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

October 31, 2019

PERMIT TO INSTALL 96-19

> ISSUED TO Astech, Inc.

LOCATED AT 5512 Scotch Road Vassar, Michigan

IN THE COUNTY OF Tuscola

STATE REGISTRATION NUMBER B4350

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:

September 26, 2019

DATE PERMIT TO INSTALL APPROVED: October 31, 2019	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	Hiah 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

POLLUTANT / MEASUREMENT ABBREVIATIONS

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 dia	ameter
PM2.5 Particulate Matter equal to or less than 2.5 microns in dia	ameter
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	
Temperature 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 conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). **(R 336.1912)**
- 8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.
- 9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
- 10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.

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- 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
EURECLAIM	Gudgeon Thermfire 2000, a 2,000 lb/hr Thermal Sand Reclaim system consisting of magnetic separator, vibratory screener, sand feeder, bucket elevators, fluidized bed thermal sand reclaim system, sand cooler, surge hopper and pneumatic sand transport	TBD	NA
EUDL1T	A one ton capacity Duraline electric induction melt furnace. The affected source is a new or existing iron and steel foundry, that is (or is part of) an area source of hazardous air pollutant (HAP) emissions. The affected source is an existing small foundry as defined by 40 CFR Part 63 Subpart ZZZZZ.	2013	FGMELTING
EUNOBAKE	No-bake molding line consisting of a sand silo, a sand heater, and a sand mixer	2003	NA
EUPRECIP	One Size 12, Type D, Rotocolone, Dynamic Precipitator to collect metallic fines produced by an existing swing grinder and abrasive wheel cut-off saw	prior to 1987	NA
EUSHAKEOUT	Vibrating shake-out machine controlled by Pangborn Model #CH2 fabric filter dust collector	2003	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.

EURECLAIM EMISSION UNIT CONDITIONS

DESCRIPTION

Gudgeon Thermfire 2000, a 2,000 lb/hr Thermal Sand Reclaim system consisting of magnetic separator, vibratory screener, sand feeder, bucket elevators, fluidized bed thermal sand reclaim system, sand cooler, surge hopper and pneumatic sand transport

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

10,300 CFM Baghouse

I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1.	PM	1.77 pph	Hourly	EURECLAIM	SC V.1, VI.3, VI. 4	R 336.1331, 40 CFR 52.21(c) and (d)
2.	PM10	0.23 pph	Hourly	EURECLAIM	SC V.1 VI.3, VI. 4	40 CFR 52.21(c) and (d)
3.	PM2.5	0.23 pph	Hourly	EURECLAIM	SC V.1 VI.3, VI. 4	40 CFR 52.21(c) and (d)
4.	PM	0.040 gr/dscf	At least 2 hours and 1.70 dscm per test run	EURECLAIM	SC V.2, VI.3, VI.4	40 CFR 60.732
5.	Visible Emissions	10 percent opacity	6-minute average	EURECLAIM	SC V.2, VI.3, VI.4	40 CFR 60.732

II. MATERIAL LIMIT(S)

Material	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Thermal Sand Reclaim	2,000 tpy	12-month rolling time period as determined at	EURECLAIM	SC VI. 2.	R 336.1205
		calendar month			

2. The permittee shall only burn pipeline quality natural gas in the burners of EURECLAIM. (R 336.1225, R 336.1301, R 336.1331, 40 CFR 52.21(c) and (d))

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EURECLAIM unless a malfunction abatement plan (MAP) as described in Rule 911(2), for operation of the TSR Baghouse, has been submitted within 90 days of permit issuance, 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, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))

IV. DESIGN/EQUIPMENT PARAMETER(S)

- The maximum design heat input capacity for EURECLAIM shall not exceed 2.0 MMBtu per hour on a fuel heat input basis. (R 336.1205(1)(a) & (b), R 336.1224, R 336.1225, R 33.61702(a), 40 CFR 52.21(c) and (d))
- 2. The permittee shall not operate EURECLAIM unless the TSR Baghouse with a gauge which measures the pressure drop across the fabric filter collector is installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes operating the dust collector in accordance with the manufacturer's instructions and with the MAP required in SC III.1. (R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))

V. TESTING/SAMPLING

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

 Upon request of the AQD District Supervisor, the permittee shall verify PM in regards to SC I.1, PM10, and PM2.5 emission factors used to calculate emissions from EURECLAIM, by testing at the owner's expense, in accordance with Department requirements. If a test has been conducted, any resulting increase in an emission factor shall be implemented to calculate PM, PM10, and PM2.5. 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 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, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d))

2. Within 60 days after achieving the maximum production rate for EURECLAIM, but not later than 180 days after initial startup, the permittee shall verify PM emission rates in regard to SC I.4 and visible emissions from EURECLAIM by testing at the owner's expense, in accordance with Department requirements. Testing shall be performed using Method 5 to determine the particulate matter concentration. The sampling time and volume for each test run shall be at least 2 hours and 1.70 dscm. Method 9 and the procedures in §60.11

shall be used to determine opacity from stack emissions. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. (R 336.1205, R 336.2001, R 336.2003, R 336.2004, 40 CFR 60.736)

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 last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1205, R 336.1331, 40 CFR 52.21(c) and (d))
- The permittee shall keep, in a satisfactory manner and format acceptable to the AQD District Supervisor, monthly and 12-month rolling time period the total weight of the sand processed in EURECLAIM. All records shall be kept on file and made available to the Department upon request. (R 336.1205(1)(a), R 336.1205(3), 40 CFR 52.21(c) and (d))
- The permittee shall record and keep, in a satisfactory manner and format acceptable to the AQD District Supervisor, the baghouse pressure drop once per operating day. (R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))
- The permittee shall maintain all records specified in the MAP, including a log of part replacements, repairs, and maintenance, and all monitoring performed on the TSR Baghouse. (R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))

VII. <u>REPORTING</u>

1. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than initial startup of EURECLAIM. (R 336.1201(7)(a))

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. SVRECLAIM	25	46	40 CFR 52.21(c) and (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

EUDL1T EMISSION UNIT CONDITIONS

DESCRIPTION

A one ton capacity Duraline electric induction melt furnace. The affected source is a new or existing iron and steel foundry, that is (or is part of) an area source of hazardous air pollutant (HAP) emissions. The affected source is an existing small foundry as defined by 40 CFR Part 63 Subpart ZZZZ.

Flexible Group ID: FGMELTING

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

1. If applicable, the permittee shall not utilize a binder chemical formulation that uses methanol as a specific ingredient of the catalyst formulation for a warm box mold or core making line. This requirement does not apply to the resin portion of the binder system. (40 CFR 63.10886)

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall implement and maintain an approved plan to address the pollution prevention management practices for metallic scrap and mercury switches by the applicable compliance date specified in 40 CFR 63.10881. The plan shall include the following:
 - a) Metallic scrap management program. (40 CFR 63.10885(a))
 - b) Mercury requirements. (40 CFR 63.10885(b))

The permittee shall revise the plan within 30 days after a change occurs. (40 CFR 63.10885)

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 keep records on a monthly basis as required by 40 CFR 63.10890(e)(1) through (7) as applicable. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (40 CFR 63.10890(e))

VII. <u>REPORTING</u>

- 1. The permittee shall submit semiannual compliance reports to the Administrator according to the requirements in §63.10(e). The reports must include, at a minimum, the following information as applicable:
 - a) Summary information on any deviation from the pollution prevention management practices in §63.10885 and 63.10886 and the operation and maintenance requirements §63.10896 and the corrective action taken. **(40 CFR 10890(f))**
- 2. If applicable, the permittee shall submit semiannual reports of the number of mercury switches removed or the weight of mercury recovered from the switches and properly managed, the estimated number of vehicles processed, an estimate of the percent of mercury switches recovered, and a certification that the recovered mercury switches were recycled at RCRA-permitted facilities. The semiannual reports must include a certification that the facility has conducted periodic inspections or taken other means of corroboration as required under §63.10885(b)(1)(ii)(C). The permittee shall identify which option in §63.10885(b) applies to each scrap provider, contract, or shipment. (63.10890(e)(3)(ii))

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 ZZZZZ for Iron and Steel Foundries by the initial compliance date. (40 CFR Part 63 Subparts A and ZZZZZ)

Footnotes:

EUNOBAKE EMISSION UNIT CONDITIONS

DESCRIPTION

No-bake molding line consisting of a sand silo, a sand heater, and a sand mixer

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

1. Visible emissions from the no-bake molding process with a sand mixer shall not exceed 0% opacity. (R 336.301(1)(c))

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall keep, in a satisfactory manner and format acceptable to the AQD District Supervisor, records of monthly usage rates of resin and acid catalyst. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1702)

VII. <u>REPORTING</u>

NA

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

EUPRECIP EMISSION UNIT CONDITIONS

DESCRIPTION

One Size 12, Type D, Rotocolone, Dynamic Precipitator to collect metallic fines produced by an existing swing grinder and abrasive wheel cut-off saw

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

1. The particulate emission rate from the vibrating shake-out machine shall not exceed 0.10 pound per 1,000 pounds of exhaust gases, calculated on a dry gas basis. (**R 333.1331**)

2. Visible emissions are limited to an opacity of less than or equal to 20% except as specified in Rule 301. (R 336.1301)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

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

NA

VII. <u>REPORTING</u>

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. SVPRECIP	12.0	38.0	40 CFR 52.21(c) and (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

EUSHAKEOUT EMISSION UNIT CONDITIONS

DESCRIPTION

Vibrating shake-out machine controlled by Pangborn Model #CH2 fabric filter dust collector

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Pangborn Model #CH2 fabric filter dust collector

I. EMISSION LIMIT(S)

- 1. The particulate emission rate from the vibrating shake-out machine shall not exceed 0.10 pound per 1,000 pounds of exhaust gases, calculated on a dry gas basis. (R 333.1331)
- 2. Visible emissions are limited to an opacity of less than or equal to 20% except as specified in Rule 301. (R 336.1301)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall not operate EUSHAKEOUT unless the baghouse is installed, maintained and operated in a satisfactory manner. (R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))
- 2. The permittee shall submit and acceptable maintenance program for the baghouse dust collector to the AQD District Supervisor. (R 336.1205, R 336.1331, 40 CFR 52.21(c) and (d))

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

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

NA

VII. <u>REPORTING</u>

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. SVSHAKEOUT	12.0	38.0	40 CFR 52.21(c) and (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

FLEXIBLE GROUP SPECIAL CONDITIONS

FLEXIBLE GROUP SUMMARY TABLE

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

		Associated
Flexible Group ID	Flexible Group Description	Emission Unit IDs
FGMELTING	Duraline electric induction melt furnace	EUDL1T

FGMELTING FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Duraline electric induction melt furnace

Emission Unit: EUDL1T

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

	Material	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1.	Total Metal	2,628 tpy	12-month rolling time	FGMELTING	SC VI. 1	R 336.1205
	Melted		period as determined at			
			the end of each			
			calendar month			

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

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

The permittee shall record and keep in a satisfactory manner, monthly and 12-month rolling time period the total weight and description of charge materials melted in FGMELTING. All records shall be kept on file and made available to the Department upon request. (R 336.1205(1)(a), R 336.1205(3), R 336.1702, 40 CFR 52.21(c) and (d))

VII. <u>REPORTING</u>

NA

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63 Subparts A and ZZZZZ, as they apply to FGMELTING. (40 CFR Part 63 Subparts A & ZZZZ)