

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

FEBRUARY 16, 2021

**PERMIT TO INSTALL
78-15H**

**ISSUED TO
DICASTAL NORTH AMERICA, INC.**

**LOCATED AT
1 DICASTAL DRIVE
GREENVILLE, MICHIGAN 48838**

**IN THE COUNTY OF
MONTCALM**

**STATE REGISTRATION NUMBER
N7688**

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: February 9, 2021	
DATE PERMIT TO INSTALL APPROVED: February 16, 2021	SIGNATURE:
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

PERMIT TO INSTALL

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COMMON ACRONYMS

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

*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
PM10	Particulate Matter equal to or less than 10 microns in diameter
PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter
pph	Pounds per hour
ppm	Parts per million
ppmv	Parts per million by volume
ppmw	Parts per million by weight
psia	Pounds per square inch absolute
psig	Pounds per square inch gauge
scf	Standard cubic feet
sec	Seconds
SO ₂	Sulfur Dioxide
TAC	Toxic Air Contaminant
Temp	Temperature
THC	Total Hydrocarbons
tpy	Tons per year
µg	Microgram
µm	Micrometer or Micron
VOC	Volatile Organic Compounds
yr	Year

GENERAL CONDITIONS

1. The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. **(R 336.1201(1))**
2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environment, Great Lakes, and Energy, P.O. Box 30260, Lansing, Michigan 48909-7760, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. **(R 336.1201(4))**
3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to Rule 210 (R 336.1210), operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. **(R 336.1201(6)(b))**
4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. **(R 336.1201(8), Section 5510 of Act 451, PA 1994)**
5. The terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to Rule 219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b), and (c) of Rule 219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environment, Great Lakes, and Energy. **(R 336.1219)**
6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. **(R 336.1901)**
7. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal condition or malfunction has been corrected, or within 30 days of discovery of the abnormal condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). **(R 336.1912)**
8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.
9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.

11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of Rule 301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with Rule 303 (R 336.1303). **(R 336.1301)**
 - a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
 - b) A visible emission limit specified by an applicable federal new source performance standard.
 - c) A visible emission limit specified as a condition of this Permit to Install.
12. Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2). **(R 336.1370)**
13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001. **(R 336.2001)**

EMISSION UNIT SPECIAL CONDITIONS

EMISSION UNIT SUMMARY TABLE

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

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
EU-Melt1	10.1 MMBtu/hr natural gas fired aluminum melting furnace No. 1 with a retaining capacity of 13.2 tons. A dry, solid fluxing agent is used for removing impurities in the molten aluminum. Nitrogen gas is bubbled through the molten aluminum to remove impurities. Ducted to a common lime injected baghouse.	2017	FG-Melting, FG-MACT6Z
EU-Melt2	10.1 MMBtu/hr natural gas fired aluminum melting furnace No. 2 with a retaining capacity of 13.2 tons. A dry, solid fluxing agent is used for removing impurities in the molten aluminum. Nitrogen gas is bubbled through the molten aluminum to remove impurities. Ducted to a common lime injected baghouse.	2017	FG-Melting, FG-MACT6Z
EU-Chip1	6.2 MMBtu/hr natural gas fired aluminum chip melting furnace No. 1 with a retaining capacity of 13.2 tons. A dry, solid fluxing agent is used for removing impurities in the molten aluminum. Nitrogen gas is bubbled through the molten aluminum to remove impurities. Ducted to a common lime injected baghouse.	2017	FG-Melting, FG-MACT6Z
EU-Chip2	6.2 MMBtu/hr natural gas fired aluminum chip melting furnace No. 2 with a retaining capacity of 13.2 tons. A dry, solid fluxing agent is used for removing impurities in the molten aluminum. Nitrogen gas is bubbled through the molten aluminum to remove impurities. Ducted to a common lime injected baghouse.	2017	FG-Melting, FG-MACT6Z
EU-Hold1	2.7 MMBtu/hr natural gas fired aluminum holding melting furnace No. 1 with a retaining capacity of 13.2 tons. A dry, solid fluxing agent is used for removing impurities in the molten aluminum. Ducted to a common lime injected baghouse.	2017	FG-Melting, FG-MACT6Z
EU-Hold2	2.7 MMBtu/hr natural gas fired aluminum holding melting furnace No. 2 with a retaining capacity of 13.2 tons. A dry, solid fluxing agent is used for removing impurities in the molten aluminum. Ducted to a common lime injected baghouse.	2017	FG-Melting, FG-MACT6Z
EU-LadleHood	Fluxing and drossing station for the transfer ladles. A dry, solid fluxing agent is used for removing impurities in the molten aluminum. Nitrogen gas is bubbled through the molten aluminum to remove impurities. Ducted to a common lime injected baghouse.	2017	FG-Melting, FG-MACT6Z

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
EU-DChipDryer	Machining fluid removal system and thermal chip dryer. A spinner will use centrifugal force to mechanically remove excess emulsion fluid from the unpainted/uncoated chips, followed by a thermal rotary drum chip dryer for volatilizing remaining emulsion on the chips using natural gas combustion (6.0 MMBtu/hr) for heat. The air pollution control equipment will consist of a high efficiency cyclone for PM control, with a thermal oxidizer to control VOC.	TBD	NA
EU-MoldPreHeat	1.86 MMBtu/hr natural gas combustion furnace for preheating the die casting molds. Furnace has 3 burners each rated at 180 kW. Exhaust gases are vented with EU-MoldCoatFurn.	2017	NA
EU-MoldCoatFurn	1.24 MMBtu/hr two-chamber natural gas combustion furnace for drying the water-based mold coating. Furnace has 2 burners each rated at 180 kW. Furnace includes two rail car bays. Exhaust gases are vented with EU-MoldPreHeat.	2017	NA
EU-MoldSonicClean	Mold sonic cleaner baths consisting of alkaline cleaner, rinse, followed by rust inhibitor used to clean the molds before casting. Vapors from the baths are vented externally out the wall.	2017	NA
EU-DieCasting	28 low-pressure die casting machines used to form the shape of the aluminum wheels. There is no dedicated exhaust system for the die casting machines. Molten aluminum is transported to the electric holding furnaces of the die casting machines. A solid fluxing agent is used in the die casting machines' holding furnaces for removing impurities in the molten aluminum prior to the aluminum being injected into the molds. A cooling tower is used to cool process water. Process water is used to cool the molds in the die casting machines.	2017	NA
EU-SandBlast	Sand blasting machine used to clean the molds following casting. The emissions from the sand blasting machine are controlled by a fabric filter.	2017	NA
EU-HeatTreat1	10 MMBtu/hr natural gas combustion heat treatment Line 1, consisting of a solution furnace and aging furnace for enhancing metallurgical/mechanical properties. Waste heat from the solution furnace is directed into the aging furnace to promote energy efficiency and cost savings. From the solution furnace, the wheels are quenched in a water bath. After quenching, the wheels enter the aging furnace.	2016	FG-HeatTreat

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
EU-HeatTreat2	10 MMBtu/hr natural gas combustion heat treatment Line 2, consisting of a solution furnace and aging furnace for enhancing metallurgical/mechanical properties. Waste heat from the solution furnace is directed into the aging furnace to promote energy efficiency and cost savings. From the solution furnace, the wheels are quenched in a water bath. After quenching, the wheels enter the aging furnace.	2016	FG-HeatTreat
EU-HeatTreat3	10 MMBtu/hr natural gas combustion heat treatment Line 3, consisting of a solution furnace and aging furnace for enhancing metallurgical/mechanical properties. Waste heat from the solution furnace is directed into the aging furnace to promote energy efficiency and cost savings. From the solution furnace, the wheels are quenched in a water bath. After quenching, the wheels enter the aging furnace.	2016	FG-HeatTreat
EU-Pretreatment	Wheel surface preparation consisting of degreasing tanks (3), acidic, passivation and sealant tanks, which will be spray apply acidic or alkaline solutions to degrease (remove the machining fluid) and prepare the surface for proper coating adhesion to the aluminum. During various steps in the surface preparation process, water will be used to rinse off the alkaline and acidic solutions.	7-30-2015	NA
EU-PretreatOven	7.6 MMBtu/hr natural gas combustion oven for removing the surface moisture on the wheels the surfaces that have been treated.	7-30-2015	NA
EU-PaintShopBlr	11.2 MMBtu/hr natural gas combustion paint shop boiler	7-30-2015	NA
EU-PrimePowder	Primer powder coating booths No. 1 and 2. the powder coating operation uses a dry filtering system to capture and reuse excess powder (overspray).	7-30-2015	FG-PowderCoating
EU-PrimeOven	3.5 MMBtu/hr natural gas combustion curing oven for curing primer powder coating.	7-30-2015	FG-PowderCoating
EU-ClearPowder	Clear powder coating booth No. 1. The powder coating operation uses a dry filtering system to capture and reuse excess powder (overspray).	7-30-2015	FG-PowderCoating
EU-ClearOven	3.5 MMBtu/hr natural gas combustion curing oven for curing clear powder coating.	7-30-2015	FG-PowderCoating
EU-LiquidCoat	One base liquid coating booth and one clear liquid coating booth, each utilizing high volume low pressure (HVLP) or comparable applicators, associated flash off tunnels, and one 2.6 MMBtu/hr natural gas combustion curing oven. The VOC emissions from this line will be controlled by non-fugitive enclosure (NFE) and a recuperative thermal oxidizer (TO). The particulate emissions controlled by water spray.	7-30-2015	NA

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
EU- BrushingBurr	12 brushing burr machines controlled by a common fabric filter.	7-30-2015	NA
EU-Gen1	A diesel-fueled emergency engine with a model year of 2006 or later, and a displacement of less than 30 liters/cylinder, rated at 1MW (approximately 1,340 bHP). This emergency engine is subject to the New Source Performance Standards Stationary for Reciprocating Internal Combustion Engines (RICE), combustion ignition, emergency RICE less than 3000 HP.	7-30-2015	NA

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

**EU-DChipDryer
 EMISSION UNIT CONDITIONS**

DESCRIPTION

Machining fluid removal system and thermal chip dryer. A spinner will use centrifugal force to mechanically remove excess emulsion fluid from the chips, followed by a thermal drum chip dryer for volatilizing remaining emulsion on the unpainted/uncoated chips using natural gas combustion (6.0 MMBtu/hr) for heat.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

The air pollution control equipment will consist of a high efficiency cyclone for PM control, with a thermal oxidizer to control VOC.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. PM	2.5 pph	Hourly	EU-DChipDryer	SC V.1.	R 336.1331
2. PM10	3.0 pph	Hourly	EU-DChipDryer	SC V.1.	R 336.1205, 40 CFR 52.21 (c) & (d)
3. PM2.5	3.0 pph	Hourly	EU-DChipDryer	SC V.1.	R 336.1205, 40 CFR 52.21 (c) & (d)
4. Dioxins and furans	3.5 x 10 ⁻⁵ gr D/F TEQ per ton of feed/charge	Hourly	EU-DChipDryer	SC V.2	R 336.1225, 40 CFR 63.1503, 40 CFR 63.1505 (c)(2)
5. VOC	0.6 pph	Hourly	EU-DChipDryer	SC V.3	R 336.1205, R 336.1702(a)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Chip processing rate	3.31 tons per hour	Calendar Day Average	EU-DChipDryer	SC VI.5	R 336.1205, R 336.1225, R 336.1702 40 CFR 52.21 (c) & (d)
2. Chip processing rate	20,834 tons per year	12-month rolling time period as determined at the end of each calendar month.	EU-DChipDryer	SC VI.6	R 336.1205, R 336.1225, R 336.1702 40 CFR 52.21 (c) & (d)

3. The feedstock charged to EU-DChipDryer shall be only unpainted/uncoated aluminum chips.
(40 CFR63.1506(f)(3))

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EU-DChipDryer unless the thermal oxidizer is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the thermal oxidizer includes a minimum temperature of 729°C or the temperature established during the most recent acceptable stack test, and a minimum retention time of 0.5 seconds. **(R 336.1205, R 336.1224, R 336.1225, R 336.1702, R 336.1910)**
2. The permittee shall maintain the thermal oxidizer for EU-DChipDryer per the following requirements: **(40 CFR 63.1506(f))**
 - a) Maintain the 3-hour block average operating temperature of the afterburner at or above the average temperature established during the performance test.
 - b) Operate the thermal oxidizer in accordance with the OM&M plan.
3. The permittee shall submit to the AQD District Supervisor, for review and approval, a revised Operation, Maintenance and Monitoring (OM&M) plan for EU-DChipDryer within 90 days after a successful initial performance test under §63.1511(b). The plan shall include, but is not limited to the following:
 - a) Process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges.
 - b) A monitoring schedule for EU-DChipDryer process and control parameters.
 - c) Procedures for the proper operation and maintenance of each process unit and add-on control device used to meet the applicable emission limits.
 - d) Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance.
 - e) Procedures for monitoring process and control device parameters, including procedures to be used for determining feed/charge (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 values or ranges established in SC III.1.
 - g) A maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

The permittee shall maintain and implement the approved OM&M plans at all times. If the permitting authority determines at any time after receipt of the OM&M plan that any revisions of the plan are necessary to satisfy the requirements of this permit, the permittee must promptly make all necessary revisions and resubmit the revised plan. If the permittee determines that any other revisions of the OM&M plan are necessary, such revisions will not become effective until the permittee submits a description of the changes and a revised plan incorporating them to the permitting authority. **(R 336.1205, R 336.1225, R 336.1331, 40 CFR 63.1506(c)(3))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate EU-DChipDryer unless either a device that measures and records the total weight of feed/charge to or the aluminum production from EU-DChipDryer over the same operating cycle or time period used in the performance test is installed, maintained, and operated in a satisfactory manner or an acceptable alternative procedure is implemented. As an alternative to a measurement device, the owner or operator may use a procedure acceptable to the AQD District Supervisor to determine the total weight of feed/charge or aluminum production to the affected source or emission unit. The device or procedure shall meet the following criteria: **(R 336.1205, R 336.1224, R 336.1225, 40 CFR 63.1510(e))**
 - a) The accuracy of the weight measurement device or procedure shall be ± 1 percent of the weight being measured. The owner or operator may apply to the permitting agency for approval to use a device of alternative accuracy if the required accuracy cannot be achieved as a result of equipment layout or charging practices. A device of alternative accuracy will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standard.
 - b) The owner or operator 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.

2. The permittee shall not operate EU-DChipDryer unless the capture and control equipment meet the following requirements: **(40 CFR 63.1506(c))**
 - a) Design and install a system for the capture and collection of emissions to 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 §63.1502 of this subpart).
 - b) Vent captured emissions through a closed system, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to a fabric filter.
 - c) Operate each capture/collection system according to the procedures and requirements in the OM&M plan.
3. The permittee shall not operate EU-DChipDryer unless the capture system and the cyclone and thermal oxidizer are installed, maintained, and operated in accordance with the manufacturer's recommendations. **(R 336.1205(1)(a) & (3), R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1910)**
4. The permittee shall install, calibrate, maintain and operate, in a satisfactory manner, a temperature monitoring device in the combustion chamber of the thermal oxidizer to monitor and record the temperature on a continuous basis during operation of EU-DChipDryer. **(R 336.1205, R 336.1224, R 336.1225, R 336.1910, R 336.1702(a), 40 CFR 63.1510(g))**

V. TESTING/SAMPLING

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

1. Within 180 days of initial startup of EU-DChipDryer, the permittee shall verify the PM, PM10, and PM2.5 emission rates from EU-DChipDryer by testing at owner's expense, in accordance with Department requirement based upon the average of three one-hour test runs. Testing shall be performed using an approved EPA Method listed in:

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

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol. No less than 60 prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205(1)(a) & (3), R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d))**

2. Within 180 days of initial startup of EU-DChipDryer, the permittee shall verify dioxin/furan emission rates while processing unpainted aluminum chips from EU-DChipDryer by testing at owner's expense, in accordance with Department requirements based upon the average of three one-hour test runs. Testing shall be performed using an approved EPA Method listed in 40 CFR Part 60, Appendix A. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol. No less than 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 including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205(1)(a) & (3), R 336.1225, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d), 40 CFR 63.1511)**

3. Upon request from the AQD District Supervisor, the permittee shall verify VOC emission rates from EU-DChipDryer by testing at owner's expense, in accordance with Department requirements based upon the average of three one-hour test runs. Testing shall be performed using an approved EPA Method listed in 40 CFR Part 60, Appendix A. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol. No less than 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 including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205(1)(a) & (3), R 336.1702(a), R 336.2001, R 336.2003, R 336.2004)**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1205(1)(a) & (3), 40 CFR 52.21 (c) & (d))**
2. The monitoring system for the thermal oxidizer shall record the temperature in 15-minute block averages and determine and record the average temperature for each 3-hour block period. **(R 336.1205, R 336.1225, R 336.1702(a), R 336.1910, (40 CFR 63.1510(g))**
3. The permittee shall monitor and record, in a satisfactory manner, the weight of feed/charge to EU-DChipDryer for each operating cycle or time period used in the performance test required in SC V.2. **(R 336.1205, R 336.1224, R 336.1225, R 336.1702, 40 CFR 52.21(c) & (d))**
4. The permittee shall monitor, in a satisfactory manner, the temperature in the thermal oxidizer on a continuous basis in a manner and with instrumentation acceptable to the Air Quality Division. **(R 336.1205, R 336.1224, R 336.1225, R 336.1702)**
5. The permittee shall keep on a daily basis, in a satisfactory manner, a log of the hourly average throughput rate and types of material charged in EU-DChipDryer. As an alternative to a measurement device, the owner or operator may use a procedure acceptable to the AQD District Supervisor to determine the total weight of feed/charge or aluminum production to the affected source or emission unit. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request. **(R 336.1205, R 336.1220, R 336.1225, R 336.1702, 40 CFR 63.1510(e))**
6. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period records of the total weight of charge materials in EU-DChipDryer. As an alternative to a measurement device, the owner or operator may use a procedure acceptable to the AQD District Supervisor to determine the total weight of feed/charge or aluminum production to the affected source or emission unit. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205, R 336.1225, 40 CFR 63.1510(e))**

VII. REPORTING

1. The permittee shall submit a certification of compliance with the applicable operational standard for charge materials in 40 CFR§ 63.1506(f)(3) for each 6-month reporting period. Each certification must contain the information in 40 CFR§ 63.1516(b)(2)(i). **(40 CFR 63.1510(k))**

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-CHIPBHST	22	75	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR, Part 63, Subpart A and Subpart RRR, as they apply to EU-DChipDryer, upon startup. **(40 CFR Part 63 Subparts A and RRR)**

EU-MoldPreHeat EMISSION UNIT CONDITIONS
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DESCRIPTION

1.86 MMBtu/hr natural gas combustion furnace for preheating the die casting molds. Furnace has 3 burners each rated at 180 kW. Exhaust gases are vented with EU-MoldCoatFurn.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

1. The permittee shall burn only pipeline quality natural gas in EU-MoldPreHeat. **(R 336.1205(1)(a) & (3), R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The maximum design heat input capacity for EU-MoldPreHeat shall not exceed 180 kilowatts per burner. **(R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d))**

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 RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-202MLD	16	33	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

NA

**EU-MoldCoatFurn
EMISSION UNIT CONDITIONS**

DESCRIPTION

1.24 MMBtu/hr two-chamber natural gas combustion furnace for drying the water-based mold coating. Furnace has 2 burners each rated at 180 kW. Furnace includes two rail car bays. Exhaust gases are vented with EU-MoldPreHeat.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

1. The permittee shall burn only pipeline quality natural gas in EU-MoldCoatFurn. **(R 336.1205(1)(a) & (3), R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The maximum design heat input capacity for EU-MoldCoatFurn shall not exceed 180 kilowatts per burner. **(R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d))**

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 RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-202MLD	16	33	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

NA

EU-MoldSonicClean EMISSION UNIT CONDITIONS

DESCRIPTION

Mold sonic cleaner baths consisting of alkaline cleaner, rinse, followed by rust inhibitor used to clean the molds before casting. Vapors from the baths are vented externally out the wall.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(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 maintain a current listing from the manufacturer of the chemical composition of each material, such as cleaners and rust inhibitors, used in EU-MoldSonicClean, including the weight percent of each component. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request.¹ (R 336.1224, R 336.1225)

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

**EU-DieCasting
 EMISSION UNIT CONDITIONS**

DESCRIPTION

28 low-pressure die casting machines used to form the shape of the aluminum wheels. There is no dedicated exhaust system for the die casting machines. Molten aluminum is transported to the electric holding furnaces of the die casting machines. A solid fluxing agent is used in the die casting machines' holding furnaces for removing impurities in the molten aluminum prior to the aluminum being injected into the molds. A cooling tower is used to cool process water. Process water is used to cool the molds in the die casting machines

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. PM	0.005% Drift Loss	Hourly	EU-DieCasting cooling tower	SC V.1	R 336.1301, R 336.1331

II. MATERIAL LIMIT(S)

Material	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Flux Usage	80 lb/8-hours	Daily average	EU-DieCasting	SC VI.3	R 336.1225, 40 CFR 52.21 (c) & (d)
2. Flux Usage	92,594 lb/yr	12-month rolling time period basis as determined at the end of each calendar month	EU-DieCasting	SC VI.4	R 336.1225, 40 CFR 52.21 (c) & (d)

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

1. Upon request of the Department, the permittee shall verify and quantify PM emission rates from the EU-DieCasting cooling tower by testing at owner's expense, in accordance with Department requirements based on the average of three one-hour test runs. Testing shall be performed using an approved EPA Method listed in 40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol. No less than 60 prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1301, R 336.1331, R 336.2001, R 336.2003, R 336.2004)**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1205(1)(a) & (3), 40 CFR 52.21 (c) & (d))**
2. The permittee shall keep, in a satisfactory manner, monthly records of the HCl emission rate on a monthly and 12-month rolling time period basis for EU-DieCasting. The permittee shall keep all records on file at the facility and make them available to the Department upon request.¹ **(R 336.1225)**
3. The permittee shall monitor and record, in a satisfactory manner, the weight and description of the flux added to EU-DieCasting 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 336.1224, R 336.1225, R 336.1301, R 336.1331)**
4. The permittee shall monitor and record, in a satisfactory manner, the flux usage rate for EU-DieCasting on a monthly and 12-month rolling time period basis. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1225, R 336.1702(a), 40 CFR 52.21 (c) & (d))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

**EU-SandBlast
 EMISSION UNIT CONDITIONS**

DESCRIPTION

Sand Blasting Machine used to clean the molds following casting. The emissions from the sand blasting machine are controlled by a fabric filter.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Fabric Filter

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. PM	0.007 grains per dscf gas	Hourly	EU-SandBlast	SC V.1	R 336.1331

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The malfunction abatement plan (MAP), at a minimum, specify the following for the fabric filter baghouse associated with EU-SandBlast:
 - a) A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
 - b) An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
 - c) A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If at any time the plan 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 plan within 45 days if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the Plan and any amendments to the Plan to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the Plan or amended Plan 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 336.1331, R 336.1910, R 336.1911, 40 CFR 52.21(c) and (d))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate EU-SandBlast unless the fabric filter is installed, maintained, and operated in a satisfactory manner. **(R 336.1205, R 336.1224, R 336.1225, R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))**

2. The permittee shall install, calibrate, maintain, and operate in a satisfactory manner a device to monitor and record the pressure drop across the fabric filter for EU-SandBlast. (R 336.1205, R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21)

V. TESTING/SAMPLING

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

1. Upon request of the Department, the permittee shall verify and quantify PM emission rates from EU-SandBlast by testing at owner's expense, in accordance with Department requirements based on the average of three one-hour test runs. Testing shall be performed using an approved EPA Method listed in 40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol. No less than 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 including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. (R 336.1301, R 336.1331, R 336.2001, R 336.2003, R 336.2004)

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1205, R 336.1224, R 336.1225, R 336.1702)
2. The permittee shall monitor and record the pressure drop across the fabric filter for EU-SandBlast on a once daily basis during operation. (R 336.1205, R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1602, R 336.1702, R 336.1910, 40 CFR 52.21)

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-201SAND	12	15	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

**EU-Pretreatment
EMISSION UNIT CONDITIONS**

DESCRIPTION

Wheel surface preparation consisting of degreasing tanks (3), acidic, passivation and sealant tanks, which will be spray apply acidic or alkaline solutions to degrease (remove the machining fluid) and prepare the surface for proper coating adhesion to the aluminum. During various steps in the surface preparation process, water will be used to rinse off the alkaline and acidic solutions.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(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 complete all required calculations in a format acceptable to the AQD District Supervisor by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1205(3), R 336.1225, R 336.1702(a))**
2. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period records of the amounts of acid and degreasing solvent added each month and 12-month rolling time period. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(3), R 336.1225, R 336.1702(a))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-502PT	21 ¹	53 ¹	R 336.1225
2. SV-503PT	26 ¹	53 ¹	R 336.1225

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

**EU-PretreatOven
 EMISSION UNIT CONDITIONS**

DESCRIPTION

7.6 MMBtu/hr Natural Gas Combustion Oven for removing the surface moisture on the wheels the surfaces that have been treated.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. NOx	75 ppmv @ 3% Oxygen (O2)	Hourly	EU-PretreatOven	SC VI.1, SC V.1	R 336.1205

II. MATERIAL LIMIT(S)

1. The permittee shall burn only pipeline quality natural gas in EU-PretreatOven. **(R 336.1205(1)(a) & (3), R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The maximum design heat input capacity for EU-PretreatOven shall not exceed 7.6 MMBtu per hour on a fuel heat input basis. **(R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d))**

V. TESTING/SAMPLING

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

1. Upon request of the Department, the permittee shall verify and quantify PM emission rates from EU-PretreatOven by testing at owner's expense, in accordance with Department requirements based on the average of three one-hour test runs. Testing shall be performed using an approved EPA Method listed in 40 CFR Part 60, Appendix A. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol. No less than 60 prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205, R 336.2001, R 336.2003, R 336.2004)**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall keep records of the NOx emission rate guaranteed by the manufacturer of EU-PretreatOven. **(R 336.1205, 40 CFR 52.21(c) & (d))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-504DOHT	16	53	R 336.1225, 40 CFR 52.21(c) & (d)
2. SV-505DOHT	16	53	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

**EU-PaintShopBlr
EMISSION UNIT CONDITIONS**

DESCRIPTION

11.2 MMBtu/hr Natural gas Combustion Paint Shop Boiler

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. NOx	75 ppmv @ 3% O ₂	Hourly	EU-PaintShopBlr	SC VI.1, SC V.1	R 336.1205

II. MATERIAL LIMIT(S)

1. The permittee shall burn only pipeline quality natural gas in EU-PaintShopBlr. (R 336.1205(1)(a), R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d), 40 CFR 60 Subpart Dc)

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The maximum design heat input capacity for EU-PaintShopBlr shall not exceed 11.2 MMBtu per hour on a fuel heat input basis. (R 336.1205(1)(a), 40 CFR 52.21(c) & (d), 40 CFR Part 60 Subpart Dc)

V. TESTING/SAMPLING

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

1. Upon request of the Department, the permittee shall verify and quantify PM emission rates from EU-PaintShopBlr by testing at owner's expense, in accordance with Department requirements based on the average of three one-hour test runs. Testing shall be performed using an approved EPA Method listed in 40 CFR Part 60, Appendix A. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol. No less than 60 prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. (R 336.1205, R 336.2001, R 336.2003, R 336.2004)

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall keep records of the NOx emission rate guaranteed by the manufacturer of EU-PaintShopBlr. (R 336.1205, 40 CFR 52.21(c) & (d))

2. The permittee shall monitor, in a satisfactory manner, the natural gas usage rate for EU-PaintShopBlr each calendar month. The permittee shall keep the records on file at the facility and make them available to the Department upon request. **(R 336.1205, 40 CFR 52.21(c) & (d), 40 CFR 60.48c(g))**
3. The permittee shall monitor emissions, operating information, and keep records for EU-PaintShopBlr in accordance with the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and Dc. The permittee shall make all records available to the Department upon request. **(40 CFR Part 60 Subparts A and Dc)**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-532BLR	26	60	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall provide written notification of construction and operation to comply with the federal Standards of Performance for New Stationary Sources, 40 CFR 60.7. The permittee shall submit this notification to the AQD District Supervisor within the time frames specified in 40 CFR 60.7. **(40 CFR 60.7)**
2. The permittee shall comply with the provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subpart A and Subpart Dc, as they apply to EU-PaintShopBlr. **(40 CFR Part 60 Subparts A & Dc)**

Footnotes:

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

**EU-LiquidCoat
 EMISSION UNIT CONDITIONS**

DESCRIPTION

One Base liquid coating booth and one Clear liquid coating booth, each utilizing high volume low pressure (HVLP) or comparable applicators, associated flash off tunnels, and one 2.6 MMBtu/hr Natural Gas Combustion Curing Oven. The VOC emissions from this line will be controlled by Non-Fugitive Enclosure (NFE) and a recuperative thermal oxidizer (TO). The particulate emissions controlled by water spray.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Thermal Oxidizer

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. VOCs	17.5 tpy	12-month rolling time period as determined at the end of each calendar month	EU-LiquidCoat	SC VI.3	R 336.1205, R 336.1702(a)
2. Heavy aromatic solvent naphtha	105.50 lb/day ¹	Calendar day	EU-LiquidCoat	SC VI.4	R 336.1225
3. Mixed Xylenes	150.66 lb/day ¹	Calendar day	EU-LiquidCoat	SC VI.4	R 336.1225
4. Butyl carbitol	30.14 lb/day ¹	Calendar day	EU-LiquidCoat	SC VI.4	R 336.1225
5. Formaldehyde	0.83 tpy ¹	12-month rolling time period as determined at the end of each calendar month	EU-LiquidCoat	SC VI.4	R 336.1225
6. Naphthalene	0.18 tpy ¹	12-month rolling time period as determined at the end of each calendar month	EU-LiquidCoat	SC VI.4	R 336.1225

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall capture all waste materials and shall store them in closed containers. The permittee shall dispose of all waste materials in an acceptable manner in compliance with all applicable state rules and federal regulations. **(R 336.1702(a))**
2. The permittee shall dispose of spent filters in a manner which minimizes the introduction of air contaminants to the outer air. **(R 336.1370)**

3. The permittee shall handle all VOC and HAP containing materials, including coatings, reducers, solvents and thinners, in a manner to minimize the generation of fugitive emissions. The permittee shall keep containers covered at all times except when operator access is necessary. **(R 336.1205(3), R 336.1225, R 336.1702(a))**
4. The permittee shall not operate the thermal oxidizer (TO) for EU-LiquidCoat unless an updated malfunction abatement plan (MAP) as described in Rule 911(2), is implemented, and maintained. The MAP shall, at a minimum, specify the following:
 - a) A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
 - b) An identification of the sources and air cleaning operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
 - c) A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.
 - d) A description of the procedures to capture, handle, and dispose of all materials to minimize the generation of fugitive emissions per SC III.1 and III.2.

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 336.1205, R 336.1225, R 336.1702(a), R 336.1910, R 336.1911)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate EU-LiquidCoat unless all respective exhaust filters are installed and operating in a satisfactory manner. **(R 336.1301, R 336.1910)**
2. The permittee shall equip and maintain EU-Liquid Coat with HVLP or comparable technology with equivalent transfer efficiency. For HVLP applicators, the permittee shall keep test caps available for pressure testing. **(R 336.1702(a))**
3. The permittee shall not operate EU-LiquidCoat unless the thermal oxidizer is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the thermal oxidizer includes a minimum VOC destruction efficiency of 95 percent (by weight) and maintaining a minimum temperature of 1292°F (700 C) and a minimum retention time of 0.5 seconds. **(R 336.1205, R 336.1225, R 336.1702, R 336.1910)**
4. The permittee shall install, calibrate, maintain, and operate in a satisfactory manner a temperature monitoring device in the combustion chamber of the thermal oxidizer to monitor and record the temperature on a continuous basis, during operation of EU-LiquidCoat. **(R 336.1205, R 336.1224, R 336.1225, R 336.1702)**
5. The permittee shall not operate any portion of EU-LiquidCoat unless the non-fugitive enclosure is installed, maintained, and operated in a satisfactory manner. Satisfactory operation requires that the non-fugitive enclosure and oven are operating at a pressure lower than all adjacent areas, so that air flows into the non-fugitive enclosure through all-natural draft openings (NDOs). NDO is defined as any opening that is not connected to a duct in which a fan or blower is installed. The cooling chamber following the oven may be operated at positive pressure. **(R 336.1225, R 336.1702, R 336.1910)**

V. TESTING/SAMPLING

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

1. The permittee shall determine the VOC content from manufacturer's formulation data unless requested by the AQD District Supervisor to determine the VOC content, water content, and density of any material as applied and as received, using federal Reference Test Method 24. If the Method 24 and the formulation values should differ, the permittee shall use the Method 24 results to determine compliance. **(R 336.1205, R 336.1225, R 336.1702, R 336.2001, R 336.2003, R 336.2004, R 336.2040(5))**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1205, R 336.1225, R 336.1702)**
2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1224, R 336.1225, R 336.1702)**
3. The permittee shall keep the following information on a monthly basis for the EU-LiquidCoat:
 - a) Gallons (with water) of each material (coatings, reducers, thinners, cleaning solvents, etc.) used and reclaimed.
 - b) VOC content (with water) of each material as applied.
 - c) VOC mass emission calculations determining the monthly emission rate in tons per calendar month.
 - d) VOC mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records using mass balance, or an alternative format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205, R 336.1702)**

4. The permittee shall keep the following information on a daily basis for the EU-LiquidCoat:
 - a) Gallons (with water) of each heavy aromatic solvent naphtha (CAS No. 64742-94-5), mixed xylene (CAS No. 1330-20-7), and butyl carbitol (CAS No. 112-34-5) containing material used.
 - b) Where applicable, the gallons (with water) of each heavy aromatic solvent naphtha (CAS No. 64742-94-5), mixed xylene (CAS No. 1330-20-7), and butyl carbitol (CAS No. 112-34-5) containing material reclaimed.

The permittee shall keep the records using mass balance, or an alternative format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1224, R 336.1225)**

5. The permittee shall keep the following information on a monthly basis for the EU-LiquidCoat:
 - a) Gallons (with water) of each formaldehyde (CAS No. 50-00-0) and naphthalene (CAS No. 91-20-3) containing material used.
 - b) Where applicable, the gallons (with water) of each formaldehyde (CAS No. 50-00-0) and naphthalene (CAS No. 91-20-3) containing material reclaimed.
 - c) The formaldehyde (CAS No. 50-00-0) and naphthalene (CAS No. 91-20-3) content (with water) in pounds per gallon or weight percent of each material used.
 - d) Formaldehyde (CAS No. 50-00-0) and naphthalene (CAS No. 91-20-3) mass emission calculations determining the monthly emission rate in tons per calendar month.
 - e) Formaldehyde (CAS No. 50-00-0) and naphthalene (CAS No. 91-20-3) mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

- f) The heavy aromatic solvent naphtha (CAS No. 64742-94-5), mixed xylene (CAS No. 1330-20-7), and butyl carbitol (CAS No. 112-34-5) content (with water) in pounds per gallon or weight percent of each material used.
- g) Heavy aromatic solvent naphtha (CAS No. 64742-94-5), mixed xylene (CAS No. 1330-20-7), and butyl carbitol (CAS No. 112-34-5) mass emission calculations determining the mass emission rate in pounds per calendar day based on daily usages recorded in SC VI.4.

The permittee shall keep the records using mass balance, or an alternative format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1224, R 336.1225)**

- 6. The permittee shall monitor and record, in a satisfactory manner, the temperature in the thermal oxidizer on a continuous basis during operation of EU-LiquidCoat. Temperature data recordings shall consist of measurement made at equally spaced intervals, not to exceed 15 minutes per interval. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205, R 336.1225, R 336.1702)**
- 7. The permittee shall monitor, in a satisfactory manner, the pressure differential between the Non-Fugitive Enclosure (NFE) and oven for EU-LiquidCoat and the outside area, on a continuous basis, to verify that air is entering the NFE. The permittee shall record the pressure differential at least once per operating day. Alternatively, to monitoring the pressure differential between NFE and outside air, the permittee may measure the pressure differential across the enclosure. The permittee shall implement an air pressure differential monitoring plan as part of the Malfunction Abatement Plan. The monitoring plan shall include a quality assurance plan stating the method proposed to calibrate/audit the monitor in order to verify that the monitoring equipment has been installed and is operating properly. **(R 336.1205, R 336.1224, R 336.1225, R 336.1702, 40 CFR 52.21)**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-533TO	25	59	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

**EU-BrushingBurr
 EMISSION UNIT CONDITIONS**

DESCRIPTION

12 Brushing Burr Machines controlled by a common fabric filter.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Fabric Filter

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. PM	0.0075 lbs per 1000 lbs of gas (0.004 grains per dscf)	Hourly	EU-BrushingBurr	SC V.1	R 336.1331

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The malfunction abatement plan (MAP), shall, at a minimum, specify the following for the fabric filter baghouse associated with EU-BrushingBurr:
 - a) A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
 - b) An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
 - c) A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If at any time the plan 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 plan within 45 days if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the Plan and any amendments to the Plan to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the Plan or amended Plan 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 336.1331, R 336.1910, R 336.1911, 40 CFR 52.21(c) and (d))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate EU-BrushingBurr unless the fabric filter is installed, maintained, and operated in a satisfactory manner. **(R 336.1205, R 336.1224, R 336.1225, R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))**

2. The permittee shall install, calibrate, maintain, and operate in a satisfactory manner a device to monitor and record the pressure drop across the fabric filter for EU-BrushingBurr. (R 336.1205, R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21)

V. TESTING/SAMPLING

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

1. Upon request of the Department, the permittee shall verify and quantify PM emission rates from EU-BrushingBurr by testing at owner's expense, in accordance with Department requirements based on the average of three one-hour test runs. Testing shall be performed using an approved EPA Method listed in 40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol. No less than 60 prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. (R 336.1301, R 336.1331, R 336.2001, R 336.2003, R 336.2004)

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1205, R 336.1224, R 336.1225, R 336.1702)
2. The permittee shall monitor and record the pressure drop across the fabric filter for EU-BrushingBurr on a once daily basis during operation. (R 336.1205, R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1602, R 336.1702, R 336.1910, 40 CFR 52.21)

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-534DBUR	22	18	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

**EU-Gen1
 EMISSION UNIT CONDITIONS**

DESCRIPTION

A 1,500 kilowatt (kW) or smaller diesel-fueled emergency engine with a model year of 2006 or later, and a displacement of less than 30 liters/cylinder. This emergency engine is subject to the New Source Performance Standards Stationary for Reciprocating Internal Combustion Engines (RICE), combustion ignition, emergency RICE less than 3000 HP.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. NOx + HC	6.4 g/kW-hr	Hourly	EU-Gen1	SC VI.2	40 CFR 60.4205(b), 60.4202(b)(2), Table 1 of 40 CFR 89.112
2. CO	3.5 g/kW-hr	Hourly	EU-Gen1	SC VI.2	40 CFR 60.4205(b), 60.4202(b)(2), Table 1 of 40 CFR 89.112
3. PM	0.20 g/kW-hr	Hourly	EU-Gen1	SC VI.2	40 CFR 60.4205(b), 60.4202(b)(2), Table 1 of 40 CFR 89.112
4. NOx	31.67 pph	Hourly	EU-Gen1	SC V.2	R 336.1205, 40 CFR 52.21 (c) & (d)
5. PM2.5	0.29 pph	Hourly	EU-Gen1	SC V.2	R 336.1205, 40 CFR 52.21 (c) & (d)

6. Visible emissions from EU-Gen1 shall not exceed 15 percent opacity during lugging mode. This limit is based on the federal Standards of Performance for New Stationary Sources, 40 CFR Part 60 Subparts A and IIII. At all other times, EU-Gen1 shall not exceed 20 percent opacity. **(R 336.1301, 40 CFR 60.4205(b), 40 CFR 60.4202(a)(2), 40 CFR 89.113)**

II. MATERIAL LIMIT(S)

1. The permittee shall burn only diesel fuel, in EU-Gen1 with the maximum sulfur content of 15 ppm (0.0015 percent) by weight and a minimum Cetane index of 40 or a maximum aromatic content of 35 volume percent. **(R 336.1205(1)(a) & (3), R 336.1402(1), 40 CFR 60.4207, 40 CFR 80.510(b))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EU-Gen1 for more than 500 hours per year on a 12-month rolling time period basis as determined at the end of each calendar month. The 500 hours includes the hours for the purpose of necessary maintenance checks and readiness testing as described in SC III.2. **(R 336.1205(1)(a) & (3), R 336.1225, R 336.1702(a), 40 CFR 52.21 (c) & (d))**
2. The permittee may operate EU-Gen1 for no more than 100 hours per calendar year for the purpose of necessary maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. Permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing. A petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency internal combustion engines beyond 100 hours per calendar year. EU-Gen1 may operate up to 50 hours per calendar year in non-emergency situations, but those 50 hours are counted towards the 100 hours per calendar year provided for maintenance and testing. The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or demand response, or to generate income for a facility to supply non-emergency power as part of a financial arrangement with another entity. **(40 CFR 60.4211(f))**
3. If the permittee purchased a certified engine, according to procedures specified in 40 CFR Part 60 Subpart IIII, for the same model year and maximum engine power, the permittee shall meet the following requirements for EU-Gen1:
 - a) Operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions.
 - b) Change only those emission-related settings that are permitted by the manufacturer.
 - c) Meet the requirements as specified in 40 CFR 89, 94, and/or 1068, as they apply to you.

If you do not operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions, the engine may be considered a non-certified engine. **(40 CFR 60.4211(a) & (b))**

4. If the permittee purchased a non-certified engine or a certified engine operating in a non-certified manner, the permittee shall keep a maintenance plan for EU-Gen1 and shall, to the extent practicable, maintain and operate each engine in a manner consistent with good air pollution control practice for minimizing emissions. **(40 CFR 60.4211(g)(3))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain each EU-Gen1 with non-resettable hours meters to track the operating hours. **(R 336.1205(1)(a) & (3), R 336.1225, 40 CFR 60.4209)**
2. The nameplate capacity of EU-Gen1 shall not exceed 1,250 kW, as certified by the equipment manufacturer. **(R 336.1205(1)(a) & (3), 40 CFR 60.4202, 40 CFR 89.112(a))**

V. TESTING/SAMPLING

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

1. The permittee shall conduct an initial performance test for EU-Gen1 within one year after the engine is no longer considered certified to demonstrate compliance with the emission limits in 40 CFR 60.4205 unless the engines have been certified by the manufacturer and the permittee maintains the engine as required by 40 CFR Part 60 Subpart IIII. If a performance test is required, the performance tests shall be conducted according to 40 CFR 60.4212. No less than 30 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. Subsequent performance testing shall be conducted every 8,760 hours of engine operation or 3 years, whichever comes first. **(40 CFR 60.4211, 40 CFR 60.4212, 40 CFR Part 60 Subpart IIII)**

- Upon request of the Department, the permittee shall verify and quantify NOx and PM2.5 emission rates from EU-Gen1 by testing at owner's expense, in accordance with Department requirements based on the average of three one-hour test runs. Testing shall be performed using an approved EPA Method listed in 40 CFR Part 60, Appendix A for NOx and 40 CFR Part 51, Appendix M for PM2.5. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol. No less than 60 prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1301, R 336.1331, R 336.2001, R 336.2003, R 336.2004)**

VI. MONITORING/RECORDKEEPING

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

- The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1205(1)(a) & (3), 40 CFR 52.21 (c) & (d))**
- The permittee shall keep, in a satisfactory manner, records of testing required in SC V.1 or manufacturer certification documentation indicating that EU-Gen1 meets the applicable requirements contained in the federal Standards of Performance for New Stationary Sources 40 CFR Part 60 Subpart IIII. If EU-Gen1 becomes uncertified then the permittee must also keep records of a maintenance plan and maintenance activities. The permittee shall keep all records on file and make them available to the Department upon request. **(40 CFR 60.4211)**
- The permittee shall monitor and record the total hours of operation and the hours of operation during non-emergencies for EU-Gen1, on a monthly and 12-month rolling time period basis, in a manner acceptable to the District Supervisor, Air Quality Division. The permittee shall document how many hours are spent for emergency operation of EU-Gen1, including what classified the operation as emergency and how many hours are spent for non-emergency operation. **(R 336.1205(1)(a) & (3), 40 CFR 60.4211, 40 CFR 60.4214)**
- The permittee shall keep, in a satisfactory manner, fuel supplier certification records or fuel sample test data, for each delivery of diesel fuel oil used in EU-Gen1, demonstrating that the fuel meets the requirement of 40 CFR 80.510(b). The certification or test data shall include the name of the oil supplier or laboratory, the sulfur content, and cetane index or aromatic content of the fuel oil. **(R 336.1205(1)(a) & (3), R 336.1402(1), 40 CFR 80.510(b))**

VII. REPORTING

- The permittee shall submit a notification to the AQD District Supervisor, in writing, within 30 days of switching the manner of operation of EU-Gen1 from a certified to non-certified manner. **(40 CFR Part 60 Subpart IIII)**

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-GEN1	12	14	R 336.1225, 40 CFR 52.21 (c) & (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with the provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subpart A and Subpart IIII, as they apply to EU-Gen1. **(40 CFR Part 60 Subparts A & IIII, 40 CFR 63.6590)**
2. The permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR, Part 63, Subpart A and Subpart ZZZZ, as they apply to EU-Gen1, upon startup. **(40 CFR Part 63 Subparts A and ZZZZ, 40 CFR 63.6595)**

Footnotes:

¹ This 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
FG-Melting	Two natural gas fired aluminum melting furnaces with burners rated at 10.1 MMBtu/hr and a capacity of 13.2 tons each, two natural gas fired aluminum chip melting furnaces with burners rated at 6.2 MMBtu/hr and a holding capacity of 13.2 tons each, two natural gas fired aluminum holding furnaces with burners rated at 2.7 MMBtu/hr and a holding capacity of 13.2 tons each, and the process transfer ladles. All emission units are controlled by a common lime injected baghouse.	EU-Melt1, EU-Melt2, EU-Chip1, EU-Chip2, EU-Hold1, EU-Hold2, EU-LadleHood
FG-HeatTreat	Three natural gas fired heat treat lines with burners rated at 10 MMBtu/hr each.	EU-HeatTreat1, EU-HeatTreat2, EU-HeatTreat3
FG-PowderCoat	The powder coating process which includes two primer coatings booths, a 3.5 MMBtu/hr rated primer powder curing oven, one clear coating booth, and a 3.5 MMBtu/hr clear coat powder curing oven. The powder coating portions of this process are controlled by a dry filtering system with isolation chamber.	EU-PrimePowder, EU-PrimeOven, EU-ClearPowder, EU-ClearOven
FG-MACT6Z	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 a new, small foundry as defined by 40 CFR Part 63 Subpart ZZZZZZ.	EU-Melt1, EU-Melt2, EU-Chip1, EU-Chip2, EU-Hold1, EU-Hold2, EU-LadleHood

**FG-Melting
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Two natural gas fired aluminum melting furnaces with burners rated at 10.1 MMBtu/hr and a capacity of 13.2 tons each, two natural gas fired aluminum chip melting furnaces with burners rated at 6.2 MMBtu/hr and a holding capacity of 13.2 tons each, two natural gas fired aluminum holding furnaces with burners rated at 2.7 MMBtu/hr and a holding capacity of 13.2 tons each, and the process transfer ladles.

Emission Unit: EU-Melt1, EU-Melt2, EU-Chip1, EU-Chip2, EU-Hold1, EU-Hold2, EU-LadleHood

POLLUTION CONTROL EQUIPMENT

All emission units are controlled by a common lime injected baghouse.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. PM	2.92 pph	Hourly	FG-Melting	SC V.1	R 336.1331
2. PM10	2.68 pph	Hourly	FG-Melting	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
3. PM2.5	1.89 pph	Hourly	FG-Melting	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
4. HCl	7.69 pph ¹	Hourly	FG-Melting	SC V.1	R 336.1225
5. HF	1.67 pph ¹	Hourly	FG-Melting	SC V.1	R 336.1225
6. HCl	3.72 tpy	12-month rolling time period as determined at the end of each calendar month	FG-Melting	SC VI.2	R 336.1205, R 336.1225
7. Cadmium	1.79E-4 tpy ¹	12-month rolling time period as determined at the end of each calendar month	FG-Melting	SC VI.2	R 336.1225
8. Chromium	1.83E-3 tpy ¹	12-month rolling time period as determined at the end of each calendar month	FG-Melting	SC VI.2	R 336.1225

II. MATERIAL LIMIT(S)

Material	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Feed/charge rate	3.31 tons per hour	Calendar Day Average	Each melting furnace in FG-Melting	SC VI.3	R 336.1205, R 336.1225, 40 CFR 52.21 (c) & (d)

	Material	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
2.	Feed/charge rate	1.65 tons per hour	Calendar Day Average	Each chip furnace in FG-Melting	SC VI.3	R 336.1205, R 336.1225, 40 CFR 52.21 (c) & (d)
3.	Material throughput rate	4.96 tons per hour	Calendar Day Average	Each holding furnace in FG-Melting	SC VI.3	R 336.1205, R 336.1225, 40 CFR 52.21 (c) & (d)
4.	Painted wheel melt rate	904,020 wheels per year ¹	12-month rolling time period as determined at the end of each calendar month	FG-Melting	SC VI.6	R 336.1225
5.	Flux usage	1,866 lb/day	Daily Average	FG-Melting	SC VI.3	R 336.1205, R 336.1225, 40 CFR 52.21 (c) & (d)
6.	Flux usage	564,053 lb/yr	12-month rolling time period basis as determined at the end of each calendar month	FG-Melting	SC VI.5	R 336.1205, R 336.1225, 40 CFR 52.21 (c) & (d)

7. The permittee shall melt 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 Secondary Aluminum Production. **(R 336.1224, R 336.1225, 40 CFR Part 63 Subpart RRR)**
8. The permittee shall only burn pipeline quality natural gas in the burners of FG-Melting. **(R 336.1225, R 336.1301, R 336.1331, 40 CFR 52.21(c) & (d))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate FG-Melting unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the operation of the lime injected baghouse, has been submitted within 180 days of startup, and is implemented and maintained. The MAP shall, at a minimum, specify the following:
 - a) A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
 - b) An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
 - c) A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

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, 40 CFR 52.21(c) & (d))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate FG-Melting unless the capture system and lime injected baghouse are installed, maintained, and operated in accordance with the manufacturer's recommendations. **(R 336.1205(1)(a) & (3), R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1910)**
2. The permittee shall not operate FG-Melting unless a bag leak detection system for the baghouse is installed, maintained, and operated in a satisfactory manner. **(R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1910)**
3. The maximum design heat input capacity for FG-Melting shall not exceed the following limitations on a fuel heat input basis:
 - a) 10.1 MMBtu/hr for each melting furnace.
 - b) 6.2 MMBtu/hr for each chip furnace.
 - c) 2.7 MMBtu/hr for each holding furnace.**(R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d))**
4. The permittee shall not operate FG-Melting unless a device to monitor the lime injection rate is installed maintained and operated in a satisfactory manner. **(R 336.1225, 40 CFR 52.21 (c) & (d))**

V. TESTING/SAMPLING

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

1. Upon request of the Department, the permittee shall verify PM, PM10, PM2.5, HCl and HF emission rates from FG-Melting by testing at owner's expense, in accordance with Department requirements based on the average of three one-hour test runs. Testing shall be performed using an approved EPA Method listed in the following table:

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
Hydrogen Chloride	40 CFR Part 60, Appendix A
Hydrogen Fluoride	40 CFR Part 60, Appendix A

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol. No less than 60 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) & (3), R 336.1225, 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 complete all required calculations in a format acceptable to the AQD District Supervisor by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1205(1)(a) & (3), 40 CFR 52.21 (c) & (d))**
2. The permittee shall keep, in a satisfactory manner, monthly records of the HCl, cadmium and chromium emission rate on a monthly and 12-month rolling time period basis for FG-Melting. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1225) ¹**
3. The permittee shall keep on a daily basis, in a satisfactory manner, a log of the hourly average melt/throughput rate, types of material charged, and cleaning and cover flux usage rates in FG-Melting. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request. **(R 336.1205, R 336.1220, R 336.1225, R 336.1702)**

4. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period records of the total weight of feed/charge in FG-Melting. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205, R 336.1225)**
5. The permittee shall keep, in a satisfactory manner, monthly records of the total weight of fluxing materials added to FG-Melting on a monthly and 12-month rolling time period 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 336.1225)**
6. The permittee shall keep, in a satisfactory manner, monthly records of the painted aluminum wheels melted in FG-Melting on a monthly and 12-month rolling time period basis. The permittee shall keep all records on file at the facility and make them available to the Department upon request. ¹ **(R 336.1225)**
7. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each flux material used, including the weight percent of each component. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(3), R 336.1224, R 336.1225)**
8. Effective 60 days after this permit is issued, the permittee shall not operate FG-Melting unless the bag leak detection system is installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations. **(R 336.1205(1)(a) & (3), R 336.1331, 40 CFR 52.21 (c) & (d))**
9. The permittee shall continuously monitor the lime injection feed rate to verify that the injection rate is at or above the feeder setting established in the performance test. **(R 336.1225, 40 CFR 52.21 (c) & (d))**
10. The permittee shall keep a record of the source of any painted wheels melted in FG-Melting to demonstrate that all wheels remain in control of the permittee or its affiliate. **(R 336.1205, R 336.1225, R 336.1702, 40 CFR 52.21(c) & (d), 40 CFR Part 63 Subpart RRR)**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-MELT_BHW	60	65	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

FG-HeatTreat FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Three natural gas fired heat treat lines with burners rated at 10 MMBtu/hr each.

Emission Unit: EU-HeatTreat1,EU-HeatTreat2,EU-HeatTreat3

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

1. The permittee shall burn only pipeline quality natural gas in FG-HeatTreat. (R 336.1205(1)(a) & (3), R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d))

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The maximum design heat input capacity for each burner in FG-HeatTreat shall not exceed 10 MMBtu per hour on a fuel heat input basis. (R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d))

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 RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-301NHTFR	18	56	R 336.1225, 40 CFR 52.21(c) & (d)
2. SV-301MHTFR	18	56	R 336.1225, 40 CFR 52.21(c) & (d)
3. SV-301SHTFR	18	56	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

**FG-PowderCoat
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

The powder coating process which includes two primer coatings booths, a 3.5 MMBtu/hr rated primer powder curing oven, one clear coating booth, and a 3.5 MMBtu/hr clear coat powder curing oven. The powder coating portions of this process are controlled by a dry filtering system with isolation chamber.

Emission Unit: EU-PrimePowder, EU-PrimeOven, EU-ClearPowder, EU-ClearOven

POLLUTION CONTROL EQUIPMENT

Dry filtering system and isolation chamber.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. PM	0.03 tpy	12-month rolling time period as determined at the end of each calendar month.	FG-PowderCoat	SC V.1	R 336.1331

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall maintain a minimum transfer efficiency of 93 percent for FG-PowderCoat. **(R 336.1205, R 336.1331, 40 CFR 52.21 (c) & (d))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate FG-PowderCoat unless the dry filtering system and isolation chamber is installed, maintained, and operated in a satisfactory manner. **(R 336.1205, R 336.1224, R 336.1225, R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))**

V. TESTING/SAMPLING

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

1. Upon request of the Department, the permittee shall verify and quantify PM emission rates from FG-PowderCoat by testing at owner's expense, in accordance with Department requirements based on the average of three one-hour test runs. Testing shall be performed using an approved EPA Method listed in 40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol. No less than 60 prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1301, R 336.1331, R 336.2001, R 336.2003, R 336.2004)**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1205, R 336.1224, R 336.1225, R 336.1702)**
2. The permittee shall keep records of the NOx emission rate as guaranteed by the manufacturer of EU-PrimeOven and EU-ClearOven. **(R 336.1205, 40 CFR 52.21(c) & (d))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-509PPB1	46	53	R 336.1225, 40 CFR 52.21(c) & (d)
2. SV-512PPB2	46	53	R 336.1225, 40 CFR 52.21(c) & (d)
3. SV-513PRBX	18	53	R 336.1225, 40 CFR 52.21(c) & (d)
4. SV-515PRBX	18	53	R 336.1225, 40 CFR 52.21(c) & (d)
5. SV-519NCOHT	18	53	R 336.1225, 40 CFR 52.21(c) & (d)
6. SV-520BCOHT	18	53	R 336.1225, 40 CFR 52.21(c) & (d)
7. SV-525CPB	46	53	R 336.1225, 40 CFR 52.21(c) & (d)
8. SV-526CCOHT	18	53	R 336.1225, 40 CFR 52.21(c) & (d)
9. SV-528CCOHT	18	53	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

FG-MACT6Z FLEXIBLE GROUP CONDITIONS
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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 a new, small foundry as defined by 40 CFR Part 63 Subpart ZZZZZZ.

Emission Unit: EU-Melt1, EU-Melt2, EU-Chip1, EU-Chip2, EU-Hold1, EU-Hold2, EU-LadleHood

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

1. The permittee shall purchase only metal scrap that has been depleted (to the extent practicable) aluminum 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. 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)**

III. PROCESS/OPERATIONAL RESTRICTION(S)

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 PARAMETER(S)

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: **(40 CFR 63.11552(a), 40 CFR 63.11553(c)(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.
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))**

VII. REPORTING

1. The permittee shall submit a compliance report to the permitting authority according to the requirements below if a deviation occurs during a semiannual reporting period: **(40 CFR 63.11553(e))**
 - 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.

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, 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)**

Footnotes:

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

FGFACILITY CONDITIONS

DESCRIPTION

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

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
Each Individual HAP	Less than 8.9 tpy	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.2	R 336.1205(3)
Aggregate HAPs	Less than 22.5 tpy	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.2	R 336.1205(3)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

1. The permittee shall determine the HAP content of any material as applied and as received, using manufacturer's formulation data. Upon request of the AQD District Supervisor, the permittee shall verify the manufacturer's HAP formulation data using EPA Test Method 311. (R 336.1205(3))

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1205(3))
2. The permittee shall keep the following information on a monthly basis for FGFACILITY:
 - a) Gallons or pounds of each HAP containing material used.
 - b) Where applicable, gallons or pounds of each HAP containing material reclaimed.
 - c) HAP content, in pounds per gallon or pounds per pound, of each HAP containing material used.

- d) Individual and aggregate HAP emission calculations using a mass balance approach and emission factors as approved by the AQD District Supervisor for determining the monthly emission rate of each in tons per calendar month.
- e) Individual and aggregate HAP emission calculations using a mass balance approach and emission factors as approved by the AQD District Supervisor for determining the annual emission rate of each in tons per 12-month rolling time period as determined at the end of each calendar month.

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

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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