterburner, cyclone, oxy-fuel burners

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	Group 1 furnace	SC V.1	40 CFR 63.1505(i)(4)
2. Dioxins and Furans (D/F)	0.00021 gr of D/F TEQ* per ton of feed/charge	Hourly	Group 1 furnace	SC V.1	40 CFR 63.1505(i)(3)
3. PM	0.40 lb/ton feed/charge	Hourly	Group 1 furnace	SC V.1	40 CFR 63.1505(i)(1)
4. D/F	3.5 x 10 ⁻⁵ grain of D/F TEQ* per ton of feed/charge	Hourly	Scrap dryer	SC V.1	40 CFR 63.1505(c)(2)
5. THC, as propane	0.80 lb/ton of feed/charge	Hourly	Scrap dryer	SC V.1	40 CFR 63.1505(c)(1)
6. PM	0.010 grain of PM per dscf	Hourly	Aluminum scrap shredder	SC V.1	40 CFR 63.1505(b)(1)

* 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).

7. The permittee must comply with the emission limits using the equations or alternate compliance method for PM, HCl, HF, and D/F for each secondary aluminum process unit (SAPU), specified in Appendix 7. **(40 CFR 63.1505(k))**
8. The permittee may demonstrate compliance with the SC I.7 by demonstrating that each emission unit within the SAPU is in compliance with the applicable emission limits of SC I.1 through I.6 of this section. **(40 CFR 63.1505(k)(4))**

See Appendix 7

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. At all times, the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. **(40 CFR 63.1506(a)(5))**
2. The permittee must provide and maintain easily visible labels posted at each group 1 furnace, group 2 furnace, and scrap dryer that identifies the applicable emission limits and means of compliance including: **(40 CFR 63.1506(b))**
 - a. The type of affected source or emission unit.
 - b. The applicable operational standard(s) and control method(s) that includes the type of charge to be used for a furnace, flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan.
 - c. The afterburner operating temperature and design residence time for a scrap dryer.
3. The permittee shall operate a bag leak detection system on any aluminum scrap shredder and/or group 1 furnace according to the following: **(40 CFR 63.1506(e)(1), 40 CFR 63.1506(m)(1))**
 - a. 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).
 - b. Initiate corrective action on any affected aluminum scrap shredder and/or group 1 furnace within one hour of a bag leak detection system alarm.
 - c. 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.
4. The permittee shall maintain the three-hour block average inlet temperature on any group 1 furnace for each fabric filter at or below the average temperature established during the performance test, plus 14°C (plus 25°F). **(40 CFR 63.1506(m)(3))**
5. The permittee shall install a device to continuously monitor the afterburner operating temperature on any thermal chip dryer as specified in 40 CFR 63.1510(g)(1). **(40 CFR 63.1510(g)(1))**
6. The permittee shall maintain the three-hour block average operating temperature of each afterburner on any thermal chip dryer at or above the average temperature established during the most recent performance test. **(40 CFR 63.1506(f)(1))**
7. 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))**
8. 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 63.1506(m)(6)(i))**

9. The permittee shall not charge to the main hearth of any group 1 furnace any reactive flux or material other than clean charge, or internal scrap, as defined by 40 CFR Part 63, Subpart RRR. The permittee shall operate each sidewall furnace such that reactive flux is added only to the sidewall, unless emissions from both the sidewall and the hearth are included in demonstrating compliance with all applicable emission limits. **(40 CFR 63.1506(m)(6)(ii))**
10. The permittee shall comply with all applicable operating requirements in Table 2 of this subpart. **(40 CFR 63.1506(a)(4))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate any aluminum scrap shredder and/or group 1 furnace unless the baghouse is installed and operating in accordance with the submitted OM & M plan in compliance with 40 CFR 63.1510 (b). **(40 CFR 63.1506(c)(3))**
2. The permittee shall not operate any scrap dryer 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). **(40 CFR 63.1506(c)(3))**
3. The permittee shall not operate any emission unit 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. **(40 CFR 63.1506(c))**
4. The permittee shall install and operate a device that measures and records or otherwise determine the weight of feed/charge or throughput for each operating cycle and operate each weight measurement system in accordance with the OM&M plan. **(40 CFR 63.1506(d)(1) and (2))**
5. The permittee shall install, calibrate, maintain, and operate a device to continuously monitor and record the temperature of the fabric filter inlet gases consistent with the requirements for continuous monitoring systems in Subpart A of Part 63. The temperature monitoring device shall meet the performance standards as specified in 40 CFR 63.1510(h)(2). **(40 CFR 63.1510(h))**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall conduct performance testing required by 40 CFR 63.1511 according to the requirements in 40 CFR 63.1512. 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. 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 336.1213(3), R 336.2001, R 336.2002, R 336.2003, 40 CFR 63.1511, 40 CFR 62.1512)**
2. The permittee shall conduct subsequent compliance testing to demonstrate compliance with all applicable emission limits no less frequently than every 5 years from the date of the last test and each time the permittee elects to change an operating limit or make a process change likely to increase HAP emissions. **(40 CFR 63.1511(e))**
3. The permittee shall comply with all applicable provisions of 40 CFR 63.1511 and 40 CFR 63.1512. **(40 CFR 63.1511, 40 CFR 63.1512)**

See Appendix 5

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall inspect all emission capture, collection, and transport system at least once per calendar year as described in 40 CFR 63.1510(d) and/or 40 CFR 63.1520, Table 3. **(40 CFR 63.1520(d), 40 CFR 63.1520, Table 3)**
2. The permittee shall calibrate the feed/charge measurement devices and ensure that the accuracy of the feed/charge weight measurement devices is 100 percent \pm one percent of weight measured at least once every six months. **(40 CFR 63.1510(e))**
3. The permittee shall keep, in a satisfactory manner for each bag leak detection system, a written record system which describes values for the baseline (sensitivity) setting, response time setting, and alarm level(s) and a description of how each was established from the required stack test under 40 CFR Part 63, Subpart RRR. **(40 CFR 63.1510(f))**
4. The permittee shall 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 63.1506(b), 40 CFR 63.1510(c))**
5. For all thermal chip dryers with afterburner controls installed on site, the permittee shall: **(40 CFR 63.1510(g), 40 CFR 63.1510(k), 40 CFR 63.1520, Table 3)**
 - a. Monitor and record the average temperature of all thermal chip dryers with an afterburner, for each 15-minute block and 3-hour block averages
 - b. At least once per calendar year, inspect the afterburner and complete required repairs in accordance with the OM&M plan
 - c. Record the identity of each feed/charge and certify the feed/charge materials every 6 months
6. For all group 1 furnaces with lime-injection and fabric filter controls on site, the permittee shall: **(40 CFR Part 63.1510(i), 40 CFR Part 63.1520 Table 3)**
 - a. Record feeding settings at least once per day
 - b. Inspect each feed hopper or silo at least once every 8-hours to verify the lime is free-flowing; record results of each inspection
 - c. In the event of a blockage, inspect the feed hopper or silo every 4 hours for 3 days; return to 8-hour inspections if corrective action results in no further blockage during the 3-day period
 - d. Verify monthly that the lime injection rate is no less than 90% of the rate used during the most recent compliance demonstration test
7. For each scrap dryer/delacquering kiln/decoating kiln and group 1 furnace, subject to D/F and HCl emission standards with emissions controlled by a lime-injected fabric filter, records of 15-minute block average inlet temperatures for each lime-injected fabric filter, including any period when the 3-hour block average temperature exceeds the compliant operating parameter value $+14\text{ }^{\circ}\text{C}$ ($+25\text{ }^{\circ}\text{F}$), with a brief explanation of the cause of the excursion and the corrective action taken. **(40 CFR 63.1517(b)(3))**
8. For all group 2 furnaces, the permittee shall: **(40 CFR 63.1510(r))**
 - a. Record a description of the materials charged to each furnace, including any non-reactive, non-HAP-containing/non-HAP-generating fluxing materials or agents.
 - b. Submit a certification of compliance with the applicable operational standard for charge materials in 40 CFR 63.1506(o) for each 6-month reporting period containing information in 40 CFR 63.1516(b)(2)(v)

9. For all SAPUs on site, the permittee shall calculate and record the 3-day, 24-hour rolling average emissions of PM, HCl, and D/F on a daily basis as described in 40 CFR 63.1510(t)(1) through (5). **(40 CFR 63.1510(t))**
10. The permittee may demonstrate, through performance tests, that each individual emission unit within the SAPU is in compliance with the applicable emission limits for the emission unit, as an alternative to the procedures described in 40 CFR 63.1510(t)(1) through (5). **(40 CFR 63.1510(u))**
11. The permittee shall monitor and record all other applicable emissions and operating information as required by the NESHAP regulations specified in 40 CFR 63.1510. **(40 CFR 63.1510)**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit applicable notification specified in 40 CFR 63.1515(a) and 40 CFR 63.1515(b) for an initial notification and notification of compliance status report. **(40 CFR 63.1515)**
5. The permittee shall submit semiannual reports according to the requirements in 40 CFR 63.10(e)(3) within 60 days after the end of each 6-month period. When no deviations of parameters have occurred, the permittee must submit a report stating no excess emissions occurred during the reporting period. Report should contain information as specified in 40 CFR 63.1516(b)(1) through (4). **(40 CFR 63.1516)**
6. The permittee must submit the results of any performance test conducted during the reporting period, including one complete report documenting test methods and procedures, process operation, and monitoring parameter ranges within 60 days of completing each performance test. The permittee must submit the reports according to the procedures listed below:
 - a. For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT Web site (<https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert>), you must submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>)). **(40 CFR 63.1516(b)(3)(i)(A))**
 - b. For data collected using test methods that are not supported by the EPAs ERT as listed on the EPAs ERT website, you must submit the results of the performance test to the administrator at the appropriate address listed in 40 CFR 63.13. **(40 CFR 63.1516(b)(3)(i)(B))**
7. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**
8. The permittee must certify continuing compliance and shall submit annual compliance certifications as required by 40 CFR Part 70 or 71. **(40 CFR 63.1516(c))**
9. The permittee must submit a report in the case of a malfunction during the reporting period as described in 40 CFR 63.1516(d). **(40 CFR 63.1516(d))**

See Appendix 8

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 by the compliance date. **(40 CFR Part 63, Subparts A and RRR)**

Footnotes:

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

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

FGCOLDCLEANERS FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278, Rule 278a and Rule 281(2)(h) or Rule 285(2)(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.

Emission Units: EUALCOLDCLEANER, EUIMCOLDCLEANER

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

1. The permittee shall not use cleaning solvents containing more than five percent by weight of the following halogenated compounds: methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, chloroform, or any combination thereof. **(R 336.1213(2))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Cleaned parts shall be drained for no less than 15 seconds or until dripping ceases. **(R 336.1611(2)(b), R 336.1707(3)(b))**
2. The permittee shall perform routine maintenance on each cold cleaner as recommended by the manufacturer. **(R 336.1213(3))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The cold cleaner must meet one of the following design requirements:
 - a. The air/vapor interface of the cold cleaner is no more than ten square feet. **(R 336.1281(2)(h))**
 - b. The cold cleaner is used for cleaning metal parts and the emissions are released to the general in-plant environment. **(R 336.1285(2)(r)(iv))**
2. The cold cleaner shall be equipped with a device for draining cleaned parts. **(R 336.1611(2)(b), R 336.1707(3)(b))**
3. All new and existing cold cleaners shall be equipped with a cover and the cover shall be closed whenever parts are not being handled in the cold cleaner. **(R 336.1611(2)(a), R 336.1707(3)(a))**
4. The cover of a new cold cleaner shall be mechanically assisted if the Reid vapor pressure of the solvent is more than 0.3 psia or if the solvent is agitated or heated. **(R 336.1707(3)(a))**
5. If the Reid vapor pressure of any solvent used in a new cold cleaner is greater than 0.6 psia; or, if any solvent used in a new cold cleaner is heated above 120 degrees Fahrenheit, then the cold cleaner must comply with at least one of the following provisions:

- a. The cold cleaner must be designed such that the ratio of the freeboard height to the width of the cleaner is equal to or greater than 0.7. **(R 336.1707(2)(a))**
- b. The solvent bath must be covered with water if the solvent is insoluble and has a specific gravity of more than 1.0. **(R 336.1707(2)(b))**
- c. The cold cleaner must be controlled by a carbon adsorption system, condensation system, or other method of equivalent control approved by the AQD. **(R 336.1707(2)(c))**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. For each new cold cleaner in which the solvent is heated, the solvent temperature shall be monitored and recorded at least once each calendar week during routine operating conditions. **(R 336.1213(3))**
2. The permittee shall maintain the following information on file for each cold cleaner: **(R 336.1213(3))**
 - a. A serial number, model number, or other unique identifier for each cold cleaner.
 - b. The date the unit was installed, manufactured or that it commenced operation.
 - c. The air/vapor interface area for any unit claimed to be exempt under Rule 281(2)(h).
 - d. The applicable Rule 201 exemption.
 - e. The Reid vapor pressure of each solvent used.
 - f. If applicable, the option chosen to comply with Rule 707(2).
3. The permittee shall maintain written operating procedures for each cold cleaner. These written procedures shall be posted in an accessible, conspicuous location near each cold cleaner. **(R 336.1611(3), R 336.1707(4))**
4. As noted in Rule 611(2)(c) and Rule 707(3)(c), if applicable, an initial demonstration that the waste solvent is a safety hazard shall be made prior to storage in non-closed containers. If the waste solvent is a safety hazard and is stored in non-closed containers, verification that the waste solvent is disposed of so that not more than 20 percent, by weight, is allowed to evaporate into the atmosphere shall be made on a monthly basis. **(R 336.1213(3), R 336.1611(2)(c), R 336.1707(3)(c))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

FGRULE290 FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rule 278, Rule 278a and Rule 290. Emission units installed/modified before December 20, 2016, may show compliance with Rule 290 in effect at the time of installation/modification.

Emission Units installed on or after December 20, 2016: NA

Emission Units installed prior to December 20, 2016: EUALROAD, EUMROAD, EUMDEOX

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

1. Each emission unit that emits only noncarcinogenic volatile organic compounds or noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, if the total uncontrolled or controlled emissions of air contaminants are not more than 1,000 or 500 pounds per month, respectively. **(R 336.1290(2)(a)(i))**
2. Any emission unit for which CO₂ equivalent emissions are not more than 6,250 tons per month and for which the total uncontrolled or controlled emissions of all other air contaminants are not more than 1,000 or 500 pounds per month, respectively, and all the following criteria listed below are met: **(R 336.1290(2)(a)(ii))**
 - a. For toxic air contaminants, excluding noncarcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with initial threshold screening levels greater than or equal to 0.04 micrograms per cubic meter and less than 2.0 micrograms per cubic meter, the uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively. **(R 336.1290(2)(a)(ii)(A))**
 - b. For toxic air contaminants with initial risk screening levels greater than or equal to 0.04 microgram per cubic meter, the uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively. **(R 336.1290(2)(a)(ii)(B))**
 - c. The emission unit shall not emit any toxic air contaminants, excluding non-carcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with an initial threshold screening level or initial risk screening level less than 0.04 microgram per cubic meter. **(R 336.1290(2)(a)(ii)(C))**
 - d. For total mercury, the uncontrolled or controlled emissions shall not exceed 0.01 pounds per month from emission units installed on or after December 20, 2016. **(R 336.1290(2)(a)(ii)(D))**
 - e. For lead, the uncontrolled or controlled emissions shall not exceed 16.7 pounds per month from emission units installed on or after December 20, 2016. **(R 336.1290(2)(a)(ii)(E))**
3. Any emission unit that emits only particulate air contaminants without initial risk screening levels and other air contaminants that are exempted under Rule 290(2)(a)(i) or Rule 290(2)(a)(ii), if all the following provisions are met: **(R 336.1290(2)(a)(iii))**
 - a. The particulate emissions are controlled by an appropriately designed and operated fabric filter collector or an equivalent control system which is designed to control particulate matter to a concentration of less than or equal to 0.01 pound of particulate per 1,000 pounds of exhaust gases and which does not have exhaust gas flow rate more than 30,000 actual cubic feet per minute. **(R 336.1290(2)(a)(iii)(A))**

- b. The visible emissions from the emission unit are not more than 5% opacity in accordance with the methods contained in Rule 303. **(R 336.1290(2)(a)(iii)(B))**
- c. The initial threshold screening level for each particulate toxic air contaminant, excluding nuisance particulate, is more than 2.0 micrograms per cubic meter. **(R 336.1290(2)(a)(iii)(C))**

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The provisions of Rule 290 apply to each emission unit that is operating pursuant to Rule 290. **(R 336.1290)**
- 2. The following requirements apply to emission units installed on or after December 20, 2016, utilizing control equipment:
 - a. An air cleaning device for volatile organic compounds shall be installed, maintained, and operated in accordance with the manufacturer's specifications. Examples include the following: **(R 336.1290(2)(b)(i), R 336.1910)**
 - i. Oxidizers and condensers equipped with a continuously displayed temperature indication device.
 - ii. Wet scrubbers equipped with a liquid flow rate monitor.
 - iii. Dual stage carbon absorption where the first canister is monitored for breakthrough and replaced if breakthrough is detected.
 - b. An air cleaning device for particulate matter shall be installed, maintained, and operated in accordance with the manufacturer's specifications or the permittee shall develop a plan that provides to the extent practicable for the maintenance and operation of the equipment in the manner consistent with good air pollution control practices for minimizing emissions. It shall also be equipped to monitor appropriate indicators of performance, for example, static pressure drop, water pressure, and water flow rate. **(R 336.1290(2)(b)(ii), R 336.1910)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

- 1. The permittee shall maintain records of the following information for each emission unit for each calendar month using the methods outlined in the EGLE, AQD Rule 290; Permit to Install Exemption Record form (EQP 3558) or in a format that is acceptable to the AQD District Supervisor. **(R 336.1213(3))**
 - a. Records identifying each air contaminant that is emitted. **(R 336.1213(3))**
 - b. Records identifying if each air contaminant is controlled or uncontrolled. **(R 336.1213(3))**
 - c. Records identifying if each air contaminant is either carcinogenic or non-carcinogenic. **(R 336.1213(3))**
 - d. Records identifying the ITSL and IRSL, if established, of each air contaminant that is being emitted under the provisions of Rules 290(2)(a)(ii) and (iii). **(R 336.1213(3))**

- e. Records of material use and calculations identifying the quality, nature, and quantity of the air contaminant emissions in enough detail to demonstrate that the actual emissions of the emission unit meet the emission limits outlined in this table and Rule 290. Volatile organic compound emissions from units installed on or after December 20, 2016, shall be calculated using mass balance, generally accepted engineering calculations, or another method acceptable to the AQD District Supervisor. **(R 336.1213(3), R 336.1290(2)(d))**
 - f. Records are maintained on file for the most recent 2-year period and are made available to the department upon request. **(R 336.1213(3), R 336.1290(2)(e))**
- 2. The permittee shall maintain an inventory of each emission unit that is exempt pursuant to Rule 290. This inventory shall include the following information. **(R 336.1213(3))**
 - a. The permittee shall maintain a written description of each emission unit as it is maintained and operated throughout the life of the emission unit. **(R 336.1290(2)(c), R 336.1213(3))**
 - b. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(2)(a)(iii), the permittee shall maintain a written description of the control device, including the designed control efficiency and the designed exhaust gas flow rate. **(R 336.1213(3))**
 - 3. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(2)(a)(iii), the permittee shall perform a monthly visible emission observation of each stack or vent during routine operating conditions. This observation need not be performed using Method 9. The permittee shall keep a written record of the results of each observation. **(R 336.1213(3))**

See Appendix 4

VII. REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

E. NON-APPLICABLE REQUIREMENTS

At the time of the ROP issuance, the AQD has determined that no non-applicable requirements have been identified for incorporation into the permit shield provision set forth in the General Conditions in Part A pursuant to Rule 213(6)(a)(ii).

APPENDICES

Appendix 1. Acronyms and Abbreviations

Common Acronyms		Pollutant / Measurement Abbreviations	
AQD	Air Quality Division	acfm	Actual cubic feet per minute
BACT	Best Available Control Technology	BTU	British Thermal Unit
CAA	Clean Air Act	°C	Degrees Celsius
CAM	Compliance Assurance Monitoring	CO	Carbon Monoxide
CEM	Continuous Emission Monitoring	CO ₂ e	Carbon Dioxide Equivalent
CEMS	Continuous Emission Monitoring System	dscf	Dry standard cubic foot
CFR	Code of Federal Regulations	dscm	Dry standard cubic meter
COM	Continuous Opacity Monitoring	°F	Degrees Fahrenheit
Department/ department	Michigan Department of Environment, Great Lakes, and Energy	gr	Grains
EGLE	Michigan Department of Environment, Great Lakes, and Energy	HAP	Hazardous Air Pollutant
EU	Emission Unit	Hg	Mercury
FG	Flexible Group	hr	Hour
GACS	Gallons of Applied Coating Solids	HP	Horsepower
GC	General Condition	H ₂ S	Hydrogen Sulfide
GHGs	Greenhouse Gases	kW	Kilowatt
HVLP	High Volume Low Pressure*	lb	Pound
ID	Identification	m	Meter
IRSL	Initial Risk Screening Level	mg	Milligram
ITSL	Initial Threshold Screening Level	mm	Millimeter
LAER	Lowest Achievable Emission Rate	MM	Million
MACT	Maximum Achievable Control Technology	MW	Megawatts
MAERS	Michigan Air Emissions Reporting System	NMOC	Non-methane Organic Compounds
MAP	Malfunction Abatement Plan	NO _x	Oxides of Nitrogen
MSDS	Material Safety Data Sheet	ng	Nanogram
NA	Not Applicable	PM	Particulate Matter
NAAQS	National Ambient Air Quality Standards	PM10	Particulate Matter equal to or less than 10 microns in diameter
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter
NSPS	New Source Performance Standards	pph	Pounds per hour
NSR	New Source Review	ppm	Parts per million
PS	Performance Specification	ppmv	Parts per million by volume
PSD	Prevention of Significant Deterioration	ppmw	Parts per million by weight
PTE	Permanent Total Enclosure	%	Percent
PTI	Permit to Install	psia	Pounds per square inch absolute
RACT	Reasonable Available Control Technology	psig	Pounds per square inch gauge
ROP	Renewable Operating Permit	scf	Standard cubic feet
SC	Special Condition	sec	Seconds
SCR	Selective Catalytic Reduction	SO ₂	Sulfur Dioxide
SDS	Safety Data Sheet	TAC	Toxic Air Contaminant
SNCR	Selective Non-Catalytic Reduction	Temp	Temperature
SRN	State Registration Number	THC	Total Hydrocarbons
TEQ	Toxicity Equivalence Quotient	tpy	Tons per year
USEPA/EPA	United States Environmental Protection Agency	µg	Microgram
VE	Visible Emissions	µm	Micrometer or Micron
		VOC	Volatile Organic Compounds
		yr	Year

*For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 psig.

Appendix 2. Schedule of Compliance

The permittee certified in the ROP application that this stationary source is in compliance with all applicable requirements and the permittee shall continue to comply with all terms and conditions of this ROP. A Schedule of Compliance is not required. (R 336.1213(4)(a), R 336.1119(a)(ii))

Appendix 3. Monitoring Requirements

Specific monitoring requirement procedures, methods or specifications are detailed in Part A or the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, this appendix is not applicable.

Appendix 4. Recordkeeping

Specific recordkeeping requirement formats and procedures are detailed in Part A or the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, this appendix is not applicable.

Appendix 5. Testing Procedures

Specific testing requirement plans, procedures, and averaging times are detailed in the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, this appendix is not applicable.

Appendix 6. Permits to Install

The following table lists any PTIs issued or ROP revision applications received since the effective date of the previously issued ROP No. MI-ROP-N5957-2012. Those ROP revision applications that are being issued concurrently with this ROP renewal are identified by an asterisk (*). Those revision applications not listed with an asterisk were processed prior to this renewal.

Source-Wide PTI No MI-PTI-N5957-2012e is being reissued as Source-Wide PTI No. MI-PTI-N5957-2022.

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
76-12	201200172	Increase annual feed/charge rate limit from 61,320 tons per year to 90,540 tons per year, with associated increases in annual emission limits for FGIMROTFURN1/2.	FGIMROTFURN1/2
126-13	201400013	Increases to hydrogen chloride emission limits for EUALFURN1, EUALFURN7, and EUALFURN8.	FGALFURN1/2/7/8
192-14	NA	Relocation of exhaust stack (SVIMROT1/2BH) for FGIMROTFURN1/2. There were no changes to permit conditions for FGIMROTFURN1/2.	FGIMROTFURN1/2
110-15	201600038	Replacement of existing burners in rotary furnaces EUIMROTFURN1 and EUIMROTFURN2 with burners of like size. The new burners (oxyfuel burners) also include the option to supplement	FGIMROTFURN1/2

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
		combustion with oxygen. Additionally, doors were added to EUIMROTFURN1 and EUIMROTFURN2 to improve thermal efficiency of each unit and four additional baghouse modules of the same design currently at the facility were installed for FGIMROTFURN1/2. The changes are being made to enhance overall PM10 and PM2.5 emissions control.	
110-15	201600038	Reroute flue emissions from EUALFURN7 and EUALFURN8 through a common stack that will be at least 95 feet above ground level following a lime-injected baghouse. The changes are being made to enhance PM10 and PM2.5 emissions control.	FGALFURN1/2/7/8
63-19B*	202200100*	Permit to Install (PTI) application for changes to PM10 and PM2.5 emission rates for EUALFURN1 and establish PSD opt-out limits. This application was required to go through the public participation process because the opt-out limits are greater than 90%.	EUALFURN1 EUALFURN2 EUALFURN7/8 EUALDRYER3 EUALSHREDDER EUALDROSS EUALCRUCIBLES EUMHOTDROSS EUMREVERBFURN EUIMROTFURN1/2 EUIMCRUCIBLES

Appendix 7. Emission Calculations

The permittee shall use the following calculations in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable requirements referenced in FGMACTRRR.

For PM:

The permittee must not discharge or allow to be discharged to the atmosphere any 3-day, 24-hour rolling average emissions of PM in excess of:

$$L_{CPM} = \frac{\sum_{i=1}^n (L_{iPM} \times T_{ii})}{\sum_{i=1}^n (T_{ii})}$$

Where:

L_{iPM} = The PM emission limit for individual group 1 furnace emission unit

T_{ii} = The mass of feed/charge for 24 hours for individual group 1 furnace emission unit

L_{CPM} = The daily PM emission limit for the SAPU which is used to calculate the 3-day, 24-hour PM emission limit applicable to the SAPU (**40 CFR 63.1505(k)(1)**)

For HCl/HF:

The permittee must not discharge or allow to be discharged to the atmosphere any 3-day, 24-hour rolling average emissions of HCl or HF in excess of:

$$L_{c_{HCl/HF}} = \frac{\sum_{i=1}^n (L_{ti_{HCl/HF}} \times T_{ti})}{\sum_{i=1}^n (T_{ti})}$$

Where:

$L_{ti_{HCl/HF}}$ = The HCl emission limit for individual group 1 furnace emission unit or the HF emission limit for individual group 1 furnace emission unit for an uncontrolled group 1 furnace

$L_{c_{HCl/HF}}$ = The daily HCl or HF emission limit for the SAPU which is used to calculate the 3-day, 24-hour HCl or HF emission limit applicable to the SAPU **(40 CFR 63.1505(k)(2))**

For D/F:

The permittee must not discharge or allow to be discharged to the atmosphere any 3-day, 24 hour rolling average emissions of D/F in excess of:

$$L_{c_{D/F}} = \frac{\sum_{i=1}^n (L_{ti_{D/F}} \times T_{ti})}{\sum_{i=1}^n (T_{ti})}$$

Where:

$L_{ti_{D/F}}$ = The D/F emission limit for individual group 1 furnace emission unit

$L_{c_{D/F}}$ = The daily D/F emission limit for the SAPU which is used to calculate the 3-day, 24-hour D/F emission limit applicable to the SAPU **(40 CFR 63.1505(k)(3))**

Appendix 8. Reporting

A. Annual, Semiannual, and Deviation Certification Reporting

The permittee shall use EGLE, AQD, Report Certification form (EQP 5736) and EGLE, AQD, Deviation Report form (EQP 5737) for the annual, semiannual and deviation certification reporting referenced in the Reporting Section of the Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Alternative formats must meet the provisions of Rule 213(4)(c) and Rule 213(3)(c)(i), respectively, and be approved by the AQD District Supervisor.

B. Other Reporting

Specific reporting requirement formats and procedures are detailed in Part A or the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, Part B of this appendix is not applicable.