

**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION**

April 18, 2012  
REVISED May 9, 2012

**PERMIT TO INSTALL**  
113-09D

**ISSUED TO**  
Kaiser Aluminum Fabricated Products, LLC

**LOCATED AT**  
5205 Kaiser Drive  
Kalamazoo, Michigan

**IN THE COUNTY OF**  
Kalamazoo

**STATE REGISTRATION NUMBER**  
B1686

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

DATE OF RECEIPT OF ALL INFORMATION REQUIRED BY RULE 203:

**March 27, 2012**

DATE PERMIT TO INSTALL APPROVED:

**April 18, 2012**

SIGNATURE:

DATE PERMIT VOIDED:

SIGNATURE:

DATE PERMIT REVOKED:

SIGNATURE:

**PERMIT TO INSTALL**

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**Common Abbreviations / Acronyms**

<b>Common Acronyms</b>		<b>Pollutant/Measurement Abbreviations</b>	
AQD	Air Quality Division	Btu	British thermal unit
ANSI	American National Standards Institute	°C	Degrees Celsius
BACT	Best Available Control Technology	CO	Carbon monoxide
CAA	Clean Air Act	dscf	Dry standard cubic foot
CEM	Continuous Emission Monitoring	dscm	Dry standard cubic meter
CFR	Code of Federal Regulations	°F	Degrees Fahrenheit
COM	Continuous Opacity Monitoring	gr	Grains
EPA	Environmental Protection Agency	Hg	Mercury
EU	Emission Unit	hr	Hour
FG	Flexible Group	H <sub>2</sub> S	Hydrogen sulfide
GACS	Gallon of Applied Coating Solids	hp	Horsepower
GC	General Condition	lb	Pound
HAP	Hazardous Air Pollutant	m	Meter
HVLP	High Volume Low Pressure *	mg	Milligram
ID	Identification	mm	Millimeter
LAER	Lowest Achievable Emission Rate	MM	Million
MACT	Maximum Achievable Control Technology	MW	Megawatts
MAERS	Michigan Air Emissions Reporting System	ng	Nanogram
MAP	Malfunction Abatement Plan	NO <sub>x</sub>	Oxides of nitrogen
MDEQ	Michigan Department of Environmental Quality (Department)	PM	Particulate matter
MIOSHA	Michigan Occupational Safety & Health Administration	PM10	PM less than or equal to 10 microns aerodynamic diameter
MSDS	Material Safety Data Sheet	PM2.5	PM less than or equal to 2.5 microns aerodynamic diameter
NESHAP	National Emission Standard for Hazardous Air Pollutants	pph	Pound per hour
NSPS	New Source Performance Standards	ppm	Parts per million
NSR	New Source Review	ppmv	Parts per million by volume
PS	Performance Specification	ppmw	Parts per million by weight
PSD	Prevention of Significant Deterioration	psia	Pounds per square inch, absolute
PTE	Permanent Total Enclosure	psig	Pounds per square inch, gauge
PTI	Permit to Install	scf	Standard cubic feet
RACT	Reasonably Available Control Technology	sec	Seconds
ROP	Renewable Operating Permit	SO <sub>2</sub>	Sulfur dioxide
SC	Special Condition	THC	Total hydrocarbons
SCR	Selective Catalytic Reduction	tpy	Tons per year
SRN	State Registration Number	µg	Microgram
TAC	Toxic Air Contaminant	VOC	Volatile organic compounds
TEQ	Toxicity Equivalence Quotient	yr	Year
VE	Visible Emissions		

\* For High Volume Low Pressure (HVLP) applicators, the pressure measured at the HVLP gun air cap shall not exceed ten (10) pounds per square inch gauge (psig).

### GENERAL CONDITIONS

1. The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. **(R 336.1201(1))**
2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environmental Quality, P.O. Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. **(R 336.1201(4))**
3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to R 336.1210, operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. **(R 336.1201(6)(b))**
4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. **(R 336.1201(8), Section 5510 of Act 451, PA 1994)**
5. The terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to R 336.1219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b), and (c) of R 336.1219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environmental Quality. **(R 336.1219)**
6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. **(R 336.1901)**
7. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). **(R 336.1912)**
8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.
9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.

11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of R 336.1301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with R 336.1303. **(R 336.1301)**
  - a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
  - b) A visible emission limit specified by an applicable federal new source performance standard.
  - c) A visible emission limit specified as a condition of this Permit to Install.
  
12. Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in R 336.1370(2). **(R 336.1370)**
  
13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001. **(R 336.2001)**

**SPECIAL CONDITIONS**

**EMISSION UNIT SUMMARY TABLE**

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

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	Installation Date / Modification Date	Flexible Group ID
EUMELTFURNACE	<p>A natural gas-fired aluminum reverberatory furnace with a maximum heat input of 81 MMBtu/hr during direct firing mode and 54 MMBtu/hr during regenerative firing modes. The furnace is equipped with a pump well used to circulate the molten aluminum in the melt furnace. The pump well is equipped with a hood which is vented to the 30,000 cfm cyclone-adsorbent injected-baghouse system. The furnace is exhausted through the same cyclone-adsorbent injected-baghouse system.</p> <p>During Group 2 operation, the control device is bypassed, no reactive fluxing is performed and only clean charge is used. Clean charge is defined as "furnace charge materials, including molten aluminum; T-bar; sow; ingot; billet; pig; alloying elements; aluminum scrap known by the owner or operator to be entirely free of paints, coatings, and lubricants; uncoated/unpainted aluminum chips that have been thermally dried or treated by a centrifugal cleaner; aluminum scrap dried at 343 °C (650 °F) or higher; aluminum scrap delacquered/decoated at 482 °C (900 °F) or higher, and runaround scrap."</p>	11/30/09	FGMELTS SHOP FGFACILITY
EUHOLDFURNACE	A holding furnace equipped with 20 MMBtu/hr natural gas-fired low NOx burners. The hood over the charge door is exhausted through a 40,000 cfm baghouse	11/30/09	FGMELTS SHOP FGFACILITY
EUDROSS	The dross storage area which is vented through a common 40,000 cfm baghouse	11/30/09	FGFACILITY
EUHMFURNACE	A homogenizing furnace equipped with natural gas-fired burners rated at 14.3 MMBtu/hr of heat input. A powder surface conditioner is added for maintaining the appropriate log appearance.	11/30/09 02/08/11	FGFACILITY
EUHEATERS	Two natural gas-fired billet heaters, rated at 29.1 MMBtu/hr of total heat input, which are exhausted through two separate stacks	11/30/09	FGFACILITY
EUOVENS	Five gas-fired aging ovens, rated at 24.5 MMBtu/hr of total heat input, which are vented through separate stacks	11/30/09	FGFACILITY
EUUTILITIES	Natural gas-fired space heaters with maximum heat input of 4 MMBtu/hr	11/30/09	FGFACILITY
Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1290.			

**The following conditions apply to: EUMELTFURNACE (Group 1 Operation)**

**DESCRIPTION:** A natural gas-fired aluminum reverberatory furnace when operating as a Group 1 furnace with a maximum heat input of 81 MMBtu/hr during direct firing mode and 54 MMBtu/hr during regenerative firing modes.

**Flexible Group ID:** FGFACILITY

**POLLUTION CONTROL EQUIPMENT:** A 30,000 cfm cyclone-adsorbent injected-baghouse system.

**I. EMISSION LIMITS**

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM	0.005 gr/dscf	Test Protocol	EUMELTFURNACE	V.1	R 336.1331(c), R 336.1225
2. VOC	1.7 lbs/hr	Test Protocol	EUMELTFURNACE	V.1	R 336.1225 R 336.1702
3. Dioxins and Furans (D/F)	0.00021 grain of D/F TEQ* per ton of charge	Test Protocol	EUMELTFURNACE	V.1	40 CFR § 63 Subpart RRR
4. Dioxins and Furans (D/F)	2.14E-06 tpy	Annual	EUMELTFURNACE	VI.22	R 336.1225
5. HCl	0.14 lb/ton Al charge	Test Protocol	FGMELTSHOP	V.1	R 336.1205 (3), R 336.1225
6. Cl <sub>2</sub>	0.05 lb/ton Al charge	Test Protocol	FGMELTSHOP	V.1	R 336.1205 (3), R 336.1225

\* Grains of tetra-, penta-, hexa-, and octachlorinated dibenzo dioxins and furans expressed as 2,3,7,8-tetrachlorodibenzo(p)dioxin toxicity equivalent quotient per ton of feed or charge.

**II. MATERIAL LIMITS**

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Feed/Charge Rate	146,000 lbs per batch or 9 batches per day	Daily	EUMELTFURNACE	VI.4, VI.5, and VI.6	R 336.1331, R 336.1225, 40 CFR § 63 Subpart RRR
2. Reactive Flux Usage Rate	540 lbs per day	Daily	EUMELTFURNACE	VI.5 and VI.6	R 336.1331, R 336.1225

**III. PROCESS/OPERATIONAL RESTRICTIONS**

- The permittee shall not operate EUMELTFURNACE unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the 30,000 cfm cyclone-adsorbent adsorbent injected-baghouse system (baghouse system) has been submitted prior to startup, and is implemented and maintained. If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or

amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1225, R 336.1331, R 336.1910, R 336.1911)**

2. The permittee shall not operate EUMELTFURNACE unless an Operation, Maintenance & Monitoring (OM&M) plan pursuant to 40 CFR Part 63, Subpart RRR, Sections 63.1506 and 63.1510 has been implemented and maintained. **(40 CFR Part 63, Subpart RRR)**
3. The permittee shall provide and maintain easily visible labels posted at EUMELTFURNACE that identify the applicable emission limits and means of compliance, including the following: **(40 CFR Part 63, Subpart RRR, § 63.1506 (b))**
  - (a) The type of affected source or emission unit.
  - (b) The applicable operational standard(s) and control method(s) (work practice or control device). This includes, but is not limited to, the type of charge to be used for a furnace (e.g., clean scrap only, all scrap, etc.), flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan.
  - (c) The position of the exhaust system damper indicating when capture and collection of emissions from EUMELTFURNACE is in operation.
4. The permittee shall install, calibrate, operate and maintain a device(s) that measures and records or otherwise determines the weight of feed/charge (or throughput) for EUMELTFURNACE for each operating cycle or time period used in the performance test. The weight measurement system(s) shall be operated in accordance with the OM&M plan. **(40 CFR Part 63, Subpart RRR, § 63.1506 (d))**
5. The permittee shall not operate EUMELTFURNACE unless the associated baghouse system is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the baghouse system shall require the following: **(R 336.1205(1)(a) and (3), R 336.1225, R 336.1910, 40 CFR Part 63 Subpart RRR)**
  - (a) Design and installation of the baghouse for the capture and collection of emissions from EUMELTFURNACE shall meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Manual of Recommended Practice" (incorporated by reference in 40 CFR Part 63, Subpart RRR, §63.1502);
  - (b) Captured emissions from EUMELTFURNACE shall be vented through a closed system, except that dilution air may be added to emission streams for the sole purpose of controlling temperature at the inlet to a fabric filter; and
  - (c) Operation of the capture/collection system shall be operated according to the procedures and requirements in the OM&M plan.
6. The permittee shall not flux in the pump well. This condition is necessary to avoid requirements of 40 CFR Part 63 Subpart RRR, National Emission Standards for Secondary Aluminum Production. **(R 336.1224 and R 336.1225, 40 CFR Part 63 Subpart RRR)**
7. The permittee shall not charge to EUMELTFURNACE through the pump well any material other than alloying materials or clean charge, customer returns, 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 Standards for Secondary Aluminum Production. **(R 336.1224 and R 336.1225, 40 CFR Part 63 Subpart RRR)**

#### **IV. DESIGN/EQUIPMENT PARAMETERS**

1. The permittee shall equip EUMELTFURNACE with a baghouse system. The baghouse and its associated exhaust system from EUMELTFURNACE shall be operated in a manner to achieve capture and collection of emissions from EUMELTFURNACE during furnace operation. **(R 336.1225, 40 CFR Part 63 Subpart RRR)**

2. The permittee shall monitor the pressure drop across the baghouse. When the pressure drop of the baghouse exceeds its associated allowable maximum differential, the permittee shall clean the baghouse immediately consistent with the safe operating procedures recommended by the manufacturer and shall implement procedures specified in the System Startup, Shutdown, and Malfunction Plan to minimize emissions from EUMELTFURNACE until normal operating conditions are restored. The maximum differential for the baghouse shall be recorded in the OM&M plan and clearly displayed on the baghouse or its control panel at all times. **(R 336.1910, R 336.1911)**
3. The permittee shall install, calibrate, maintain, and continuously operate a bag leak detection system as required below: **(40 CFR Part 63, Subpart RRR, § 63.1510 (f))**
  - (a) The permittee shall install and operate a bag leak detection system for each exhaust stack of a fabric filter.
  - (b) Each triboelectric bag leak detection system shall be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997). This document is available from the U.S. Environmental Protection Agency; Office of Air Quality Planning and Standards; Emissions, Monitoring and Analysis Division; Emission Measurement Center (MD-19), Research Triangle Park, NC 27711. This document also is available on the Technology Transfer Network (TTN) under Emission Measurement Technical Information (EMTIC), Continuous Emission Monitoring. Other bag leak detection systems, if approved, shall be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.
  - (c) The bag leak detection system shall be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.
  - (d) The bag leak detection system sensor shall provide output of relative or absolute PM loadings.
  - (e) The bag leak detection system shall be equipped with a device to continuously record the output signal from the sensor.
  - (f) The bag leak detection system shall be equipped with an alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm shall be located where it is easily heard by plant operating personnel.
  - (g) The bag leak detector shall be installed downstream of the fabric filter.
  - (h) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.
  - (i) The baseline output shall be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time.
  - (j) Following initial adjustment of the system, the permittee shall not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time except as detailed in the OM&M plan. In no case may the sensitivity be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless such adjustment follows a complete fabric filter inspection which demonstrates that the fabric filter is in good operating condition.
4. 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 40 CFR Part 63 Subpart A. The temperature monitoring device shall meet each of these performance and equipment specifications: **(40 CFR Part 63, Subpart RRR, § 63.1510 (h))**
  - (a) The monitoring system shall record the temperature in 15-minute block averages and calculate and record the average temperature for each 3-hour block period.
  - (b) The recorder response range shall include zero and 1.5 times the average temperature established in the performance test according to the requirements in 40 CFR § 63.1512(n).

- (c) The reference method shall be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the U.S. EPA Administrator.

#### **V. TESTING/SAMPLING**

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

NA

#### **VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall comply with the submitted OM&M plan. Any subsequent changes to the plan must be submitted to the District Supervisor for review and approval. Pending approval by District Supervisor of an initial or amended plan, the permittee must comply with the provisions of the submitted plan. Each plan must contain the following information: **(40 CFR Part 63, Subpart RRR, § 63.1510 (b))**
  - (a) Process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for EUMELTFURNACE and the baghouse system.
  - (b) A monitoring schedule for EUMELTFURNACE and the baghouse system.
  - (c) Procedures for the proper operation and maintenance of EUMELTFURNACE and the baghouse system used to meet the applicable emission limits or standards in Section 63.1505.
  - (d) Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:
    - (i) Calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and
    - (ii) Procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems as required by the general provisions in 40 CFR Part 63 Subpart A.
  - (e) Procedures for monitoring process and control device parameters and if applicable, the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used.
  - (f) Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in SC VI.1 (a), including:
    - (i) Procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
    - (ii) Procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.
  - (g) A maintenance schedule for EUMELTFURNACE and the baghouse system that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.
2. The permittee shall inspect the labels for EUMELTFURNACE at least once per calendar month to confirm that posted labels as required by the operational standard in 40 CFR § 63.1506(b) are intact and legible. **(40 CFR Part 63, Subpart RRR, § 63.1510 (c))**
3. The permittee shall inspect the baghouse system and closed vent system at least once a year to ensure that each system is operating in accordance with the operating requirements in § 63.1506 (c) and record the results of each inspection. **(40 CFR Part 63, Subpart RRR, § 63.1510 (d))**

4. The permittee shall verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months. **(40 CFR Part 63, Subpart RRR, § 63.1510 (e)(2))**
5. The permittee shall record, for each 15-minute block period during each batch or time period used in the performance test during which reactive fluxing occurs, the time, weight and time of flux for each addition of reactive flux used in the performance test. **(40 CFR Part 63, Subpart RRR, § 63.1510 (j)(3))**
6. The permittee shall calculate and record the total reactive fluxing rate for each batch or time period used in the performance test using the procedure in § 63.1512(o). **(40 CFR Part 63, Subpart RRR, § 63.1510 (j)(4))**
7. The permittee shall: **(40 CFR Part 63, Subpart RRR, § 63.1510 (i))**
  - (a) Verify that adsorbent is always free-flowing by either:
    - (i) Inspecting each feed hopper or silo at least once each 8-hour period and recording the results of each inspection. If adsorbent is found not to be free-flowing during any of the 8-hour periods, the permittee shall increase the frequency of inspections to at least once every 4-hour period for the next 3 days. The permittee may return to inspections at least once every 8 hour period if corrective action results in no further blockages of adsorbent during the 3-day period; or
    - (ii) Subject to the approval of the AQD District Supervisor, installing, operating and maintaining a load cell, carrier gas/adsorbent flow indicator, carrier gas pressure drop measurement system or other system to confirm that adsorbent is free flowing. If adsorbent is found not to be free flowing, the permittee shall promptly initiate and complete corrective action, or
    - (iii) Subject to the approval of the AQD District Supervisor, installing, operating and maintaining a device to monitor the concentration of HCl at the outlet of the fabric filter. If an increase in the concentration of HCl indicates that the adsorbent is not free-flowing, the permittee shall promptly initiate and complete corrective action.
  - (b) Record the adsorbent feeder setting once each day of operation.
8. Except as provided in Special Condition 9. the permittee shall calculate and record the 3-day, 24-hour rolling average emissions of Dioxin/Furans (D/F) for EUMELTFURNACE on a daily basis. To calculate the 3-day, 24-hour rolling average, the permittee shall: **(40 CFR Part 63, Subpart RRR, § 63.1510(b),(e),(s),(t))**
  - (a) Calculate and record the total weight of material charged to EUMELTFURNACE for each 24-hour day of operation using the feed/charge weight information required in SC III.4.
  - (b) Multiply the total feed/charge weight to EUMELTFURNACE for the 24-hour period by the emission rate (in lb/ton of feed/charge) for that emissions unit (as determined during the performance test) to provide emissions for each emissions unit for the 24-hour period, in pounds.
  - (c) Divide the total emissions for EUMELTFURNACE for the 24-hour period by the total material charged to EUMELTFURNACE over the 24-hour period to provide the daily emission rate for EUMELTFURNACE.
  - (d) Compute the 24-hour daily emission rate using Equation 4 of 40 CFR 63.1510(t).
  - (e) Calculate and record the 3-day, 24-hour rolling average for D/F each day by summing the daily emission rates for D/F over the 3 most recent consecutive days and dividing by 3.
9. As an alternative to the procedures of Special Condition 8 of this section, the permittee may demonstrate, through performance tests that EUMELTFURNACE, which is an individual emission unit within the secondary aluminum production unit, is in compliance with the Dioxin/Furans (D/F) emission limit in Special Condition I.3. **(40 CFR Part 63, Subpart RRR § 63.1510(u))**
10. As required by 40 CFR § 63.10(b), the permittee shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart. **(40 CFR Part 63, Subpart RRR, § 63.1517 (a), 40 CFR § 63.10(b))**

- (a) The permittee shall retain each record for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent two years of records must be retained at the facility. The remaining three years of records may be retained off site.
  - (b) The permittee may retain records on microfilm, computer disks, magnetic tape, or microfiche; and
  - (c) The permittee may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.
11. The permittee shall maintain the following records for the bag leak detection system: the number of total operating hours for EUMELTFURNACE during each 6-month reporting period, records of each alarm, the time of the alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action(s) taken. **(40 CFR Part 63, Subpart RRR, § 63.1517(b)(1)(i))**
12. The permittee shall keep, in a satisfactory manner, records of the manufacturer-recommended cleaning frequency of the baghouses. **(R 336.1331, R 336.1225)**
13. The permittee shall maintain records of 15-minute block average inlet temperatures for the 30,000 cfm cyclone-adsorbent injected-baghouse system, including any period when the 3-hour block average temperature exceeds the compliant operating parameter value +14 °C (+25 °F), with a brief explanation of the cause of the excursion and the corrective action taken. **(40 CFR Part 63, Subpart RRR, § 63.1517(b)(3))**
14. The permittee shall maintain the following records for the adsorbent injection system: **(40 CFR Part 63, Subpart RRR, § 63.1517(b)(4))**
- (a) Records of inspections at least once every 8-hour period verifying that adsorbent is present in the feeder hopper or silo and flowing, including any inspection where blockage is found, with a brief explanation of the cause of the blockage and the corrective action taken, and records of inspections at least once every 4-hour period for the subsequent 3 days. If flow monitors, pressure drop sensors or load cells are used to verify that adsorbent is present in the hopper and flowing, records of all monitor or sensor output including any event where blockage was found, with a brief explanation of the cause of the blockage and the corrective action taken;
  - (b) If adsorbent feeder setting is monitored, records of daily inspections of feeder setting, including records of any deviation of the feeder setting from the setting used in the performance test, with a brief explanation of the cause of the deviation and the corrective action taken.
  - (c) If adsorbent addition rate for a non-continuous adsorbent injection system is monitored pursuant to the approved alternative monitoring requirements in 40 CFR § 63.1510(v), records of the time and mass of each adsorbent addition during each operating cycle or time period used in the performance test and calculations of the average adsorbent addition rate (lb/ton of feed/charge).
15. The permittee shall maintain records of 15-minute block average weights of total reactive flux addition rate and calculations (including records of the identity, composition, and weight of each addition of solid reactive flux), including records of any period the rate exceeds the compliant operating parameter value and corrective action taken. **(40 CFR Part 63, Subpart RRR, § 63.1517(b)(5))**
16. The permittee shall maintain records of feed/charge, records of feed/charge (or throughput) weights for each operating cycle or time period used in the performance test. **(40 CFR Part 63, Subpart RRR, § 63.1517(b)(7))**
17. The permittee shall maintain records of monthly inspections for proper unit labeling for each affected source and emission unit subject to labeling requirements. **(40 CFR Part 63, Subpart RRR, § 63.1517(b)(13))**
18. The permittee shall maintain records of annual inspections of emission capture/collection and closed vent systems. **(40 CFR Part 63, Subpart RRR, § 63.1517(b)(14))**
19. The permittee shall maintain records for any approved alternative monitoring or test procedure. **(40 CFR Part 63, Subpart RRR, § 63.1517(b)(15))**

20. The permittee shall maintain current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including Startup, Shutdown, and Malfunction plan and OM&M plan and make them available to the Department upon request. These records shall include the position of the exhaust system damper indicating when capture and collection of emissions from EUMELTFURNACE is in operation. **(40 CFR Part 63, Subpart RRR, § 63.1500 (c), § 63.1517(b)(16))**
21. The permittee shall maintain records of total charge weight, or if the permittee chooses to comply on the basis of aluminum production, total aluminum produced for each 24-hour period and calculations of 3-day, 24-hour rolling average emissions. **(40 CFR Part 63, Subpart RRR, § 63.1517(b)(17))**
22. The permittee shall maintain records of measurements needed to demonstrate compliance with permit limits. **(40 CFR Part 63, Subpart A, § 63.10(b)(2)(vii))**
23. The permittee shall maintain records of performance test results. **(40 CFR Part 63, Subpart A, § 63.10(b)(2)(viii))**

## **VII. REPORTING**

1. The permittee shall provide notification for an area source that subsequently increases its emissions such that the source is a major source subject to the standard. **(40 CFR Part 63, Subpart RRR, § 63.1515(a)(1))**
2. The permittee shall implement the written plan as described in 40 CFR § 63.6(e)(3) that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The permittee shall also keep records of each event as required by 40 CFR § 63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR § 63.6(e)(3). In addition to the information required in 40 CFR § 63.6(e)(3), the plan shall include: **(40 CFR Part 63, Subpart RRR, § 63.1516 (a))**
  - (a) Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and
  - (b) Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.
3. As required by 40 CFR § 63.10(e)(3), the permittee shall submit semiannual reports within 60 days after the end of each 6-month period. Each report shall contain the information specified in 40 CFR § 63.10(c). When no deviations of parameters have occurred, the permittee shall submit a report stating that no excess emissions occurred during the reporting period. **(40 CFR Part 63, Subpart RRR, § 63.1516 (b))**
  - (a) A report shall be submitted if any of these conditions occur during a 6-month reporting period:
    - (i) The corrective action specified in the OM&M plan for a bag leak detection system alarm was not initiated within 1 hour.
    - (ii) An excursion of a compliant process or operating parameter value or range (e.g., adsorbent injection rate or screw feeder setting, total reactive fluxing rate, fabric filter inlet temperature, definition of acceptable scrap, or other approved operating parameter).
    - (iii) An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in 40 CFR § 63.6(e)(3).
    - (iv) An affected source (including an emission unit in a secondary aluminum processing unit) was not operated according to the requirements of this subpart.
    - (v) A deviation from the 3-day, 24-hour rolling average emission limit for a secondary aluminum processing unit.

- (b) The permittee shall 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 or values for each test method used for a particular type of emission point tested.

**VIII. STACK/VENT RESTRICTIONS**

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

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter/Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SVHOTBAGHOUSE	56	85	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
2. SVMELTFURNACE	76	60	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)

**IX. OTHER REQUIREMENTS**

NA

**The following conditions apply to: EUMELTFURNACE (Group 2 Operation)**

**DESCRIPTION:** A natural gas-fired aluminum reverberatory furnace when operating as a Group 2 furnace with a maximum heat input of 81 MMBtu/hr during direct firing mode and 54 MMBtu/hr during regenerative firing modes.

**Flexible Group ID:** FGFACILITY

**POLLUTION CONTROL EQUIPMENT:** None

**I. EMISSION LIMITS**

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM	0.006 gr/dscf	Test Protocol	EUMELTFURNACE	GC 13	R 336.1331(c), R 336.1225

**II. MATERIAL LIMITS**

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Feed/Charge Rate	146,000 lbs per batch or 9 batches per day	Daily	EUMELTFURNACE	VI.4, VI.5, and VI.6	R 336.1331, R 336.1225, 40 CFR § 63 Subpart RRR

**III. PROCESS/OPERATIONAL RESTRICTIONS**

1. The permittee shall not operate EUMELTFURNACE during Group 2 operation unless an Operation, Maintenance & Monitoring (OM&M) plan pursuant to 40 CFR Part 63, Subpart RRR, Sections 63.1506 and 63.1510 has been implemented and maintained. **(40 CFR Part 63, Subpart RRR)**
2. The permittee shall provide and maintain easily visible labels posted at EUMELTFURNACE that identify the applicable emission limits and means of compliance, including the following: **(40 CFR Part 63, Subpart RRR, § 63.1506 (b))**
  - (a) The type of affected source or emission unit.
  - (b) The applicable operational standard(s) and control method(s) (work practice or control device). This includes, but is not limited to, the type of charge to be used for a furnace (e.g., clean scrap only, all scrap, etc.), flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan.
3. The permittee shall not perform reactive fluxing in EUMELTFURNACE during Group 2 operation. This condition is necessary to avoid requirements of 40 CFR Part 63 Subpart RRR, National Emission Standards for Secondary Aluminum Production. **(R 336.1224 and R 336.1225, 40 CFR Part 63 Subpart RRR)**
4. The permittee shall not charge to EUMELTFURNACE during Group 2 operation any material other than alloying materials or clean charge, as defined by 40 CFR Part 63 Subpart RRR. Clean charge is defined as "furnace charge materials, including molten aluminum; T-bar; sow; ingot; billet; pig; alloying elements; aluminum scrap known by the owner or operator to be entirely free of paints, coatings, and lubricants; uncoated/unpainted aluminum chips that have been thermally dried or treated by a centrifugal cleaner;

aluminum scrap dried at 343 °C (650 °F) or higher; aluminum scrap delacquered/decoated at 482 °C (900 °F) or higher, and runaround scrap.” **(R 336.1224 and R 336.1225, 40 CFR Part 63 Subpart RRR)**

#### **IV. DESIGN/EQUIPMENT PARAMETERS**

NA

#### **V. TESTING/SAMPLING**

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

NA

#### **VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall submit a revision to the existing OM&M plan prior to operation EUMELTFURNACE as a Group 2 furnace. Any subsequent changes to the plan must be submitted to the District Supervisor for review and approval. Pending approval by District Supervisor of an initial or amended plan, the permittee must comply with the provisions of the submitted plan. The plan must contain the following information for Group 2 operation: **(40 CFR Part 63, Subpart RRR, § 63.1510 (b))**
  - (a) Process parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for EUMELTFURNACE.
  - (b) A monitoring schedule for EUMELTFURNACE.
  - (c) Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance.
  - (e) Procedure(s) for monitoring the process.
  - (f) Corrective actions to be taken when process or operating parameters deviate from the value or range established in SC VI.1 (a), including:
    - (i) Procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
    - (ii) Procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.
  - (g) A maintenance schedule for EUMELTFURNACE that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.
  - (h) Records which verify that the material feed to EUMELTFURNACE is in compliance with the requirements of SC III. 3. and 4.
2. The permittee shall inspect the labels for EUMELTFURNACE at least once per calendar month to confirm that posted labels as required by the operational standard in 40 CFR § 63.1506(b) are intact and legible. **(40 CFR Part 63, Subpart RRR, § 63.1510 (c))**
3. As required by 40 CFR § 63.10(b), the permittee shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart. **(40 CFR Part 63, Subpart RRR, § 63.1517 (a), 40 CFR § 63.10(b))**
  - (a) The permittee shall retain each record for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent two years of records must be retained at the facility. The remaining three years of records may be retained off site.
  - (b) The permittee may retain records on microfilm, computer disks, magnetic tape, or microfiche; and

- (c) The permittee may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.
- 4. The permittee shall maintain records of monthly inspections for proper unit labeling for each affected source and emission unit subject to labeling requirements. **(40 CFR Part 63, Subpart RRR, § 63.1517(b)(13))**
- 5. The permittee shall maintain current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including Startup, Shutdown, and Malfunction plan and OM&M plan and make them available to the Department upon request. **(40 CFR Part 63, Subpart RRR, § 63.1500 (c), § 63.1517(b)(16))**

## **VII. REPORTING**

- 1. The permittee shall provide notification for an area source that subsequently increases its emissions such that the source is a major source subject to the standard. **(40 CFR Part 63, Subpart RRR, § 63.1515(a)(1))**
- 2. The permittee shall submit a notification of compliance status report within 90 days after commencement of operation as a Group 2 furnace. The notification must be signed by the responsible official who must certify its accuracy. A complete notification of compliance status report shall include the information specified in paragraphs (a) through (f) of this section. If the permittee submits the information specified in this section at different times or in different submittals, later submittals may refer to earlier submittals instead of duplicating and resubmitting the information previously submitted. A complete notification of compliance status report shall include: **(40 CFR Part 63, Subpart RRR, § 63.1515 (b))**
  - (a) All information required in 40 CFR § 63.9(h). The permittee shall provide a complete performance test report for each affected source and emission unit for which a performance test is required. A complete performance test report includes all data, associated measurements, and calculations.
  - (b) The approved site-specific test plan and performance evaluation test results for the continuous monitoring device for the baghouse inlet temperature. (40 CFR § 63.1510(h), 40 CFR § 63.8)
  - (c) Unit labeling as described in 40 CFR § 63.1506(b), including process type or furnace classification and operating requirements.
  - (d) The compliant operating parameter value or range established for each affected source or emission unit with supporting documentation and a description of the procedure used to establish the value (e.g., adsorbent injection rate, total reactive fluxing rate, fabric filter inlet temperature), including the operating cycle or time period used in the performance test.
  - (e) Design information and analysis, with supporting documentation, demonstrating conformance with the requirements for capture/collection systems in 40 CFR § 63.1506(c).
  - (f) If applicable, analysis and supporting documentation demonstrating conformance with EPA guidance and specifications for bag leak detection systems in 40 CFR § 63.1510(f).
  - (g) Startup, shutdown, and malfunction plan, with revisions.
- 3. As required by 40 CFR § 63.10(e)(3), the permittee shall submit semiannual reports within 60 days after the end of each 6-month period. Each report shall contain the information specified in 40 CFR § 63.10(c). When no deviations of parameters have occurred, the permittee shall submit a report stating that no excess emissions occurred during the reporting period. **(40 CFR Part 63, Subpart RRR, § 63.1516 (b))**
  - (a) A report shall be submitted if any of these conditions occur during a 6-month reporting period:
    - (i) An excursion of a compliant process or operating parameter value or range (e.g., adsorbent injection rate or screw feeder setting, total reactive fluxing rate, fabric filter inlet temperature, definition of acceptable scrap, or other approved operating parameter).
    - (ii) An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in 40 CFR § 63.6(e)(3).

- (iii) An affected source (including an emission unit in a secondary aluminum processing unit) was not operated according to the requirements of this permit.

**VIII. STACK/VENT RESTRICTIONS**

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

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter/Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SVHOTBAGHOUSE	56	85	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
2. SVMELTFURNACE	76	60	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)

**IX. OTHER REQUIREMENTS**

NA

**The following conditions apply to: EUHOLDFURNACE**

**DESCRIPTION:** A holding furnace equipped with 20 MMBtu/hr natural gas-fired low NOx burners. The hood over the charge door is exhausted through a 40,000 cfm baghouse.

**Flexible Group ID:** FGFACILTY

**POLLUTION CONTROL EQUIPMENT:** A 40,000 cfm baghouse.

**I. EMISSION LIMITS**

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VE	10 % opacity	6-minute	EUHOLDFURNACE	Method 9 or equivalent	R 336.1301 (c)
2. PM	0.01 lb/1000 lbs of gas on a dry basis	Test Protocol	EUHOLDFURNACE	GC 13	R 336.1331

**II. MATERIAL LIMITS**

NA

**III. PROCESS/OPERATIONAL RESTRICTIONS**

1. The permittee shall not melt in EUHOLDFURNACE any material other than clean charge, customer returns, 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 Standards for Secondary Aluminum Production. **(R 336.1224 and R 336.1225, 40 CFR Part 63 Subpart RRR)**
2. The permittee shall not operate EUHOLDFURNACE unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the 40,000 cfm baghouse has been submitted prior to startup, and is implemented and maintained. If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1225, R 336.1331, R 336.1910, R 336.1911)**
3. The permittee shall not operate EUHOLDFURNACE unless the associated baghouse is installed, maintained, and operated in a satisfactory manner. **(R 336.1205, R 336.1225, R 336.1910)**
4. Permittee shall not perform reactive fluxing in EUHOLDFURNACE. **(R 336.1224, R 336.1225).**

**IV. DESIGN/EQUIPMENT PARAMETERS**

1. The permittee shall equip the hood over the charge door on EUHOLDFURNACE with a baghouse. **(R 336.1205, R 336.1225, R 336.1331)**

- The permittee shall monitor the pressure drop across the baghouse. When the pressure drop of the baghouse exceeds its associated allowable maximum differential, the permittee shall clean the baghouse immediately consistent with safe operating procedures recommended by the manufacturer and shall implement procedures specified in the MAP to minimize emissions from EUHOLDFURNACE until normal operating conditions are restored. The maximum differential for the baghouse shall be recorded in the MAP and clearly displayed on the baghouse or its control panel at all times. **(R 336.1910, R 336.1911)**

**V. TESTING/SAMPLING**

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

NA

**VI. MONITORING/RECORDKEEPING**

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

- The permittee shall keep records of total daily feed/charge weight for EUHOLDFURNACE. **(R 336.1205, R 336.1225)**

**VII. REPORTING**

NA

**VIII. STACK/VENT RESTRICTIONS**

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

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter/Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SVCOLDBAGHOUSE	40	60	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)

**IX. OTHER REQUIREMENTS**

NA

**The following conditions apply to: EUDROSS**

**DESCRIPTION:** The dross storage area which is vented through a common 40,000 cfm baghouse.

**Flexible Group ID:** FGFACILITY

**POLLUTION CONTROL EQUIPMENT:** A 40,000 cfm baghouse.

**I. EMISSION LIMITS**

<b>Pollutant</b>	<b>Limit</b>	<b>Time Period / Operating Scenario</b>	<b>Equipment</b>	<b>Testing / Monitoring Method</b>	<b>Underlying Applicable Requirements</b>
1. VE	10 % opacity	6-minutes	EUDROSS	Method 9 or equivalent	R 336.1301 (c)
2. PM	0.01 lb/1000 lbs of gas on a dry basis	Test Protocol	EUDROSS	GC 13	R 336.1331

**II. MATERIAL LIMITS**

NA

**III. PROCESS/OPERATIONAL RESTRICTIONS**

1. The permittee shall not operate EUDROSS unless the MAP has been implemented and is maintained. **(R 336.1225, R 336.1911)**
2. The permittee shall not move or load dross associated with EUDROSS unless the associated baghouse is installed, maintained, and operated in a satisfactory manner. **(R 336.1205, R 336.1225, R 336.1910)**

**IV. DESIGN/EQUIPMENT PARAMETERS**

NA

**V. TESTING/SAMPLING**

NA

**VI. MONITORING/RECORDKEEPING**

NA

**VII. REPORTING**

NA

**VIII. STACK/VENT RESTRICTIONS**

NA

**IX. OTHER REQUIREMENTS**

NA

**The following conditions apply to: EUHMFURNACE**

**DESCRIPTION:** A homogenizing furnace equipped with natural gas-fired burners rated at 14.3 MMBtu/hr of heat input. A surface conditioner is added to the EUHMFURNACE using small packets attached directly to the logs entering the furnace

**Flexible Group ID:** FGFACILITY

**POLLUTION CONTROL EQUIPMENT:** N/A

**I. EMISSION LIMITS**

<b>Pollutant</b>	<b>Limit</b>	<b>Time Period / Operating Scenario</b>	<b>Equipment</b>	<b>Testing / Monitoring Method</b>	<b>Underlying Applicable Requirements</b>
1. VE	10% opacity	6-minutes	EUHMFURNACE	Method 9 or equivalent	R 336.1301(c)

**II. MATERIAL LIMITS**

1. The permittee shall not use more than 3.18 pounds of surface conditioner per calendar day in EUHMFURNACE. **(R 1336.225)**

**III. PROCESS/OPERATIONAL RESTRICTIONS**

N/A

**IV. DESIGN/EQUIPMENT PARAMETERS**

N/A

**V. TESTING/SAMPLING**

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

N/A

**VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall keep a record of the pounds of surface conditioner used on a daily basis. The permittee shall keep the records on file at the facility, in a format acceptable to the AQD District Supervisor, and make them available to the Department upon request. **(R 336.1225)**

**VII. REPORTING**

N/A

**VIII. STACK/VENT RESTRICTIONS**

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

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter/Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SV-HMFURNACE	31.5	60	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)

**IX. OTHER REQUIREMENTS**

N/A

**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
FGGASCOMBUSTION	All process equipment that burns natural gas fuel	EUMELTFURNACE, EUHOLDFURNACE, EUHMFURNACE, EUHEATERS, EUOVENS, and EUUTILITIES
FGMELTSHOP	All process equipment that melts aluminum scrap or aluminum feed/charge	EUMELTFURNACE, EUHOLDFURNACE
FGFACILITY	All process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment.	

**The following conditions apply to: FGGASCOMBUSTION**

**DESCRIPTION:** All process equipment that burns natural gas fuel.

**Emission Units:** EUMELTFURNACE, EUHOLDFURNACE, EUHMFURNACE, EUHEATERS, EUOVENS, and EUUTILITIES.

**POLLUTION CONTROL EQUIPMENT:** None.

**I. EMISSION LIMITS**

NA

**II. MATERIAL LIMITS**

NA

**III. PROCESS/OPERATIONAL RESTRICTIONS**

1. The total heat input of FGGASCOMBUSTION shall not exceed a maximum of 186 MM Btu per hour.  
(R 336.1205)

**IV. DESIGN/EQUIPMENT PARAMETERS**

NA

**V. TESTING/SAMPLING**

NA

**VI. MONITORING/RECORDKEEPING**

NA

**VII. REPORTING**

NA

**VIII. STACK/VENT RESTRICTIONS**

NA

**IX. OTHER REQUIREMENTS**

NA

**The following conditions apply to: FGMELTSHOP**

**DESCRIPTION:** All process equipment that melts aluminum scrap or aluminum feed/charge.

**Emission Units:** EUMELTFURNACE, and EUHOLDFURNACE

**POLLUTION CONTROL EQUIPMENT:** NA

**I. EMISSION LIMITS**

NA

**II. MATERIAL LIMITS**

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Feed/Charge Rate	256,500,000 lbs/yr	12-month rolling time period as determined at the end of each calendar month	FGMELTSHOP	VI.1	R 336.1331, R 336.1225, 40 CFR § 63 Subpart RRR

**III. PROCESS/OPERATIONAL RESTRICTIONS**

NA

**IV. DESIGN/EQUIPMENT PARAMETERS**

NA

**V. TESTING/SAMPLING**

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

NA

**VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall keep records of monthly feed/charge weight and annual (12-month rolling time period) feed/charge weight for FGMELTSHOP. (R 336.1205, R 336.1225)

**VII. REPORTING**

NA

**VIII. STACK/VENT RESTRICTIONS**

NA

**IX. OTHER REQUIREMENTS**

NA

**The following conditions apply Source-Wide to: FGFACILITY**

**POLLUTION CONTROL EQUIPMENT:** NA

**I. EMISSION LIMITS**

<b>Pollutant</b>	<b>Limit</b>	<b>Time Period / Operating Scenario</b>	<b>Equipment</b>	<b>Testing / Monitoring Method</b>	<b>Underlying Applicable Requirements</b>
1. HCl	8.9 tpy	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	VI.4 and VI.5	R 336.1205 and R 336.1225
2. Aggregate HAPs	24.9 tpy	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	VI.4 and VI.5	R 336.1205 and R 336.1225
3. NOx	84.5 tpy	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	VI.4 and VI.5	R 336.1205

**II. MATERIAL LIMITS**

NA

**III. PROCESS/OPERATIONAL RESTRICTIONS**

NA

**IV. DESIGN/EQUIPMENT PARAMETERS**

NA

**V. TESTING/SAMPLING**

NA

**VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall monitor and record the natural gas usage for equipment included in FGFACILITY on a continuous basis. **(R 336.1205(3))**
2. The permittee shall monitor and record all emissions and operating information required to comply with the Federal National Emission Standards for Hazardous Air Pollutants (NESHAP) specified in 40 CFR Part 63, Subpart RRR. **(40 CFR Part 63, Subpart RRR)**
3. For operation, maintenance, and monitoring data specified in this permit that are not required by 40 CFR Part 63, Subpart RRR, the permittee shall keep all required calculations and records 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 recordkeeping, reporting or notification special condition. For operation, maintenance, and monitoring data required by 40 CFR Part 63, Subpart RRR, the permittee shall keep all required calculations and records as specified in the OM&M plan. All source emissions data and operating data shall be kept on file at a location approved by the AQD District Supervisor and made available to the AQD upon request. **(R 336.1205(3), 40 CFR Part 63, Subpart RRR)**

4. The permittee shall implement the emission tracking method as approved by the AQD District Supervisor to calculate all emissions for FGFACILITY as specified in SC I.1 through I.3, based on material usage rates, test results and/or emission factors. The permittee shall complete all required calculations and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. **(R 336.1205(3))**
5. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period HCl, aggregate HAPs, and NOx emission calculation records for FGFACILITY, as required by SC I.1, I.2, and I.3. **(R 336.1205(3))**

**VII. REPORTING**

NA

**VIII. STACK/VENT RESTRICTIONS**

NA

**IX. OTHER REQUIREMENTS**

NA