MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

January 30, 2015

PERMIT TO INSTALL
28-99E

ISSUED TO
Non-Ferrous Cast Alloys, Inc.

LOCATED AT
1146 North Gateway Boulevard
Norton Shores, Michigan

IN THE COUNTY OF
Muskegon

STATE REGISTRATION NUMBER
N6561

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: **January 22, 2015**	
DATE PERMIT TO INSTALL APPROVED: **January 30, 2015**	SIGNATURE:
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

PERMIT TO INSTALL

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Common Abbreviations / Acronyms

Common Acronyms		Pollutant / Measurement Abbreviations	
AQD	Air Quality Division	BTU	British Thermal Unit
BACT	Best Available Control Technology	°C	Degrees Celsius
CAA	Clean Air Act	CO	Carbon Monoxide
CEM	Continuous Emission Monitoring	dscf	Dry standard cubic foot
CFR	Code of Federal Regulations	dscm	Dry standard cubic meter
CO_2e	Carbon Dioxide Equivalent	°F	Degrees Fahrenheit
COM	Continuous Opacity Monitoring	gr	Grains
EPA	Environmental Protection Agency	Hg	Mercury
EU	Emission Unit	hr	Hour
FG	Flexible Group	H_2S	Hydrogen Sulfide
GACS	Gallon of Applied Coating Solids	hp	Horsepower
GC	General Condition	lb	Pound
GHGs	Greenhouse Gases	kW	Kilowatt
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_x	Oxides of Nitrogen
MDEQ	Michigan Department of Environmental Quality (Department)	PM	Particulate Matter
MSDS	Material Safety Data Sheet	PM10	PM with aerodynamic diameter ≤10 microns
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM2.5	PM with aerodynamic diameter ≤ 2.5 microns
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	psia	Pounds per square inch absolute
PTI	Permit to Install	psig	Pounds per square inch gauge
RACT	Reasonably Available Control Technology	scf	Standard cubic feet
ROP	Renewable Operating Permit	sec	Seconds
SC	Special Condition	SO_2	Sulfur Dioxide
SCR	Selective Catalytic Reduction	THC	Total Hydrocarbons
SRN	State Registration Number	tpy	Tons per year
TAC	Toxic Air Contaminant	µg	Microgram
TEQ	Toxicity Equivalence Quotient	VOC	Volatile Organic Compound
VE	Visible Emissions	yr	Year

* 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 48909-7760, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. **(R 336.1201(4))**

3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to 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
EUINDUCTION1	Ajax Model M-2E200 furnace; design melt rate 1200 lb/hr used to melt brass. Controlled by fume ring ducted to baghouse control. Process includes transport ladle, skimming station and pouring lines with emissions collected and ducted to the baghouse.	1999	FGINDUCTION
EUINDUCTION2	Ajax Model M-93150 furnace; design melt rate 1200 lb/hr used to melt brass. Controlled by fume ring ducted to baghouse control. Process includes transport ladle, skimming station and pouring lines with emissions collected and ducted to the baghouse.	1999	FGINDUCTION
EUINDUCTION3	Ajax Model PACERII 60/ISO034 furnace; design melt rate 1200 lb/hr used to melt brass. Controlled by fume ring ducted to baghouse control. Process includes transport ladle, skimming station and pouring lines with emissions collected and ducted to the baghouse.	1999	FGINDUCTION
EUINDUCTION-AL	Thermtronixs SF-1200, 1,200 lb aluminum induction melting furnace. No control.	2009	
EUALUMINUM1	Four Thermtronix Model No. GS-1000 gas-fired furnaces; design melt rate 500 lb/hr used to melt aluminum; each with a 1.5 MMBtu/hr burner; no control. Includes hand ladle and pouring.	1999	FGALUMINUM
EUALUMINUM2	Four Thermtronix Model No. GS-1000 gas-fired furnaces; design melt rate 500 lb/hr used to melt aluminum; each with a 1.5 MMBtu/hr burner; no control. Includes hand ladle and pouring.	1999	FGALUMINUM
EUALUMINUM6	Two Thermtronix Model No. GS-1000 gas-fired furnaces; design melt rate 500 lb/hr used to melt aluminum; each with a 1.5 MMBtu/hr burner; no control. Includes hand ladle and pouring.	1999	FGALUMINUM
EUALUMINUM7	Two Thermtronix Model No. GS-1000 gas-fired furnaces; design melt rate 500 lb/hr used to melt aluminum; each with a 1.5 MMBtu/hr burner; no control. Includes hand ladle and pouring.	1999	FGALUMINUM
EUALUMINUM8	Two Thermtronix Model No. GS-1000 gas-fired furnaces; design melt rate 500 lb/hr used to melt aluminum; each with a 1.5 MMBtu/hr burner; no control. Includes hand ladle and pouring.	January 2015	FGALUMINUM

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	Installation Date / Modification Date	Flexible Group ID
EUSANDPROCESS	Sand processing equipment with a design capacity of 100 tons sand per hour, including a muller, two bucket elevators, a vibrating pan conveyor, a vibrating shaker deck, two belt conveyors, and a rotary screen. Baghouse control.	1999	NA
EUGRINDERS	Twelve grinders, shot blast; two baghouses for control	1999	NA
EUWOODWORKING	Saws and grinders, cyclone and baghouse control	1999	NA
EUAIRSET	Two mixers producing cores and molds using the phenolic urethane no-bake process.	1999	NA
EUISOCURE	One mixer producing cores and molds using the isocure process controlled by an acid scrubber.	1999	NA
EUSHELLCORE	Five hot box core machines using resin coated sand.	2009	NA
Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1290.			

The following conditions apply to:
EUINDUCTION-AL

DESCRIPTION: Thermtronix SF-1200, 1,200 lb aluminum induction melting furnace. No control.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT: NA

I. EMISSION LIMITS

NA

II. MATERIAL LIMITS

1. The permittee shall not flux in EUINDUCTION-AL. **(R 336.1224, R 336.1225)**[1]

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))**

NA

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

NA

The following conditions apply to:
EUSANDPROCESS

DESCRIPTION: Sand processing equipment with a design capacity of 100 tons sand per hour, including a muller, two bucket elevators, a vibrating pan conveyor, a vibrating shaker deck, two belt conveyors, and a rotary screen. Baghouse control.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT: Baghouse

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM	0.02 lb/1,000 lb gas on a dry basis	Test Protocol*	EUSANDPROCESS	GC 13	R 336.1331
2. PM	3.15 pph	Test Protocol*	EUSANDPROCESS	GC 13	R 336.1331
3. PM	13.8 tpy	Test Protocol*	EUSANDPROCESS	GC 13	R 336.1331
4. Visible Emissions	10% opacity	Six-minute average	EUSANDPROCESS	GC 13	R 336.1301 R 336.1331
*Test Protocol shall specify averaging time.					

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate EUSANDPROCESS unless the fabric filter collector is installed, maintained, and operated in a satisfactory manner. **(R 336.1205, R 336.1225, R 336.1301, R 336.1331, R 336.1901)**

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 record the pressure drop across the fabric filter collector used to control emissions from EUSANDPROCESS on daily basis. **(R 336.1205, R 336.1331)**

2. The permittee shall keep, in a satisfactory manner, records of the pressure drop across the fabric filter collector for EUSANDPROCESS. All records shall be kept on file for a period of at least five years and made available to the Department upon request. **(R 336.1205)**

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:

Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVSANDPROCESS	46	65	40 CFR 52.21 (c) & (d)

IX. OTHER REQUIREMENTS

NA

The following conditions apply to:
EUGRINDERS

DESCRIPTION: Twelve grinders, shot blast; two baghouses for control

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT: Baghouse

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM	0.04 lb/1,000 lb gas on a dry basis	Test Protocol*	EUGRINDERS	GC 13	R 336.1331
2. PM	2.16 pph	Test Protocol*	EUGRINDERS	GC 13	R 336.1331
3. PM	9.46 tpy	Test Protocol*	EUGRINDERS	GC 13	R 336.1331
4. Visible Emissions	10% opacity	Six-minute average	EUGRINDERS	GC 13	R 336.1301, R 336.1331
*Test Protocol shall specify averaging time.					

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate EUGRINDERS unless the two fabric filter collectors are installed, maintained, and operated in a satisfactory manner. **(R 336.1205, R 336.1225, R 336.1301, R 336.1331, R 336.1901)**

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 record the pressure drop across the fabric filter collectors used to control emissions from EUGRINDERS on a daily basis. **(R 336.1205, R 336.1331)**

2. The permittee shall keep, in a satisfactory manner, records of the pressure drop across the fabric filter collectors for EUGRINDERS. All records shall be kept on file for a period of at least five years and made available to the Department upon request. **(R 336.1205)**

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:

Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVGRINDERS1	21	36	40 CFR 52.21 (c) & (d)
2. SVGRINDERS2	21	36	40 CFR 52.21 (c) & (d)

IX. OTHER REQUIREMENTS

NA

The following conditions apply to:
EUWOODWORKING

DESCRIPTION: Saws and grinders, cyclone and baghouse control

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT: Cyclone and baghouse

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM	0.02 lb/1,000 lb exhaust gas	Test Protocol*	EUWOODWORKING	GC 13	R 336.1331
2. PM	0.41 pph	Test Protocol*	EUWOODWORKING	GC 13	R 336.1331
3. PM	1.79 tpy	Test Protocol*	EUWOODWORKING	GC 13	R 336.1331
4. Visible Emissions	10% opacity	Six-minute average	EUWOODWORKING	GC 13	R 336.1301, R 336.1331

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate EUWOODWORKING unless the negative pressure cyclone and fabric filter collector are installed, maintained, and operated in a satisfactory manner. **(R 336.1205, R 336.1225, R 336.1301, R 336.1331, R 336.1901)**

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))**

NA

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

NA

The following conditions apply to:
EUAIRSET

DESCRIPTION: Two mixers producing cores and molds using the phenolic urethane no-bake process.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT: NA

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOC	1.17 lb/ton of prepared sand	Test Protocol*	EUAIRSET	GC 13	R 336.1702
*Test Protocol shall specify averaging time.					

II. MATERIAL LIMITS

1. The permittee shall not process more than 2,500 tons of sand through EUAIRSET per 12 month rolling time period. **(R 336.1702)**

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 a written record of the tons of sand used in EUAIRSET on a monthly averaging period. The records shall be kept in a format acceptable to the AQD District Supervisor. All records shall be kept on file for a period of at least five years and made available to the Department upon request. **(R 336.1702)**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

NA

The following conditions apply to:
EUISOCURE

DESCRIPTION: One mixer producing cores and molds using the isocure process controlled by an acid scrubber.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT: Acid scrubber

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOC	1.10 lb/ton of prepared sand	Test Protocol	EUISOCURE	GC 13	R 336.1702
*Test Protocol shall specify averaging time.					

II. MATERIAL LIMITS

1. The permittee shall not process more than 2,500 tons of sand through EUISOCURE per 12 month rolling time period. **(R 336.1702)**

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate EUISOCURE unless the acid scrubber is installed, maintained, and operated in a satisfactory manner. **(R 336.1205, R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1901)**

2. The permittee shall not operate EUISOCURE unless an automatic air flow switch is installed and operating in a satisfactory manner to ensure adequate scrubbing solution flow through the acid scrubber. **(R 336.1205, R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1901)**

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 record the pH of the acid scrubber used to control emissions from EUISOCURE on a daily basis when the process is in operation. **(R 336.1224, R 336.1225, R 336.1331)**

2. The permittee shall keep a written record of the tons of sand used in EUISOCURE on a monthly averaging period. The records shall be kept in a format acceptable to the AQD District Supervisor. All records shall be kept on file for a period of at least five years and made available to the Department upon request. **(R 336.1702)**

3. The permittee shall keep, in a satisfactory manner, records of the pH for EUISOCURE. All records shall be kept on file for a period of at least five years and made available to the Department upon request. **(R 336.1224, R 336.1225)**[1]

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:

Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVISOCURE	6 X 7	10	40 CFR 52.21 (c) & (d)

IX. OTHER REQUIREMENTS

NA

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

The following conditions apply to:
EUSHELLCORE

DESCRIPTION: Five hot box core machines using resin coated sand.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT: NA

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM	0.10 lb/1000 lb gas on a dry basis	Test Protocol*	EUSHELLCORE	GC 13	R 336.1331
*Test Protocol shall specify averaging time.					

II. MATERIAL LIMITS

NA

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, in a satisfactory manner, monthly records of sand and resin usage rates for the EUSHELLCORE. All records shall be kept on file for a period of at least five years and made available to the Department upon request. **(R 336.1225, R 336.1702)**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

NA

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
FGINDUCTION	Three induction furnaces at the facility.	EUINDUCTION1, EUINDUCTION2, EUINDUCTION3
FGALUMINUM	Five aluminum melt emission units at the facility.	EUALUMINUM1, EUALUMINUM2, EUALUMINUM6, EUALUMINUM7, EUALUMINUM8
FGMACT6Z	The affected source is the collection of all melting operations located at an aluminum, copper, or other nonferrous foundry, that is (or is part of) an area source of hazardous air pollutant (HAP) emissions. The affected source is an existing small foundry as defined by 40 CFR Part 63 Subpart ZZZZZZ.	NA

The following conditions apply to:
FGINDUCTION

DESCRIPTION: Three induction furnaces at the facility.

Emission Units: EUINDUCTION1, EUINDUCTION2, EUINDUCTION3

POLLUTION CONTROL EQUIPMENT: Baghouse

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM	0.008 lb/1000 lb gas on a dry basis	Test Protocol*	FGINDUCTION	GC 13	R 336.1331
2. PM	2.05 pph	Test Protocol*	FGINDUCTION	GC 13	R 336.1331
3. PM	8.99 tpy	Test Protocol*	FGINDUCTION	GC 13	R 336.1331
4. Visible Emissions	5% opacity	Six-minute average	FGINDUCTION	GC 13	R 336.1301, R 336.1331
*Test Protocol shall specify averaging time.					

II. MATERIAL LIMITS

1. The permittee shall charge no materials other than clean charge and materials generated within the facility in FGINDUCTION.[1] **(R 336.1224, R 336.1225)**

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate FGINDUCTION unless the fabric filter collector is installed, maintained, and operated in a satisfactory manner. **(R 336.1205, R 336.1225, R 336.1301, R 336.1331, R 336.1901)**

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 record the pressure drop across the fabric filter collectors used to control emissions from FGINDUCTION on a daily basis. **(R 336.1205, R 336.1331)**

2. The permittee shall keep records of the amount of metal melted in FGINDUCTION in pounds per month. Such records shall be kept on file for a period of at least five years and made available to the Department upon request. **(R 336.1205(3))**

3. The permittee shall keep, in a satisfactory manner, records of the pressure drop across the fabric filter collectors for FGINDUCTION. All records shall be kept on file for a period of at least five years and made available to the Department upon request. **(R 336.1205)**

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:

Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVINDUCTION	56	65	40 CFR 52.21 (c) & (d)

IX. OTHER REQUIREMENTS

NA

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

The following conditions apply to:
FGALUMINUM

DESCRIPTION: Four aluminum melt furnaces at the facility.

Emission Units: EUALUMINUM1, EUALUMINUM2, EUIALUMINUM6, EUALUMINUM7, EUALUMINUM8

POLLUTION CONTROL EQUIPMENT: NA

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM	0.10 lb/1000 lb gas on a dry basis	Test Protocol*	FGALUMINUM	GC 13	R 336.1331
*Test Protocol shall specify averaging time.					

II. MATERIAL LIMITS

1. The permittee shall charge no materials other than clean charge (as defined in 40 CFR § 63.1503), flux materials, and materials generated within the facility in FGALUMINUM. This condition is necessary to avoid requirements of 40 CFR Part 63 Subpart RRR. **(R 336.1224, R 336.1225)** [1]

2. The permittee shall not process more than 10.0 tons of aluminum in FGALUMINUM per day. **(R 336.1225)** [1]

3. The permittee shall not process more than 25.0 pounds per day of flux material in FGALUMINUM. **(R 336.1225)** [1]

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 the amount of aluminum melted in pounds per month and the usage rates of all fluxes in pounds per month for FGALUMINUM. Such records shall be kept on file for a period of at least five years and made available to the Department upon request. **(R 336.1205 (3))**

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:

Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVALUMINUM1	34	36	40 CFR 52.21 (c) & (d)
2. SVALUMINUM2	34	36	40 CFR 52.21 (c) & (d)
3. SVALUMINUM6	24	36	40 CFR 52.21 (c) & (d)
4. SVALUMINUM7	24	36	40 CFR 52.21 (c) & (d)
5. SVALUMINUM8	24	36	40 CFR 52.21 (c) & (d)

IX. OTHER REQUIREMENTS

NA

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

The following conditions apply to:
FGMACT6Z

DESCRIPTION: The affected source is the collection of all melting operations located at an aluminum, copper, or other nonferrous foundry, that is (or is part of) an area source of hazardous air pollutant (HAP) emissions. The affected source is an existing small foundry as defined by 40 CFR Part 63 Subpart ZZZZZZ.

Emission Units: NA

POLLUTION CONTROL EQUIPMENT: NA

I. EMISSION LIMITS

NA

II. MATERIAL LIMITS

1. The permittee shall purchase only metal scrap that has been depleted (to the extent practicable) of aluminum foundry HAP and other nonferrous foundry HAP in the materials charged to the melting furnace, except metal scrap that is purchased specifically for its HAP metal content for use in alloying or to meet specifications for the casting. *Aluminum foundry HAP* means any compound of the following metals: beryllium, cadmium, lead, manganese, or nickel, or any of these metals in the elemental form. *Other nonferrous foundry HAP* means any compound of the following metals: chromium, lead, and nickel, or any of these metals in the elemental form. This requirement does not apply to material that is not scrap (e.g., ingots, alloys, sows) or to materials that are not purchased (e.g., internal scrap, customer returns). **(40 CFR 63.11550(a)(2), 40 CFR 63.11556)**

2. The permittee shall melt less than 6,000 tons of metal(s) per calendar year. This condition is necessary to avoid requirements of 40 CFR Part 63.11550(b). **(40 CFR Part 63, Subpart ZZZZZZ)**

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall cover or enclose each melting furnace that is equipped with a cover or enclosure during the melting operation to the extent practicable, except when access is needed; including, but not limited to charging, alloy addition, and tapping. **(40 CFR 63.11550(a)(1))**

2. The permittee shall prepare and operate pursuant to a written management practices plan. The management practices plan must include the required management practices in SC II.1 and SC III.1 and may include any other management practices that are implemented at the facility to minimize emissions from melting furnaces. **(40 CFR 63.11550(a)(3))**

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 perform monthly inspections and record results to ensure compliance with SC II.1 and SC III.1. **(40 CFR 63.11553(c)(2))**

2. The permittee shall keep the following records to document conformance with the management practices plan required by SC III.2:
   a. For melting furnaces equipped with a cover or enclosure, records must identify each melting furnace equipped with a cover or enclosure and document that the procedures in the management practices plan were followed during monthly inspections. These records may be in the form of a checklist.
   b. Records documenting that the permittee purchased only metal scrap that has been depleted of HAP metals (to the extent practicable) charged to the melting furnace. If you purchase scrap metal specifically for the HAP metal content for use in alloying or to meet specifications for the casting, you must keep records to document that the HAP metal is included in the material specifications for the cast metal product.

   (40 CFR 63.11552(a), 40 CFR 63.11553(c)(2))

3. The permittee shall keep a copy of each notification that was submitted to comply with 40 CFR 63 Subpart ZZZZZZ, and all documentation supporting any Initial Notification or Notification of Compliance Status that was submitted. **(40 CFR 63.11553(c)(1))**

4. The permittee shall maintain records to document that the facility melts less than 6,000 tpy total of copper, other nonferrous metal, and all associated alloys (excluding aluminum) in each calendar year. Records shall be kept on file for a period of at least five years and made available to the Department upon request. **(40 CFR 63.11553(c)(4))**

VII. REPORTING

1. The permittee shall submit and keep a copy of an Initial Notification and a Notification Of Compliance Status to the Administrator as specified in 40 CFR Part 63 Subpart ZZZZZZ. (**(40 CFR 63.11553(a), (b))**

2. If a deviation occurs during a semiannual reporting period, you must submit a compliance report to your permitting authority according to the requirements below.
   a. Each reporting period covers the semiannual period from January 1 through June 30 or from July 1 through December 31. Your compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after the end of the semiannual reporting period.
   b. A compliance report must include all of the information below.
      i. Company name and address.
      ii. Statement by a responsible official, with the official's name, title, and signature, certifying the truth, accuracy and completeness of the content of the report.
      iii. Date of the report and beginning and ending dates of the reporting period.
      iv. Identification of the affected source, the pollutant being monitored, applicable requirement, description of deviation, and corrective action taken.

   (40 CFR 63.11553(e))

VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

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, Subpart A and Subpart ZZZZZZ for Aluminum, Copper, and Other Nonferrous Foundries by the initial compliance date. **(40 CFR Part 63 Subparts A and ZZZZZZ)**