

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

July 26, 2019

PERMIT TO INSTALL
43-05C

ISSUED TO
Century Foundry, Inc.

LOCATED AT
339 West Hovey Avenue (Plant 1) and 2416 Park Street (Plant 3)
Muskegon Heights, Michigan

IN THE COUNTY OF
Muskegon

STATE REGISTRATION NUMBER
N7027

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

DATE OF RECEIPT OF ALL INFORMATION REQUIRED BY RULE 203: July 21, 2019	
DATE PERMIT TO INSTALL APPROVED: July 26, 2019	SIGNATURE:
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

PERMIT TO INSTALL

Table of Contents

COMMON ACRONYMS	2
POLLUTANT / MEASUREMENT ABBREVIATIONS.....	3
GENERAL CONDITIONS	4
EMISSION UNIT SPECIAL CONDITIONS.....	6
EMISSION UNIT SUMMARY TABLE	6
EUPT1REVERB1.....	7
EUSANDHANDLING.....	9
EUMOLDMAKING.....	11
FLEXIBLE GROUP SPECIAL CONDITIONS.....	13
FLEXIBLE GROUP SUMMARY TABLE	13
FGPT1FURNACES.....	14
FGPT3FURNACES.....	16
FGCLEANING.....	18

COMMON ACRONYMS

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

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

POLLUTANT / MEASUREMENT ABBREVIATIONS

acfm	Actual cubic feet per minute
BTU	British Thermal Unit
°C	Degrees Celsius
CO	Carbon Monoxide
CO ₂ e	Carbon Dioxide Equivalent
dscf	Dry standard cubic foot
dscm	Dry standard cubic meter
°F	Degrees Fahrenheit
gr	Grains
HAP	Hazardous Air Pollutant
Hg	Mercury
hr	Hour
HP	Horsepower
H ₂ S	Hydrogen Sulfide
kW	Kilowatt
lb	Pound
m	Meter
mg	Milligram
mm	Millimeter
MM	Million
MW	Megawatts
NMOC	Non-Methane Organic Compounds
NO _x	Oxides of Nitrogen
ng	Nanogram
PM	Particulate Matter
PM ₁₀	Particulate Matter equal to or less than 10 microns in diameter
PM _{2.5}	Particulate Matter equal to or less than 2.5 microns in diameter
pph	Pounds per hour
ppm	Parts per million
ppmv	Parts per million by volume
ppmw	Parts per million by weight
psia	Pounds per square inch absolute
psig	Pounds per square inch gauge
scf	Standard cubic feet
sec	Seconds
SO ₂	Sulfur Dioxide
TAC	Toxic Air Contaminant
Temp	Temperature
THC	Total Hydrocarbons
tpy	Tons per year
µg	Microgram
µm	Micrometer or Micron
VOC	Volatile Organic Compounds
yr	Year

GENERAL CONDITIONS

1. The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. **(R 336.1201(1))**
2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of 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 Rule 210 (R 336.1210), operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. **(R 336.1201(6)(b))**
4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. **(R 336.1201(8), Section 5510 of Act 451, PA 1994)**
5. The terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to Rule 219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b), and (c) of Rule 219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of 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 Rule 301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with Rule 303 (R 336.1303). **(R 336.1301)**
 - a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
 - b) A visible emission limit specified by an applicable federal new source performance standard.
 - c) A visible emission limit specified as a condition of this Permit to Install.
12. Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2). **(R 336.1370)**
13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001. **(R 336.2001)**

EMISSION UNIT SPECIAL CONDITIONS

EMISSION UNIT SUMMARY TABLE

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

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Flexible Group ID
Plant 1 Greensand		
EUPT1REVERB1	4,000 lb capacity gas-fired reverberatory aluminum melting furnace. No emission control, general ventilation. Stack (SVPLANT1A) exhausts only combustion gases.	NA
EUPT1ROTO1	1,500 lb capacity gas-fired crucible aluminum melting furnace. No emission control, general ventilation. Stack (SVPLANT1B) exhausts only combustion gases.	FGPT1FURNACES
EUPT1ROTO2	1,500 lb capacity gas-fired crucible aluminum melting furnace. No emission control, general ventilation. Stack (SVPLANT1B) exhausts only combustion gases.	FGPT1FURNACES
EUPT1ROTO3	1,500 lb capacity gas-fired crucible aluminum melting furnace. No emission control, general ventilation. Stack (SVPLANT1B) exhausts only combustion gases.	FGPT1FURNACES
EUPT1SINTO1	1,500 lb capacity gas-fired crucible aluminum melting furnace. No emission control, general ventilation. Stack (SVPLANT1C) exhausts only combustion gases.	FGPT1FURNACES
EUPT1SINTO2	1,500 lb capacity gas-fired crucible aluminum melting furnace. No emission control, general ventilation. Stack (SVPLANT1D) exhausts only combustion gases.	FGPT1FURNACES
EUPT1SINTO3	1,500 lb capacity gas-fired crucible aluminum melting furnace. No emission control, general ventilation. Stack (SVPLANT1D) exhausts only combustion gases.	FGPT1FURNACES
EUSHAKEOUT	Manual shakeout operations. No emission control. No stack.	FGCLEANING
EUDEBURRING	Manual deburring operations. No emission control. No stack.	FGCLEANING
EUGRINDING	Grinding operations consisting of 10 grinders. Emissions are controlled by a 4,440 cfm baghouse collector and exhausted through stack (SVGRINDING).	FGCLEANING
EUSHOTBLAST	A Wheelabrator Shotblast unit. Emissions are controlled by a 2,300 cfm baghouse collector. No stack.	FGCLEANING
EUSANDHANDLING	Sand handling system consisting of a 80,000 lb silo, muller, and conveyor. Emissions are controlled by a 4,440 cfm baghouse and exhausted through stack (SVSAND).	NA
Plant 3 Airset		
EUPT3FURN1	1,500 lb capacity gas-fired aluminum melting furnace. No emission control. No stack. Exhaust is vented through a vent in the roof (SVPLANT3A).	FGPT3FURNACES
EUPT3FURN2	1,500 lb capacity gas-fired aluminum melting furnace. No emission control. No stack. Exhaust is vented through a vent in the roof (SVPLANT3A).	FGPT3FURNACES
EUMOLDMAKING	Airset two part no-bake binder system. Sand mixed with resins to make air set molds. No emission control.	NA
Portable Equipment		
EUPORTABLEFURN	400 lbs capacity used in all 3 plants as needed	FGPT1FURNACES, FGPT3FURNACES

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

**EUPT1REVERB1
 EMISSION UNIT CONDITIONS**

DESCRIPTION: 4,000 lb capacity gas-fired reverberatory aluminum melting furnace. No emission control, general ventilation. Stack (SVPLANT1A) exhausts only combustion gases.

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	0.15 pph	Hourly	EUPT1REVERB1	SC V.1	R 336.1205(1)(a)
2. PM10	0.15 pph	Hourly	EUPT1REVERB1	SC V.1	R 336.1205(1)(a), 40 CFR 52.21(c) & (d)
3. PM2.5	0.15 pph	Hourly	EUPT1REVERB1	SC V.1	R 336.1205(1)(a), 40 CFR 52.21(c) & (d)

II. MATERIAL LIMITS

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Aluminum feed/charge	2,190 tpy	12-month rolling time period as determined at the end of each calendar month	EUPT1REVERB1	SC VI.2	R 336.1205(1)(a), R 336.1225, 40 CFR 52.21(c) & (d)
2. Flux	4 lbs per day ¹	Daily	EUPT1REVERB1	SC VI.1	R 336.1225

3. The permittee shall melt as feed/charge material in EUPT1REVERB1 only 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 Hazardous Air Pollutants for Secondary Aluminum Production. **(40 CFR 52.21(c) & (d), 40 CFR Part 63 Subpart RRR)**

5. The permittee shall only burn natural gas in the burners of EUPT1REVERB1. **(R 336.1225, R 336.1301, 40 CFR 52.21(c) & (d))**

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))**

1. Upon request from the AQD District Supervisor, the permittee may be required to verify PM, PM10, and PM2.5 emission rates from EUPT1REVERB1 by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in:

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

No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205(1)(a), R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d))**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall monitor and record, in a satisfactory manner, the weight and description of all charge materials and fluxing materials or agents added to EUPT1REVERB1 on a daily basis. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205, R 336.1224, R 336.1225, R 336.1301, 40 CFR 52.21(c) & (d))**
2. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period records of the total weight of charge materials melted in EUPT1REVERB1. The permittee shall complete monthly records in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month and keep them on file at the facility make them available to the Department upon request. **(R 336.1205(1)(a), R 336.1225, 40 CFR 52.21(c) & (d))**

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. SVPLANT1A	24	30	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENTS

NA

Footnotes:

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

**EUSANDHANDLING
 EMISSION UNIT CONDITIONS**

DESCRIPTION

Plant 1 Greensand. Sand handling system consisting of an 80,000 lb silo, muller, and conveyor.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Emissions are controlled by a 4,440 cfm baghouse. Stack: SVSAND

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. PM	0.10 lb/1,000 lbs of exhaust gases, dry basis	Hourly	EUSANDHANDLING	GC 13	R 336.1331
2. PM	2.0 pph	Hourly	EUSANDHANDLING	GC 13	R 336.1331

II. MATERIAL LIMIT(S)

Material	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Olivine Sand	107 tpy	12-month rolling time period as determined at the end of each calendar month	EUSANDHANDLING	SC VI.2	R 336.1331
2. Shell Sand	645 tpy	12-month rolling time period as determined at the end of each calendar month	EUSANDHANDLING	SC VI.2	R 336.1331
3. Bentonite	20 tpy	12-month rolling time period as determined at the end of each calendar month	EUSANDHANDLING	SC VI.2	R 336.1331

III. PROCESS/OPERATIONAL RESTRICTIONS

NA

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate EUSANDHANDLING unless the associated baghouse dust collector is installed, maintained, and operated in a satisfactory manner. **(R 336.1205, R 336.1220, R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1910)**

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 monitor and record, in a satisfactory manner, the baghouse pressure drop for EUSANDHANDLING on a once per operating shift basis. **(R 336.1205, R 336.1331)**
2. The permittee shall keep, in a satisfactory manner, all 12-month rolling time period as determined at the end of each calendar month records of Olivine Sand, Shell Sand, and Bentonite usage for EUSANDHANDLING, as required by SC II.1, II.2, and II.3 on file at the facility and make them available to the Department upon request. **(R 336.1331)**

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 Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVSAND	16 x 16	12	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENTS

NA

Footnotes:

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

EUMOLDMAKING EMISSION UNIT CONDITIONS
--

DESCRIPTION: Plant 3 Airset. Two part no-bake binder system. Sand mixed with resins to make air set molds. No emission control.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT: NA

I. EMISSION LIMITS

1. There shall be no visible emissions from EUMOLDMAKING. **(R336.1301)**

II. MATERIAL LIMITS

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Sand usage	18,380 tons per year	12-month rolling time period as determined at the end of each calendar month	EUMOLDMAKING	SC VI.1	R 336.1205, R 336.1225
2. Resin Part I,	68,175 pounds per year	12-month rolling time period as determined at the end of each calendar month	EUMOLDMAKING	SC VI.1	R 336.1205, R 336.1225
3. Resin Part II.	472,680 pounds per year	12-month rolling time period as determined at the end of each calendar month	EUMOLDMAKING	SC VI.1	R 336.1205, R 336.1225

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 and annual (12-month rolling time period, determined at the end of the calendar month) usage rates of sand, resins and activator compound for EUMOLDMAKING, as required by SC II.1 through II.3. 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, R 336.1220, R 336.1702)**

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:

NA

IX. OTHER REQUIREMENTS

NA

Footnotes:

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

FLEXIBLE GROUP SPECIAL CONDITIONS

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
FGPT1FURNACES	Six (6) 1,500 lb capacity gas-fired aluminum melting furnaces and the 400 lbs capacity portable furnace. No control, general ventilation. Stacks exhaust only combustion gases.	EUPT1ROTO1, EUPT1ROTO2, EUPT1ROTO3, EUPT1SINTO1, EUPT1SINTO2, EUPT1SINTO3, EUPORTABLEFURN
FGCLEANING	Casting finishing processes.	EUSHAKEOUT, EUDEBURRING, EUGRINDING, EUSHOTBLAST
FGPT3FURNACES	Two 1,500 lb capacity gas-fired aluminum melting furnaces and the 400 lbs capacity portable furnace. No control. No stack. Exhaust is vented through a vent in the roof SVPLANT3A.	EUPT3FURNACE1, EUPT3FURNACE2, EUPORTABLEFURN

**FGPT1FURNACES
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION:

Six (6) 1,500lb capacity gas-fired aluminum melting furnaces and the 400lbs capacity portable furnace. No emission control, general ventilation. Stacks exhaust only combustion gases.

Emission Units: EUPT1ROTO1, EUPT1ROTO2, EUPT1ROTO3, EUPT1SINTO1, EUPT1SINTO2, EUPT1SINTO3, EUPORTABLEFURN

POLLUTION CONTROL EQUIPMENT:

NA

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM	1.2 pph	Hourly	FGPT1FURNACES	GC 13	R 336.1331
2. PM10	1.1 pph	Hourly	FGPT1FURNACES	SC VI.2	40 CFR 52.21(c) & (d)
3. PM2.5	1.1 pph	Hourly	FGPT1FURNACES	SC VI.2	40 CFR 52.21(c) & (d)

II. MATERIAL LIMITS

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Flux	110.0 pounds per day	Daily	FGPT1FURNACES	SC VI.1	R 336.1225
2. Feed/charge	15.0 tons per day	Based on monthly records	FGPT1FURNACES	SC VI.1	R 336.1225, R 336.1331

3. The permittee shall melt as feed/charge material in FGPT1FURNACES only 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 Hazardous Air Pollutants for Secondary Aluminum Production. **(R 336.1331, 40 CFR Part 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, in a satisfactory manner, daily records of the flux usage rate for each flux, aluminum melt rate and hours of operation for FGPT1FURNACES. The feed/charge rates shall be calculated based upon monthly records the weights of finished and rough castings pro-rated to daily usage rates. 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)**
2. The permittee shall calculate the average hourly PM, PM10 and PM2.5 emission rates from FGPT1FURNACES for each calendar day using a method acceptable to the AQD District Supervisor. **(40 CFR 52.21(c) & (d))**

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 (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVPLANT1A	24	30	R 336.1225, 40 CFR 52.21(c) & (d)
2. SVPLANT1B	24	30	R 336.1225, 40 CFR 52.21(c) & (d)
3. SVPLANT1C	24	30	R 336.1225, 40 CFR 52.21(c) & (d)
4. SVPLANT1D	24	30	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENTS

NA

Footnotes:

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

**FGPT3FURNACES
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION:

Two 1,500 lb capacity gas-fired aluminum melting furnaces and the 400 lbs capacity portable furnace. No control. No stack. Exhaust is vented through a vent in the roof SVPLANT3A.

Emission Units: EUPT3FURNACE1, EUPT3FURNACE2, EUPORTABLEFURN

POLLUTION CONTROL EQUIPMENT:

NA

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM	0.20 pph	Hourly	FGPT3FURNACES	GC 13	R 336.1331
2. PM10	0.18 pph	Hourly	FGPT3FURNACES	SC VI.2	40 CFR 52.21(c) & (d)
3. PM2.5	0.18 pph	Hourly	FGPT3FURNACES	SC VI.2	40 CFR 52.21(c) & (d)

II. MATERIAL LIMITS

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Flux	20.0 pounds per day	Daily	FGPT3FURNACES	SC VI.1	R 336.1225
2. Feed/charge	2.5 tons per day	Based on monthly records	FGPT3FURNACES	SC VI.1	R 336.1225, R 336.1331

3. The permittee shall melt as feed/charge material in FGPT3FURNACES only 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 Hazardous Air Pollutants for Secondary Aluminum Production. **(R 336.1331, 40 CFR Part 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, in a satisfactory manner, daily records of the flux usage rate for each flux, aluminum melt rate and hours of operation for FGPT3FURN1-2. The feed/charge rates shall be calculated based upon monthly records the weights of finished and rough castings pro-rated to daily usage rates. 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)**
2. The permittee shall calculate the average hourly PM, PM10 and PM2.5 emission rates from FGPT3FURN1-2 for each calendar day using a method acceptable to the AQD District Supervisor. **(40 CFR 52.21(c) & (d))**

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 (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVPLANT3A	36	20	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENTS

NA

Footnotes:

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

FGCLEANING FLEXIBLE GROUP CONDITIONS

DESCRIPTION:

Casting finishing processes.

Emission Units: EUSHAKEOUT, EUDEBURRING, EUGRINDING, EUSHOTBLAST

POLLUTION CONTROL EQUIPMENT:

Baghouses for EUGRINDING (with stack) and EUSHOTBLAST (no stack—vented in-plant). No emission control for EUDEBURRING or EUSHAKEOUT.

I. EMISSION LIMITS

NA

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

NA

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate FGCLEANING unless the associated baghouse dust collectors are installed, maintained, and operated in a satisfactory manner. **(R 336.1205, R 336.1220, R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1910)**

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 monitor and record, in a satisfactory manner, the baghouse pressure drop for each baghouse in FGCLEANING on a once per operating shift basis. **(R 336.1205, R 336.1331)**

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 (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVGRINDING	15	8	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENTS

NA

Footnotes:

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