EGLE

RENEWABLE OPERATING PERMIT RENEWAL APPLICATION FORM

RECEIVED
MDEQ - JACKSON
SEP 15 2022
AIR QUALITY DIVISION

This information is required by Article II, Chapter 1, Part 55 (Air Pollution Control) of P.A. 451 of 1994, as amended, and the Federal Clean Air Act of 1990. Failure to obtain a permit required by Part 55 may result in penalties and/or imprisonment. Refer to instructions for additional information to complete the Renewable Operating Permit Renewal Application Form.

GENERAL INSTRUCTIONS

This application form should be submitted as part of an administratively complete application package for renewal of a Renewable Operating Permit (ROP). This application form consists of nine parts. Parts A – H must be completed for all applications and must also be completed for each section of a sectioned ROP. Answer all questions in all parts of the form unless directed otherwise. Detailed instructions for this application form can be found at http://michigan.gov/air (select the Permits Tab, "Renewable Operating Permits (ROP)/Title V", then "ROP Forms & Templates").

PART A: GENERAL INFORMATION

Enter information about the source, owner, contact person and the responsible official.

SOURCE INFORMATION

SRN	SIC Code	NAICS Code	Existing ROP Number	Section Number (if applicable)
B1754	3291	327910	MI-ROP-B1754-2018	N/A

Source Name
Ervin Amasteel Div.

Street Address
915 Tabor St.

City	State	ZIP Code	County
Adrian	MI	49221	Lenawee

Section/Town/Range (if address not available)
Section 11, Adrian/Madison Twp.

Source Description
Manufacturer of steel abrasives

☐ Check here if any of the above information is different than what appears in the existing ROP. Identify any changes on the marked-up copy of your existing ROP.

OWNER INFORMATION

Owner Name	Section Number (if applicable)
Ervin Industries Inc.	N/A

Mailing address (☐ check if same as source address)
3892 Research Park Dr.

City	State	ZIP Code	County	Country
Ann Arbor	MI	49221	Washtenaw	U.S.

☐ Check here if any information in this ROP renewal application is confidential. Confidential information should be identified on an Additional Information (AI-001) Form.

SRN: B1754	Section Number (if applicable): N/A

PART A: GENERAL INFORMATION (continued)

At least one contact and responsible official must be identified. Additional contacts and responsible officials may be included if necessary.

CONTACT INFORMATION

Contact 1 Name	Title
Richard F. Payne III	Plant Engineer

Company Name & Mailing address (☒ check if same as source address)				
City	State	ZIP Code	County	Country

Phone number	E-mail address
(517) 265-6118	rpayne@ervinindustries.com

Contact 2 Name (optional)	Title
John Gramm	Plant Manager

Company Name & Mailing address (☒ check if same as source address)				
City	State	ZIP Code	County	Country

Phone number	E-mail address
(517) 265-6118	jgramm@ervinindustries.com

RESPONSIBLE OFFICIAL INFORMATION

Responsible Official 1 Name	Title
John Gramm	Plant Manager

Company Name & Mailing address (☒ check if same as source address)				
City	State	ZIP Code	County	Country

Phone number	E-mail address
(517) 265-6118	jgramm@ervinindustries.com

Responsible Official 2 Name (optional)	Title
Ken Prior	Vice President Manufacturing

Company Name & Mailing address (☐ check if same as source address)				
City	State	ZIP Code	County	Country

Phone number	E-mail address

☐ Check here if an AI-001 Form is attached to provide more information for Part A. Enter AI-001 Form ID:

SRN: B1754	Section Number (if applicable): N/A

PART B: APPLICATION SUBMITTAL and CERTIFICATION by Responsible Official

Identify the items that are included as part of your administratively complete application in the checklist below. For your application to be complete, it must include information necessary to evaluate the source and to determine all applicable requirements. Answer the compliance statements as they pertain to all the applicable requirements to which the source is subject. The source's Responsible Official must sign and date this form.

Listing of ROP Application Contents. Check the box for the items included with your application.	
☒ Completed ROP Renewal Application Form (and any AI-001 Forms) (required)	☐ Compliance Plan/Schedule of Compliance
☒ Mark-up copy of existing ROP using official version from the AQD website (required)	☐ Stack information
☐ Copies of all Permit(s) to Install (PTIs) that have not been incorporated into existing ROP (required)	☐ Acid Rain Permit Initial/Renewal Application
☐ Criteria Pollutant/Hazardous Air Pollutant (HAP) Potential to Emit Calculations	☐ Cross-State Air Pollution Rule (CSAPR) Information
☐ MAERS Forms (to report emissions not previously submitted)	☐ Confidential Information
☐ Copies of all Consent Order/Consent Judgments that have not been incorporated into existing ROP	☒ Paper copy of all documentation provided (required)
☒ Compliance Assurance Monitoring (CAM) Plan	☐ Electronic documents provided (optional)
☒ Other Plans (e.g., Malfunction Abatement, Fugitive Dust, Operation and Maintenance, etc.)	☐ Other, explain:

Compliance Statement

This source is in compliance with **all** of its applicable requirements, including those contained in the existing ROP, Permits to Install that have not yet been incorporated into that ROP, and other applicable requirements not currently contained in the existing ROP.	☒ Yes ☐ No
This source will continue to be in compliance with all of its applicable requirements, including those contained in the existing ROP, Permits to Install that have not yet been incorporated into that ROP, and other applicable requirements not currently contained in the existing ROP.	☒ Yes ☐ No
This source will meet in a timely manner applicable requirements that become effective during the permit term.	☒ Yes ☐ No

The method(s) used to determine compliance for each applicable requirement is/are the method(s) specified in the existing ROP, Permits to Install that have not yet been incorporated into that ROP, and all other applicable requirements not currently contained in the existing ROP.

If any of the above are checked No, identify the emission unit(s) or flexible group(s) affected and the specific condition number(s) or applicable requirement for which the source is or will be out of compliance at the time of issuance of the ROP renewal on an AI-001 Form. Provide a compliance plan and schedule of compliance on an AI-001 Form.

Name and Title of the Responsible Official (Print or Type)

John Gramm

As a Responsible Official, I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this application are true, accurate, and complete.

Signature of Responsible Official	**Date** 9-12-22

SRN: B1754	Section Number (if applicable): N/A

PART C: SOURCE REQUIREMENT INFORMATION

Answer the questions below for specific requirements or programs to which the source may be subject.

C1.	Actual emissions and associated data from **all** emission units with applicable requirements (including those identified in the existing ROP, Permits to Install and other equipment that have not yet been incorporated into the ROP) are required to be reported in MAERS. Are there any emissions and associated data that have not been reported in MAERS for the most recent emissions reporting year? If Yes, identify the emission unit(s) that was/were not reported in MAERS on an AI-001 Form. Applicable MAERS form(s) for unreported emission units must be included with this application.	☐ Yes ☒ No
C2.	Is this source subject to the federal regulations on ozone-depleting substances? (40 CFR Part 82)	☐ Yes ☒ No
C3.	Is this source subject to the federal Chemical Accident Prevention Provisions? (Section 112(r) of the Clean Air Act Amendments, 40 CFR Part 68) If Yes, a Risk Management Plan (RMP) and periodic updates must be submitted to the USEPA. Has an updated RMP been submitted to the USEPA?	☐ Yes ☒ No ☐ Yes ☒ No
C4.	Has this stationary source **added or modified** equipment since the last ROP renewal that changes the potential to emit (PTE) for criteria pollutant (CO, NOx, PM10, PM2.5, SO_2, VOC, lead) emissions? If Yes, include potential emission calculations (or the PTI and/or ROP revision application numbers, or other references for the PTE demonstration) for the added or modified equipment on an AI-001 Form. If No, criteria pollutant potential emission calculations do not need to be included.	☐ Yes ☒ No
C5.	Has this stationary source **added or modified** equipment since the last ROP renewal that changes the PTE for hazardous air pollutants (HAPs) regulated by Section 112 of the federal Clean Air Act? If Yes, include potential emission calculations (or the PTI and/or ROP revision application numbers or other references for the PTE demonstration) for the added or modified equipment on an AI-001 Form. Fugitive emissions must be included in HAP emission calculations. If No, HAP potential emission calculations do not need to be included.	☐ Yes ☒ No
C6.	Are any emission units subject to the Cross-State Air Pollution Rule (CSAPR)? If Yes, identify the specific emission unit(s) subject to CSAPR on an AI-001 Form.	☐ Yes ☒ No
C7.	Are any emission units subject to the federal Acid Rain Program? If Yes, identify the specific emission unit(s) subject to the federal Acid Rain Program on an AI-001 Form. Is an Acid Rain Permit Renewal Application included with this application?	☐ Yes ☒ No ☐ Yes ☒ No
C8.	Are any emission units identified in the existing ROP subject to compliance assurance monitoring (CAM)? If Yes, identify the specific emission unit(s) subject to CAM on an AI-001 Form. If a CAM plan has not been previously submitted to EGLE, one must be included with the ROP renewal application on an AI-001 Form. If the CAM Plan has been updated, include an updated copy. Is a CAM plan included with this application? If a CAM Plan is included, check the type of proposed monitoring included in the Plan: 1. Monitoring proposed by the source based on performance of the control device, or 2. Presumptively Acceptable Monitoring, if eligible	☒ Yes ☐ No ☒ Yes ☐ No ☒ ☐
C9.	Does the source have any plans such as a malfunction abatement plan, fugitive dust plan, operation/maintenance plan, or any other monitoring plan that is referenced in an existing ROP, Permit to Install requirement, or any other applicable requirement? If Yes, then a copy must be submitted as part of the ROP renewal application.	☒ Yes ☐ No
C10.	Are there any specific requirements that the source proposes to be identified in the ROP as non-applicable? If Yes, then a description of the requirement and justification must be submitted as part of the ROP renewal application on an AI-001 Form.	☐ Yes ☒ No
☐	Check here if an AI-001 Form is attached to provide more information for Part C. Enter AI-001 Form ID: **AI-**	

SRN: B1754	Section Number (if applicable): N/A

PART D: PERMIT TO INSTALL (PTI) EXEMPT EMISSION UNIT INFORMATION

Review all emission units at the source and answer the question below.

D1. Does the source have any emission units that do not appear in the existing ROP but are required to be listed in the ROP application under R 336.1212(4) (Rule 212(4)) of the Michigan Air Pollution Control Rules? If Yes, identify the emission units in the table below. ☒ Yes ☐ No

If No, go to Part E.

Note: Emission units that are subject to process specific emission limitations or standards, even if identified in Rule 212, must be captured in either Part G or H of this application form. Identical emission units may be grouped (e.g. PTI exempt Storage Tanks).

Emission Unit ID	**Emission Unit Description**	**Rule 212(4) Citation** [e.g. Rule 212(4)(c)]	**Rule 201 Exemption Rule Citation** [e.g. Rule 282(2)(b)(i)]
EU-SPACEHTRS	Natural gas fired space heating units ranging from 0.1 – 0.99 MMBtu/hr	282(b)(i)	212(4)(b)
EU-WTRHTR	Natural gas fired water heating unit 0.28 MMBtu/hr	282(b)(i)	212(4)(b)
EU-LPGTANKS	Two 30,000 gallon propane storage tanks	284(b)	212(4)(c)
EU-RXGEN	Natural gas fired (endothermic) atmosphere Generator 10 MMBtu/hr	285(l)(iv)	212(4)(d)
EU-HTSFUR	Natural gas fired heat treat furnaces ranging from 1.2-2.1 MMBtu/hr	282(a)(i)	212(4)(b)

Comments:

☐ Check here if an AI-001 Form is attached to provide more information for Part D. Enter AI-001 Form ID: **AI-**

SRN: B1754	Section Number (if applicable): N/A

PART E: EXISTING ROP INFORMATION

Review all emission units and applicable requirements (including any source wide requirements) in the existing ROP and answer the questions below as they pertain to **all** emission units and **all** applicable requirements in the existing ROP.

E1. Does the source propose to make any additions, changes or deletions to terms, conditions and underlying applicable requirements as they appear in the existing ROP? If Yes, identify changes and additions on Part F, Part G and/or Part H.	☒ Yes ☐ No
E2. For each emission unit(s) identified in the existing ROP, all stacks with applicable requirements are to be reported in MAERS. Are there any stacks with applicable requirements for emission unit(s) identified in the existing ROP that were not reported in the most recent MAERS reporting year? If Yes, identity the stack(s) that was/were not reported on applicable MAERS form(s).	☐ Yes ☒ No
E3. Have any emission units identified in the existing ROP been modified or reconstructed that required a PTI? If Yes, complete Part F with the appropriate information.	☐ Yes ☒ No
E4. Have any emission units identified in the existing ROP been dismantled? If Yes, identify the emission unit(s) and the dismantle date in the comment area below or on an AI-001 Form.	☒ Yes ☐ No

Comments:
The "Ascast" drying process, and screen line holding tank connections were removed from the East Cox collector associated with EU0005. The two processes we're re-assigned to a new dust collector installed/exhausted into the melt shop 1st qtr 2022.

☐ Check here if an AI-001 Form is attached to provide more information for Part E. Enter AI-001 Form ID: **AI-**

SRN: B1754	Section Number (if applicable): N/A

PART F: PERMIT TO INSTALL (PTI) INFORMATION

Review all emission units and applicable requirements at the source and answer the following questions as they pertain to **all** emission units with PTIs. Any PTI(s) identified below must be attached to the application.

F1. Has the source obtained any PTIs where the applicable requirements from the PTI have not been incorporated into the existing ROP? If Yes, complete the following table. If No, go to Part G. ☐ Yes ☒ No

Permit to Install Number	Emission Units/Flexible Group ID(s)	Description (*Include Process Equipment, Control Devices and Monitoring Devices*)	Date Emission Unit was Installed/ Modified/ Reconstructed

F2. Do any of the PTIs listed above change, add, or delete terms/conditions to **established emission units** in the existing ROP? If Yes, identify the emission unit(s) or flexible group(s) affected in the comments area below or on an AI-001 Form and identify all changes, additions, and deletions in a mark-up of the existing ROP. ☐ Yes ☐ No

F3. Do any of the PTIs listed above identify **new emission units** that need to be incorporated into the ROP? If Yes, submit the PTIs as part of the ROP renewal application on an AI-001 Form, and include the new emission unit(s) or flexible group(s) in the mark-up of the existing ROP. ☐ Yes ☐ No

F4. Are there any stacks with applicable requirements for emission unit(s) identified in the PTIs listed above that were not reported in MAERS for the most recent emissions reporting year? If Yes, identity the stack(s) that were not reported on the applicable MAERS form(s). ☐ Yes ☐ No

F5. Are there any proposed administrative changes to any of the emission unit names, descriptions or control devices in the PTIs listed above for any emission units not already incorporated into the ROP? If Yes, describe the changes on an AI-001 Form. ☐ Yes ☐ No

Comments:

☐ Check here if an AI-001 Form is attached to provide more information for Part F. Enter AI-001 Form ID: **AI-**

SRN: B1754	Section Number (if applicable): N/A

PART G: EMISSION UNITS MEETING THE CRITERIA OF RULES 281(2)(h), 285(2)(r)(iv), 287(2)(c), OR 290

Review all emission units and applicable requirements at the source and answer the following questions.

G1. Does the source have any new and/or existing emission units which do not already appear in the existing ROP and which meet the criteria of Rules 281(2)(h), 285(2)(r)(iv), 287(2)(c), or 290.

If Yes, identify the emission units in the table below. If No, go to Part H. ☐ Yes ☒ No

Note: If several emission units were installed under the same rule above, provide a description of each and an installation/modification/reconstruction date for each.

Origin of Applicable Requirements	**Emission Unit Description – *Provide Emission Unit ID and a description of Process Equipment, Control Devices and Monitoring Devices***	**Date Emission Unit was Installed/ Modified/ Reconstructed**
☐ Rule 281(2)(h) or 285(2)(r)(iv) cleaning operation		
☐ Rule 287(2)(c) surface coating line		
☐ Rule 290 process with limited emissions		

Comments:

☐ Check here if an AI-001 Form is attached to provide more information for Part G. Enter AI-001 Form ID: **AI-**

SRN: B1754	Section Number (if applicable): N/A

PART H: REQUIREMENTS FOR ADDITION OR CHANGE

Complete this part of the application form for all proposed additions, changes or deletions to the existing ROP. This includes state or federal regulations that the source is subject to and that must be incorporated into the ROP or other proposed changes to the existing ROP. **Do not include additions or changes that have already been identified in Parts F or G of this application form.** If additional space is needed copy and complete an additional Part H.

Complete a separate Part H for each emission unit with proposed additions and/or changes.

H1. Are there changes that need to be incorporated into the ROP that have not been identified in Parts F and G? If Yes, answer the questions below.	☒ Yes	☐ No
H2. Are there any proposed administrative changes to any of the existing emission unit names, descriptions or control devices in the ROP? If Yes, describe the changes in questions H8 – H16 below and in the affected Emission Unit Table(s) in the mark-up of the ROP.	☒ Yes	☐ No
H3. Does the source propose to add a new emission unit or flexible group to the ROP not previously identified in Parts F or G? If Yes, identify and describe the emission unit name, process description, control device(s), monitoring device(s) and applicable requirements in questions H8 – H16 below and in a new Emission Unit Table in the mark-up of the ROP. See instructions on how to incorporate a new emission unit/flexible group into the ROP.	☐ Yes	☒ No
H4. Does the source propose to add new state or federal regulations to the existing ROP? If Yes, on an AI-001 Form, identify each emission unit/flexible group that the new regulation applies to and identify each state or federal regulation that should be added. Also, describe the new requirements in questions H8 – H16 below and add the specific requirements to existing emission units/flexible groups in the mark-up of the ROP, create a new Emission Unit/Flexible Group Table, or add an AQD template table for the specific state or federal requirement.	☐ Yes	☒ No
H5. Has a Consent Order/Consent Judgment (CO/CJ) been issued where the requirements were not incorporated into the existing ROP? If Yes, list the CO/CJ number(s) below and add or change the conditions and underlying applicable requirements in the appropriate Emission Unit/Flexible Group Tables in the mark-up of the ROP.	☐ Yes	☒ No
H6. Does the source propose to add, change and/or delete **source-wide** requirements? If Yes, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below.	☐ Yes	☒ No
H7. Are you proposing to **streamline** any requirements? If Yes, identify the streamlined and subsumed requirements and the EU ID, and provide a justification for streamlining the applicable requirement below.	☐ Yes	☒ No

SRN: B1754	Section Number (if applicable): N/A

PART H: REQUIREMENTS FOR ADDITION OR CHANGE – (continued)

H8. Does the source propose to add, change and/or delete **emission limit** requirements? If Yes, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below. ☒ Yes ☐ No

Propose to eliminate mass emissions monitoring & record keeping requirements associated with EU0005. EU0005 had equipment disconnected from it which drove the aforementioned requirement.

H9. Does the source propose to add, change and/or delete **material limit** requirements? If Yes, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below. ☐ Yes ☒ No

H10. Does the source propose to add, change and/or delete **process/operational restriction** requirements? If Yes, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below. ☐ Yes ☒ No

H11. Does the source propose to add, change and/or delete **design/equipment parameter** requirements? If Yes, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below. ☒ Yes ☐ No

H12. Does the source propose to add, change and/or delete **testing/sampling** requirements? If Yes, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below. ☐ Yes ☒ No

H13. Does the source propose to add, change and/or delete **monitoring/recordkeeping** requirements? If Yes, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below. ☒ Yes ☐ No

H14. Does the source propose to add, change and/or delete **reporting** requirements? If Yes, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below. ☐ Yes ☒ No

PART H: REQUIREMENTS FOR ADDITION OR CHANGE – (continued)

H15. Does the source propose to add, change and/or delete **stack/vent restrictions**? If Yes, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below.	☐ Yes ☒ No
H16. Does the source propose to add, change and/or delete any **other** requirements? If Yes, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below.	☐ Yes ☒ No
H17. Does the source propose to add terms and conditions for an alternative operating scenario or intra-facility trading of emissions? If Yes, identify the proposed conditions in a mark-up of the corresponding section of the ROP and provide a justification below.	☐ Yes ☒ No
☒ Check here if an AI-001 Form is attached to provide more information for Part H. Enter AI-001 Form ID: **AI-001**	

EGLE

RENEWABLE OPERATING PERMIT APPLICATION
AI-001: ADDITIONAL INFORMATION

This information is required by Article II, Chapter 1, part 55 (Air Pollution Control) of P.A. 451 of 1994, as amended, and the Federal Clean Air Act of 1990. Failure to obtain a permit required by Part 55 may result in penalties and/or imprisonment. Please type or print clearly. Refer to instructions for additional information to complete this form.

	SRN: B1754	Section Number (if applicable): N/A

1. Additional Information ID
AI-001

Additional Information

2. Is This Information Confidential? ☐ Yes ☒ No

Indoor collector added. See enclosed CAD diagrams.

Mark ups found on pages: 12, 16, 20, 21, 22

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

EFFECTIVE DATE: March 5, 2018

ISSUED TO

Ervin Amasteel Division

State Registration Number (SRN): B1754

LOCATED AT

915 Tabor Street, Adrian, Michigan 49221

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-B1754-2018

Expiration Date: March 5, 2023

Administratively Complete ROP Renewal Application Due Between and September 5, 2021 and September 5, 2022

This Renewable Operating Permit (ROP) is issued in accordance with and subject to Section 5506(3) of Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451). Pursuant to Michigan Air Pollution Control Rule 210(1), this ROP constitutes the permittee's authority to operate the stationary source identified above in accordance with the general conditions, special conditions and attachments contained herein. Operation of the stationary source and all emission units listed in the permit are subject to all applicable future or amended rules and regulations pursuant to Act 451 and the federal Clean Air Act.

SOURCE-WIDE PERMIT TO INSTALL

Permit Number: MI-PTI-B1754-2018

This Permit to Install (PTI) is issued in accordance with and subject to Section 5505(5) of Act 451. Pursuant to Michigan Air Pollution Control Rule 214a, the terms and conditions herein, identified by the underlying applicable requirement citation of Rule 201(1)(a), constitute a federally enforceable PTI. The PTI terms and conditions do not expire and remain in effect unless the criteria of Rule 201(6) are met. Operation of all emission units identified in the PTI is subject to all applicable future or amended rules and regulations pursuant to Act 451 and the federal Clean Air Act.

Michigan Department of Environmental Quality

Scott Miller, Jackson District Supervisor

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AUTHORITY AND ENFORCEABILITY

For the purpose of this permit, the **permittee** is defined as any person who owns or operates an emission unit at a stationary source for which this permit has been issued. The **department** is defined in Rule 104(d) as the Director of the Michigan Department of Environmental Quality (MDEQ) or his or her designee.

The permittee shall comply with all specific details in the permit terms and conditions and the cited underlying applicable requirements. All terms and conditions in this ROP are both federally enforceable and state enforceable unless otherwise footnoted. Certain terms and conditions are applicable to most stationary sources for which an ROP has been issued. These general conditions are included in Part A of this ROP. Other terms and conditions may apply to a specific emission unit, several emission units which are represented as a flexible group, or the entire stationary source which is represented as a Source-Wide group. Special conditions are identified in Parts B, C, D and/or the appendices.

In accordance with Rule 213(2)(a), all underlying applicable requirements will be identified for each ROP term or condition. All terms and conditions that are included in a PTI, are streamlined or subsumed, or are state only enforceable will be noted as such.

In accordance with Section 5507 of Act 451, the permittee has included in the ROP application a compliance certification, a schedule of compliance, and a compliance plan. For applicable requirements with which the source is in compliance, the source will continue to comply with these requirements. For applicable requirements with which the source is not in compliance, the source will comply with the detailed schedule of compliance requirements that are incorporated as an appendix in this ROP. Furthermore, for any applicable requirements effective after the date of issuance of this ROP, the stationary source will meet the requirements on a timely basis, unless the underlying applicable requirement requires a more detailed schedule of compliance.

Issuance of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.

A. GENERAL CONDITIONS

Permit Enforceability

- All conditions in this permit are both federally enforceable and state enforceable unless otherwise noted. **(R 336.1213(5))**
- Those conditions that are hereby incorporated in a state-only enforceable Source-Wide PTI pursuant to Rule 201(2)(d) are designated by footnote one. **(R 336.1213(5)(a), R 336.1214a(5))**
- Those conditions that are hereby incorporated in a federally enforceable Source-Wide PTI pursuant to Rule 201(2)(c) are designated by footnote two. **(R 336.1213(5)(b), R 336.1214a(3))**

General Provisions

1. The permittee shall comply with all conditions of this ROP. Any ROP noncompliance constitutes a violation of Act 451, and is grounds for enforcement action, for ROP revocation or revision, or for denial of the renewal of the ROP. All terms and conditions of this ROP that are designated as federally enforceable are enforceable by the Administrator of the United States Environmental Protection Agency (USEPA) and by citizens under the provisions of the federal Clean Air Act (CAA). Any terms and conditions based on applicable requirements which are designated as "state-only" are not enforceable by the USEPA or citizens pursuant to the CAA. **(R 336.1213(1)(a))**

2. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this ROP. **(R 336.1213(1)(b))**

3. This ROP may be modified, revised, or revoked for cause. The filing of a request by the permittee for a permit modification, revision, or termination, or a notification of planned changes or anticipated noncompliance does not stay any ROP term or condition. This does not supersede or affect the ability of the permittee to make changes, at the permittee's own risk, pursuant to Rule 215 and Rule 216. **(R 336.1213(1)(c))**

4. The permittee shall allow the department, or an authorized representative of the department, upon presentation of credentials and other documents as may be required by law and upon stating the authority for and purpose of the investigation, to perform any of the following activities: **(R 336.1213(1)(d))**
   a. Enter, at reasonable times, a stationary source or other premises where emissions-related activity is conducted or where records must be kept under the conditions of the ROP.
   b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the ROP.
   c. Inspect, at reasonable times, any of the following:
      i. Any stationary source.
      ii. Any emission unit.
      iii. Any equipment, including monitoring and air pollution control equipment.
      iv. Any work practices or operations regulated or required under the ROP.
   d. As authorized by Section 5526 of Act 451, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the ROP or applicable requirements.

5. The permittee shall furnish to the department, within a reasonable time, any information the department may request, in writing, to determine whether cause exists for modifying, revising, or revoking the ROP or to determine compliance with this ROP. Upon request, the permittee shall also furnish to the department copies of any records that are required to be kept as a term or condition of this ROP. For information which is claimed by the permittee to be confidential, consistent with the requirements of the 1976 PA 442, MCL §15.231 et seq., and known as the Freedom of Information Act, the person may also be required to furnish the records directly to the USEPA together with a claim of confidentiality. **(R 336.1213(1)(e))**

6. A challenge by any person, the Administrator of the USEPA, or the department to a particular condition or a part of this ROP shall not set aside, delay, stay, or in any way affect the applicability or enforceability of any other condition or part of this ROP. **(R 336.1213(1)(f))**

7. The permittee shall pay fees consistent with the fee schedule and requirements pursuant to Section 5522 of Act 451. **(R 336.1213(1)(g))**

8. This ROP does not convey any property rights or any exclusive privilege. **(R 336.1213(1)(h))**

Equipment & Design

9. Any 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).[2] **(R 336.1370)**

10. Any air cleaning device shall be installed, maintained, and operated in a satisfactory manner and in accordance with the Michigan Air Pollution Control rules and existing law. **(R 336.1910)**

Emission Limits

11. Unless otherwise specified in this ROP, the permittee shall comply with Rule 301, which states, in part, "Except as provided in subrules 2, 3, and 4 of this rule, a person shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of a density greater than the most stringent of the following:"[2] **(R 336.1301(1))**
    a. A 6-minute average of 20% opacity, except for one 6-minute average per hour of not more than 27% opacity.
    b. A limit specified by an applicable federal new source performance standard.

    The grading of visible emissions shall be determined in accordance with Rule 303.

12. The permittee shall not cause or permit the emission of an air contaminant or water vapor in quantities that cause, alone or in reaction with other air contaminants, either of the following:
    a. Injurious effects to human health or safety, animal life, plant life of significant economic value, or property.[1] **(R 336.1901(a))**
    b. Unreasonable interference with the comfortable enjoyment of life and property.[1] **(R 336.1901(b))**

Testing/Sampling

13. The department may require the owner or operator of any source of an air contaminant to conduct acceptable performance tests, at the owner's or operator's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001(1).[2] **(R 336.2001)**

14. Any required performance testing shall be conducted in accordance with Rule 1001(2), Rule 1001(3) and Rule 1003. **(R 336.2001(2), R 336.2001(3), R 336.2003(1))**

15. Any required test results shall be submitted to the Air Quality Division (AQD) in the format prescribed by the applicable reference test method within 60 days following the last date of the test. **(R 336.2001(5))**

Monitoring/Recordkeeping

16. Records of any periodic emission or parametric monitoring required in this ROP shall include the following information specified in Rule 213(3)(b)(i), where appropriate. **(R 336.1213(3)(b))**
    a. The date, location, time, and method of sampling or measurements.
    b. The dates the analyses of the samples were performed.
    c. The company or entity that performed the analyses of the samples.
    d. The analytical techniques or methods used.
    e. The results of the analyses.
    f. The related process operating conditions or parameters that existed at the time of sampling or measurement.

17. All required monitoring data, support information and all reports, including reports of all instances of deviation from permit requirements, shall be kept and furnished to the department upon request for a period of not less than 5 years from the date of the monitoring sample, measurement, report or application. Support information includes all calibration and maintenance records and all original strip-chart recordings, or other original data records, for continuous monitoring instrumentation and copies of all reports required by the ROP. **(R 336.1213(1)(e), R 336.1213(3)(b)(ii))**

Certification & Reporting

18. Except for the alternate certification schedule provided in Rule 213(3)(c)(iii)(B), any document required to be submitted to the department as a term or condition of this ROP shall contain an original certification by a Responsible Official which states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. **(R 336.1213(3)(c))**

19. A Responsible Official shall certify to the appropriate AQD District Office and to the USEPA that the stationary source is and has been in compliance with all terms and conditions contained in the ROP except for deviations that have been or are being reported to the appropriate AQD District Office pursuant to Rule 213(3)(c). This certification shall include all the information specified in Rule 213(4)(c)(i) through (v) and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete. The USEPA address is: USEPA, Air Compliance Data - Michigan, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, Illinois 60604-3507. **(R 336.1213(4)(c))**

20. The certification of compliance shall be submitted annually for the term of this ROP as detailed in the special conditions, or more frequently if specified in an applicable requirement or in this ROP. **(R 336.1213(4)(c))**

21. The permittee shall promptly report any deviations from ROP requirements and certify the reports. The prompt reporting of deviations from ROP requirements is defined in Rule 213(3)(c)(ii) as follows, unless otherwise described in this ROP. **(R 336.1213(3)(c))**
    a. For deviations that exceed the emissions allowed under the ROP, prompt reporting means reporting consistent with the requirements of Rule 912 as detailed in Condition 25. All reports submitted pursuant to this paragraph shall be promptly certified as specified in Rule 213(3)(c)(iii).
    b. For deviations which exceed the emissions allowed under the ROP and which are not reported pursuant to Rule 912 due to the duration of the deviation, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe reasons for each deviation and the actions taken to minimize or correct each deviation.
    c. For deviations that do not exceed the emissions allowed under the ROP, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe the reasons for each deviation and the actions taken to minimize or correct each deviation.

22. For reports required pursuant to Rule 213(3)(c)(ii), prompt certification of the reports is described in Rule 213(3)(c)(iii) as either of the following: **(R 336.1213(3)(c))**
    a. Submitting a certification by a Responsible Official with each report which states that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
    b. Submitting, within 30 days following the end of a calendar month during which one or more prompt reports of deviations from the emissions allowed under the ROP were submitted to the department pursuant to Rule 213(3)(c)(ii), a certification by a Responsible Official which states that; "based on information and belief formed after reasonable inquiry, the statements and information contained in each of the reports submitted during the previous month were true, accurate, and complete." The certification shall include a listing of the reports that are being certified. Any report submitted pursuant to Rule 213(3)(c)(ii) that will be certified on a monthly basis pursuant to this paragraph shall include a statement that certification of the report will be provided within 30 days following the end of the calendar month.

23. Semiannually for the term of the ROP as detailed in the special conditions, or more frequently if specified, the permittee shall submit certified reports of any required monitoring to the appropriate AQD District Office. All instances of deviations from ROP requirements during the reporting period shall be clearly identified in the reports. **(R 336.1213(3)(c)(i))**

24. On an annual basis, the permittee shall report the actual emissions, or the information necessary to determine the actual emissions, of each regulated air pollutant as defined in Rule 212(6) for each emission unit utilizing the emissions inventory forms provided by the department. **(R 336.1212(6))**

25. 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 appropriate AQD District Office. The notice shall be provided not later than two business days after the start-up, shutdown, or discovery of the abnormal conditions or malfunction. Notice shall be by any reasonable means, including electronic, telephonic, or oral communication. Written reports, if required under Rule 912, must be submitted to the appropriate AQD District Supervisor 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 conditions or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5) and shall be certified by a Responsible Official in a manner consistent with the CAA.[2] **(R 336.1912)**

Permit Shield

26. Compliance with the conditions of the ROP shall be considered compliance with any applicable requirements as of the date of ROP issuance, if either of the following provisions is satisfied. **(R 336.1213(6)(a)(i), R 336.1213(6)(a)(ii))**
    a. The applicable requirements are included and are specifically identified in the ROP.
    b. The permit includes a determination or concise summary of the determination by the department that other specifically identified requirements are not applicable to the stationary source.

    Any requirements identified in Part E of this ROP have been identified as non-applicable to this ROP and are included in the permit shield.

27. Nothing in this ROP shall alter or affect any of the following:
    a. The provisions of Section 303 of the CAA, emergency orders, including the authority of the USEPA under Section 303 of the CAA. **(R 336.1213(6)(b)(i))**
    b. The liability of the owner or operator of this source for any violation of applicable requirements prior to or at the time of this ROP issuance. **(R 336.1213(6)(b)(ii))**
    c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the CAA. **(R 336.1213(6)(b)(iii))**

d. The ability of the USEPA to obtain information from a source pursuant to Section 114 of the CAA. **(R 336.1213(6)(b)(iv))**

28. The permit shield shall not apply to provisions incorporated into this ROP through procedures for any of the following:
    a. Operational flexibility changes made pursuant to Rule 215. **(R 336.1215(5))**
    b. Administrative Amendments made pursuant to Rule 216(1)(a)(i)-(iv). **(R 336.1216(1)(b)(iii))**
    c. Administrative Amendments made pursuant to Rule 216(1)(a)(v) until the amendment has been approved by the department. **(R 336.1216(1)(c)(iii))**
    d. Minor Permit Modifications made pursuant to Rule 216(2). **(R 336.1216(2)(f))**
    e. State-Only Modifications made pursuant to Rule 216(4) until the changes have been approved by the department. **(R 336.1216(4)(e))**

29. Expiration of this ROP results in the loss of the permit shield. If a timely and administratively complete application for renewal is submitted not more than 18 months, but not less than 6 months, before the expiration date of the ROP, but the department fails to take final action before the end of the ROP term, the existing ROP does not expire until the renewal is issued or denied, and the permit shield shall extend beyond the original ROP term until the department takes final action. **(R 336.1217(1)(c), R 336.1217(1)(a))**

Revisions

30. For changes to any process or process equipment covered by this ROP that do not require a revision of the ROP pursuant to Rule 216, the permittee must comply with Rule 215. **(R 336.1215, R 336.1216)**

31. A change in ownership or operational control of a stationary source covered by this ROP shall be made pursuant to Rule 216(1). **(R 336.1219(2))**

32. For revisions to this ROP, an administratively complete application shall be considered timely if it is received by the department in accordance with the time frames specified in Rule 216. **(R 336.1210(10))**

33. Pursuant to Rule 216(1)(b)(iii), Rule 216(2)(d) and Rule 216(4)(d), after a change has been made, and until the department takes final action, the permittee shall comply with both the applicable requirements governing the change and the ROP terms and conditions proposed in the application for the modification. During this time period, the permittee may choose to not comply with the existing ROP terms and conditions that the application seeks to change. However, if the permittee fails to comply with the ROP terms and conditions proposed in the application during this time period, the terms and conditions in the ROP are enforceable. **(R 336.1216(1)(c)(iii), R 336.1216(2)(d), R 336.1216(4)(d))**

Reopenings

34. A ROP shall be reopened by the department prior to the expiration date and revised by the department under any of the following circumstances:
    a. If additional requirements become applicable to this stationary source with three or more years remaining in the term of the ROP, but not if the effective date of the new applicable requirement is later than the ROP expiration date. **(R 336.1217(2)(a)(i))**
    b. If additional requirements pursuant to Title IV of the CAA become applicable to this stationary source. **(R 336.1217(2)(a)(ii))**
    c. If the department determines that the ROP contains a material mistake, information required by any applicable requirement was omitted, or inaccurate statements were made in establishing emission limits or the terms or conditions of the ROP. **(R 336.1217(2)(a)(iii))**
    d. If the department determines that the ROP must be revised to ensure compliance with the applicable requirements. **(R 336.1217(2)(a)(iv))**

Renewals

35. For renewal of this ROP, an administratively complete application shall be considered timely if it is received by the department not more than 18 months, but not less than 6 months, before the expiration date of the ROP. **(R 336.1210(8))**

Stratospheric Ozone Protection

36. If the permittee is subject to Title 40 of the Code of Federal Regulations (CFR), Part 82 and services, maintains, or repairs appliances except for motor vehicle air conditioners (MVAC), or disposes of appliances containing refrigerant, including MVAC and small appliances, or if the permittee is a refrigerant reclaimer, appliance owner or a manufacturer of appliances or recycling and recovery equipment, the permittee shall comply with all applicable standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F.

37. If the permittee is subject to 40 CFR Part 82, and performs a service on motor (fleet) vehicles when this service involves refrigerant in the MVAC, the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed by the original equipment manufacturer. The term MVAC as used in Subpart B does not include the air-tight sealed refrigeration system used for refrigerated cargo or an air conditioning system on passenger buses using Hydrochlorofluorocarbon-22 refrigerant.

Risk Management Plan

38. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall register and submit to the USEPA the required data related to the risk management plan for reducing the probability of accidental releases of any regulated substances listed pursuant to Section 112(r)(3) of the CAA as amended in 40 CFR 68.130. The list of substances, threshold quantities, and accident prevention regulations promulgated under 40 CFR Part 68, do not limit in any way the general duty provisions under Section 112(r)(1).

39. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall comply with the requirements of 40 CFR Part 68, no later than the latest of the following dates as provided in 40 CFR 68.10(a):
    a. June 21, 1999,
    b. Three years after the date on which a regulated substance is first listed under 40 CFR 68.130, or
    c. The date on which a regulated substance is first present above a threshold quantity in a process.

40. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall submit any additional relevant information requested by any regulatory agency necessary to ensure compliance with the requirements of 40 CFR Part 68.

41. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall annually certify compliance with all applicable requirements of Section 112(r) as detailed in Rule 213(4)(c)). **(40 CFR Part 68)**

Emission Trading

42. Emission averaging and emission reduction credit trading are allowed pursuant to any applicable interstate or regional emission trading program that has been approved by the Administrator of the USEPA as a part of Michigan's State Implementation Plan. Such activities must comply with Rule 215 and Rule 216. **(R 336.1213(12))**

Permit to Install (PTI)

43. The process or process equipment included in this permit shall not be reconstructed, relocated, or modified unless a PTI authorizing such action is issued by the department, except to the extent such action is exempt from the PTI requirements by any applicable rule.[2] **(R 336.1201(1))**

44. The department may, after notice and opportunity for a hearing, revoke PTI terms or conditions if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of the PTI or is violating the department's rules or the CAA.[2] **(R 336.1201(8), Section 5510 of Act 451)**

45. The terms and conditions of a PTI 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 the PTI. If a new owner or operator submits a written request to the department pursuant to Rule 219 and the department approves the request, this PTI 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. The written request shall be sent to the appropriate AQD District Supervisor, MDEQ.[2] **(R 336.1219)**

46. If the installation, reconstruction, relocation, or modification of the equipment for which PTI terms and conditions have been approved has not commenced within 18 months of the original PTI issuance date, or has been interrupted for 18 months, the applicable terms and conditions from that PTI, as incorporated into the ROP, shall become void unless otherwise authorized by the department. Furthermore, the person to whom that PTI was issued, or the designated authorized agent, shall notify the department via the Supervisor, Permit Section, MDEQ, AQD, P. O. Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, reconstruction, relocation, or modification of the equipment allowed by the terms and conditions from that PTI.[2] **(R 336.1201(4))**

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

B. SOURCE-WIDE CONDITIONS

Part B outlines the Source-Wide Terms and Conditions that apply to this stationary source. The permittee is subject to these special conditions for the stationary source in addition to the general conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply to this source, NA (not applicable) has been used in the table. If there are no Source-Wide Conditions, this section will be left blank.

C. EMISSION UNIT CONDITIONS

Part C outlines terms and conditions that are specific to individual emission units listed in the Emission Unit Summary Table. The permittee is subject to the special conditions for each emission unit in addition to the General Conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply, NA (not applicable) has been used in the table. If there are no conditions specific to individual emission units, this section will be left blank.

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
EUCOLDCLEANERS	One (1) 30-gallon miscellaneous metal parts cold cleaner using petroleum naptha.	08/29/1988	FGCOLDCLEANERS
EU0004	Shot forming work area. Emissions directed to Baghouse-0009.	07/11/2016	FG0009
EUASCASTDRYER1	30 ton/hour, 7 MMBtu/hour natural gas-fired shot dryer (No. 1). Controlled by Baghouse-0005.	07/15/1994	FG0005
EURMLTDUMPHOIST	Handles processed steel shot to be recycled to the EAF. Controlled by Baghouse-0005.	12/12/2000	FG0005
EUACSCRNLINEBINS	Cast steel shot storage tank(s). Controlled by Baghouse-0005.	07/15/1994	FG0005
EU#1LINEDRYELEV1	Elevator off of shot dryer. Controlled by Baghouse-0005.	06/01/1962	FG0005
EU#1LINEDRYELEV2	Elevator off of shot dryer. Controlled by Baghouse-0005.	06/01/1962	FG0005
EUAMALINEBEATSYS	(3) Amaline elevators, (2) Beaters, (2) Magnetic Separators. Controlled by Baghouse-0005.	11/01/1976	FG0005
EU#4BEATERSYSTEM	Tub Dump Hoist, Elevator, Classifier, Beater Cabinet. Controlled by Baghouse-0005.	1972	FG0005
EU0007	Process equipment utilized for producing, cleaning, and sizing of abrasive materials for shipment. Consists of the following equipment: No. 1 beater & elevator, No. 2 beater & elevator, No. 2 heat treat dryer elevator, No. 3 beater and (2) elevators, No. 4 beater and elevator, No. 6 rescreening line, grit screening line, grit screening line elevators (3), small grit machines (from 11 to 13 units), small grit machine elevators (from 11 to 13 units), small grit machines (11 units), small grit machine elevators (11), amaline elevators (3), water quench elevators (3), (2) new grit machines, and (3) new elevators.	11/01/1976 03/01/2004 02/01/2006 08/01/2006 07/09/2012	NA

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUEAF	A 30-ton/hour Whiting electric arc furnace (EAF) with a CO destruction device; emissions are collected by a hood and routed to Baghouse-0009. Three (3) furnace preheat burners; emissions are captured by the roof collector and routed to Baghouse-0009.	04/08/1994	FG0009
EUPOURING	Two (2) ladle preheat burners; four (4) pouring ladles; emissions from pouring into the ladles are captured by a hood with additional collection from a separate roof collector; (4) Tundish burners; emissions are captured by the roof collector (4) Casting tundish; emissions are captured by the roof collector additional collection is provided by a vent. All emissions from EUPOURING are routed to Baghouse-0009.	04/08/1994	FG0009
EUCASTINGTANK	Casting Tank. Emissions are routed to Baghouse-0009.	04/08/1994	FG0009
EUELECGEN	Natural gas-powered generator for emergency lighting with a rated capacity of 0.05 MMBtu/hour.	Before 2006	FGSI-RICEMACT
EUAUXFAN	300 hp auxiliary fan drawing fugitive emissions from within the Melt shop building when the 1750 hp main dust collector fan is not operating.	4/1/2016	FG0009
Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1290.			

EU0007
EMISSION UNIT CONDITIONS

DESCRIPTION

Process equipment utilized for producing, cleaning, and sizing of abrasive materials for shipment. Consists of the following equipment: No. 1 beater & elevator, No. 2 beater & elevator, No. 2 heat treat dryer elevator, No. 3 beater and (2) elevators, No. 4 beater and elevator, No. 6 rescreening line, grit screening line, grit screening line elevators (3), small grit machines (from 11 to 13 units), small grit machine elevators (from 11 to 13 units), small grit machines (11 units), small grit machine elevators (11), amaline elevators (3), water quench elevators (3), (2) new grit machines, and (3) new elevators.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

26,420 scfm fabric filter dust collector (baghouse)

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM	0.01 lbs per 1000 lbs of exhaust gas[a,2]	Hourly	EU0007	SC IV.2, SC VI.2, and SC IX.1	**R 336.1331(1)(c)**
2. PM10	1.2 pph[2]	Hourly	EU0007	SC IV.2, SC VI.2, and SC IX.1	**R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)**
3. PM2.5	1.2 pph[2]	Hourly	EU0007	SC IV.2, SC VI.2, and SC IX.1	**R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)**

[a] Calculated on a wet gas basis

4. Visible emissions from EU0007 shall not exceed a six-minute average of 5 percent opacity.[2] **(R 336.1301, R 336.1331)**

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate EU0007 unless the baghouse collector is installed, maintained, and operated in a satisfactory manner.[2] **(R 336.1331, R 336.1901, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))**

2. The permittee shall maintain and calibrate a portable differential pressure measuring device to conduct daily pressure drop readings for the EU0007 baghouse collector.[2] **(R 336.1301, R 336.1331, R 336.1901, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall complete all required records and calculations in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.[2] **(R 336.1301, R 336.1331, R 336.1901, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))**

2. The permittee shall monitor and record the pressure drop across the EU0007 baghouse collector on a daily basis.[2] **(R 336.1301, R 336.1331, R 336.1901, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))**

See Appendix 4

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**

2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**

3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8

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 Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV11	39 x 52[2]	12[2]	**R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)**

IX. OTHER REQUIREMENT(S)

1. Personnel responsible to assess opacity levels from the exhaust stack shall be trained and certified in conducting EPA Method 9 evaluations. **(R 336.1303)**

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

D. FLEXIBLE GROUP CONDITIONS

Part D outlines the terms and conditions that apply to more than one emission unit. The permittee is subject to the special conditions for each flexible group in addition to the General Conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply, NA (not applicable) has been used in the table. If there are no special conditions that apply to more than one emission unit, this section will be left blank.

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
FGCOLDCLEANERS	Miscellaneous metal parts degreasing using petroleum naphtha.	EUCOLDCLEANERS
FG0005	Shot processing equipment controlled by Baghouse-0005.	EUASCASTDRYER1 ← Delete EURMLTDUMPHOIST EUACSCRNLINEBINS ← Delete EU#1LINEDRYELEV1 EU#1LINEDRYELEV2 EUAMALINEBEATSYS EU#4BEATERSYSTEM
FG0009	A 30 ton/hour Whiting EAF with a CO destruction device that draws in outside air to help complete combustion; (3) furnace preheat burners; (2) ladle preheat burners and (4) pouring ladles; (4) casting tundish, (4) tundish preheat burners, (1) casting tank and shot forming area Controlled by fabric filter Baghouse-0009. (Also known as the Flowers or main EAF dust collector.)	EUEAF EUPOURING EUCASTINGTANK EUAUXFAN EU0004
FGMACT-YYYYY	The affected source is an existing electric arc furnace (EAF) steelmaking facility that is an area source of hazardous air pollutant (HAP) emissions. The affected source is an EAF steelmaking facility as defined by 40 CFR Part 63 Subpart YYYYY.	EUEAF
FGSI-RICEMACT	Existing emergency spark ignition engines < 500 HP that commenced construction or reconstruction before June 12, 2006 or New emergency spark ignition engines < 500 HP that shall meet the requirements of 40 CFR Part 63, Subpart ZZZZ in order to comply with 40 CFR Part 60 Subpart JJJJ.	EUELECGEN

FGCOLDCLEANERS
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278, 278a and Rule 281(2)(h) or Rule 285(2)(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.

Emission Unit: EUCOLDCLEANER

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

1. The permittee shall not use cleaning solvents containing more than five percent by weight of the following halogenated compounds: methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, chloroform, or any combination thereof. **(R 336.1213(2))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Cleaned parts shall be drained for no less than 15 seconds or until dripping ceases. **(R 336.1611(2)(b), R 336.1707(3)(b))**

2. The permittee shall perform routine maintenance on each cold cleaner as recommended by the manufacturer. **(R 336.1213(3))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The cold cleaner must meet one of the following design requirements:

   a. The air/vapor interface of the cold cleaner is no more than ten square feet. **(R 336.1281(2)(h))**

   b. The cold cleaner is used for cleaning metal parts and the emissions are released to the general in-plant environment. **(R 336.1285((2)r)(iv))**

2. The cold cleaner shall be equipped with a device for draining cleaned parts. **(R 336.1611(2)(b), R 336.1707(3)(b))**

3. All new and existing cold cleaners shall be equipped with a cover and the cover shall be closed whenever parts are not being handled in the cold cleaner. **(R 336.1611(2)(a), R 336.1707(3)(a))**

4. The cover of a new cold cleaner shall be mechanically assisted if the Reid vapor pressure of the solvent is more than 0.3 psia or if the solvent is agitated or heated. **(R 336.1707(3)(a))**

5. If the Reid vapor pressure of any solvent used in a new cold cleaner is greater than 0.6 psia; or, if any solvent used in a new cold cleaner is heated above 120 degrees Fahrenheit, then the cold cleaner must comply with at least one of the following provisions:

a. The cold cleaner must be designed such that the ratio of the freeboard height to the width of the cleaner is equal to or greater than 0.7. **(R 336.1707(2)(a))**

b. The solvent bath must be covered with water if the solvent is insoluble and has a specific gravity of more than 1.0. **(R 336.1707(2)(b))**

c. The cold cleaner must be controlled by a carbon adsorption system, condensation system, or other method of equivalent control approved by the AQD. **(R 336.1707(2)(c))**

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. For each new cold cleaner in which the solvent is heated, the solvent temperature shall be monitored and recorded at least once each calendar week during routine operating conditions. **(R 336.1213(3))**

2. The permittee shall maintain the following information on file for each cold cleaner: **(R 336.1213(3))**

   a. A serial number, model number, or other unique identifier for each cold cleaner.

   b. The date the unit was installed, manufactured or that it commenced operation.

   c. The air/vapor interface area for any unit claimed to be exempt under Rule 281(2)(h).

   d. The applicable Rule 201 exemption.

   e. The Reid vapor pressure of each solvent used.

   f. If applicable, the option chosen to comply with Rule 707(2).

3. The permittee shall maintain written operating procedures for each cold cleaner. These written procedures shall be posted in an accessible, conspicuous location near each cold cleaner. **(R 336.1611(3), R 336.1707(4))**

4. As noted in Rule 611(2)(c) and Rule 707(3)(c), if applicable, an initial demonstration that the waste solvent is a safety hazard shall be made prior to storage in non-closed containers. If the waste solvent is a safety hazard and is stored in non-closed containers, verification that the waste solvent is disposed of so that not more than 20 percent, by weight, is allowed to evaporate into the atmosphere shall be made on a monthly basis. **(R 336.1213(3), R 336.1611(2)(c), R 336.1707(3)(c))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**

2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**

3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

FG0005
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Shot processing equipment controlled by Baghouse-0005. (Also known as the Hard Cast dust collector.)

Emission Units: EUASCSTDRYER1, EURMLTDUMPHOIST, EUACSCRNLINEBINS, EU#1LINEDRYELEV1, EU#1LINEDRYELEV2, EUAMALINEBEATSYS, EU#4BEATERSYSTEM

POLLUTION CONTROL EQUIPMENT

Baghouse-0005 dust collector (20,000 SCFM)

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM	0.01 lb/ 1000 lb of exhaust gas[a,2]	Hourly	FG0005	SC VI.1 and Appendix 4	**R 336.1331(1)(c)**
2. PM10	0.90 pph[2]	Hourly	FG0005	SC VI.1 and Appendix 4	**R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)**
3. PM2.5	0.90 pph[2]	Hourly	FG0005	SC VI.1 and Appendix 4	**R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)**

[a] Calculated on a wet gas basis

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate the process lines and dryer unless the baghouse is installed and operating properly.[2] **(R 336.1331(1)(c), R 336.1910)**

2. The permittee shall not operate the process lines or dryer unless the Fugitive Dust Control Plan specified in Appendix 9 has been implemented and is maintained.[2] **(R 336.1371(1), R 336.1372, Act 451 324.5524)**

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall record, on a daily basis, the pressure drop across the baghouse. If an excursion occurs outside the normal operating parameters of 1.5 inches H_2O to 5.5 inches H_2O column, personnel shall observe the baghouse exhaust vent and roof monitor for visible emissions. If there are visible emissions:
   a. Visible emissions reading shall be made, according to EPA Method 9.
   b. Repairs or remedial action will be taken within 24 hours to correct the pressure drop excursion to within stated normal range.

   Recordkeeping shall be done in accordance with Appendix 4.
   Monthly summary reports are to be completed and made available, upon request by the District Supervisor, no later than 15 days after the completed month.[2] **(R 336.1910, R 336. 2803, R 336.2804, 40 CFR 52.21(c) & (d))**

2. The permittee shall inspect the dust collector for broken or damaged parts, on a monthly basis, and replace/repair the broken and damaged parts, as required. Monthly reports shall be completed and made available upon request of the District Supervisor no later than 15 days after the completed month.[2] **(R 336.1910, R 336. 2803, R 336.2804, 40 CFR 52.21(c) & (d))**

3. The permittee shall monitor, on a daily basis, areas/equipment of FG0005 that are subject to the Fugitive Dust Control Plan in Appendix 9. Logs shall be kept, noting the conditions observed and the actions taken.[2] **(R 336.1371(1), R 336.1372, Act 451 324.5524)**

See Appendices 4 and 9

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**

2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**

3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8

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 Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV12	36[2]	7[2]	R 336.2803, R 336.2804, 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).
[2] This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

FG0009
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

A 30 ton/hour Whiting EAF with a CO destruction device that draws in outside air to help complete combustion; (3) furnace preheat burners; (2) ladle preheat burners and (4) pouring ladles; (4) Casting tundish, (4) tundish preheat burners,(1) Casting tank and shot forming area Controlled by fabric filter Baghouse-0009. (Also known as the Flowers or main EAF dust collector.)

Emission Units: EUEAF, EUPOURING, EUCASTINGTANK, EUAUXFAN, EU0004 Gone? years ago.

POLLUTION CONTROL EQUIPMENT

Baghouse-0009 with a 1750 hp main dust collector fan and 300 hp auxiliary fan for removing fugitives from the Melt shop building when the main dust collector fan is not operating.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. CO	3.0 lbs per ton of melted steel[2]	One melting heat (a batch EAF melting cycle) normally 70 to 90 minutes in duration	FG0009	SC V.1, SC VI.7, Appendix 7	**R 336.1205(1)**
2. CO	90 pph on a 3-hour average[2]	One melting heat (a batch EAF melting cycle) normally 70 to 90 minutes in duration	FG0009	SC V.1	**R 336.1205(1) R 336.2803 R 336.2804 40 CFR 52.21(c) & (d)**
3. CO	322.5 tpy[2]	12-month rolling time period as determined at the end of each calendar month	FG0009	SC V.1, SC VI.8	**R 336.1205(1)**
4. PM	0.0052 gr/dscf[2]	Hourly	FG0009	SC VI.9	**40 CFR 60.272a(a)(1)**
5. PM	5.9 pph[2]	Hourly	FG0009	SC VI.9, and Appendix 7	**R 336.1331(1)(b)**
6. PM10	5.9 pph[2]	Hourly	FG0009	SC V.2	**R336.2803 R 336.2804 40 CFR 52.21(c) & (d)**
7. VE	3% opacity[2]	(3) 6-minute observations per day	EAF Control Device (Baghouse ridge vent)	SC VI.5	**R 336.1362(1) 40 CFR 60.272a(a)(3)**
8. VE	6% opacity[2]	(3) 6-minute observations, monthly	Melt shop*	SC VI.12	**R 336.1358(1) 40 CFR 60.272a(a)(3)**
9. VE	10% opacity[2]	(3) 6-minute observations, monthly	EAF Baghouse's Dust-handling system	SC VI.12	**40 CFR 60.272a(b)**
10. VE	20% opacity[2]	(3) 6-minute observations, monthly	EUPOURING Hot metal pouring from the Baghouse and the Melt Shop	SC VI.12	**R 336.1365(1) & (2)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
* Melt Shop fugitive emissions include only emissions from the EAF					

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Melted steel	30 tons per hour[2]	Based on three batch cycles	EUEAF	SC VI.6	**R 336.1205(1)(a)(i)**
2. Melted steel	20,000 tons per month[2]	As determined at the end of each calendar month	EUEAF	SC VI.6	**R 336.1205(1)(a)(i)**
3. Melted steel	215,000 tons per year[2]	12-month rolling time period as determined at the end of each calendar month	EUEAF	SC VI.6	**R 336.1205(1)(a)(i))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate the melting operation for more than 8500 hours per year, on a 12-month rolling time period, as determined at the end of each calendar month.[2] **(R 336.1205(1)(a)(ii)(B), R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))**

2. The permittee shall not operate the melting operation while any wall fan in the Melt Shop is turned on.[2,3] **(Administrative Consent Order EPA-5-17-113(a)-MI-05, 40 CFR 60.11(d) 40 CFR 63.69(e)(1)(i), 40 CFR52.21(c) & (d))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate the EAF unless the baghouse is installed, maintained and operated in a satisfactory manner.[2] **(R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))**

2. The permittee shall not operate the EAF unless the CO destruction device, with air injection, is installed and operating properly.[2] **(R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))**

3. The permittee shall not operate the EUAUXFAN unless a non-resettable hour meter for the fan is installed, maintained and operated in a satisfactory manner.[2] **(R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))**

4. If the CO emission rates, as indicated by the annual testing, are greater than 70% of any limit stated in SC I.1, I.2 or I.3, then the facility shall install a CO CEM system no later than December 1 of the same year that the testing was performed. The system shall comply with the requirements stipulated in 40 CFR Part 60, Appendix B.[2] **(40 CFR 60.13, 40 CFR Part 60, Appendix B)**

5. For all Melt Shop wall fans, the permittee shall install gravity louvers and controls that automatically disable the fans during EAF operation.[2, 3] **(Administrative Consent Order EPA-5-17-113(a)-MI-05, 40 CFR 60.11(d), 40 CFR 63.6(e)(1)(i), 40 CFR 52.21(c) & (d))**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. In lieu of continuous emissions monitoring system, each calendar year the permittee shall verify CO emissions rates from FG0009 by testing at owner's expense, in accordance with Department requirements, to demonstrate compliance with the emissions limits of SC I.1, I.2 and I.3. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office with 60 days following the last date of the test.[2] **(R 336.1205, R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))**

2. Upon request of the AQD District Supervisor, the permittee shall verify PM10 emission rates from the FG0009 baghouse by testing at owner's expense, in accordance with Department requirements. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office with 60 days following the last date of the test.[2] **(R 336.1205, R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))**

See Appendix 5

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall record, on a daily basis, the pressure drop across the baghouse. If an excursion occurs outside the normal operating parameters of 4.5 inches H_2O to 12.0 inches H_2O, personnel shall observe the baghouse exhaust vent and roof monitor for visible emissions. If there are visible emissions:
   a. Visible emissions reading shall be made, according to EPA Method 9.
   b. Repairs or remedial action will be taken within 24 hours to correct the pressure drop excursion to within stated normal range.

   Recordkeeping shall be done in accordance with Appendix 4.
   Monthly summary reports are to be completed and made available, upon request by the District Supervisor, no later than 15 days after the completed month.[2] **(R 336.1910, R 336. 2803, R 336.2804, 40 CFR 52.21(c) & (d), 40 CFR 60.272a(a)(2 and 3), 40 CFR 64.6(c)(1)(i and ii), 40 CFR 64.6(c)(2), and 40 CFR 64.7(d))**

2. The permittee shall inspect the dust collector for broken or damaged parts, on a monthly basis, and replace/repair the broken and damaged parts, as required. Monthly reports shall be completed and made available upon request of the District Supervisor, no later than 15 days after the completed month.[2] **(R 336.1910, R 336. 2803, R 336.2804, 40 CFR 52.21(c) & (d), 40 CFR 60.274a(d))**

3. The permittee shall record, on a once-per-shift basis, the furnace static pressure, fan motor amperes and damper position.[2] **(40 CFR 60.274a(b and c))**

4. The permittee shall monitor the baghouse dust-handling system, on a daily basis, for potential fugitive emissions. A log shall be kept of the conditions noted and the actions taken.[2] **(R 336.1910, 40 CFR 60.272a(b), 40 CFR 64.3(a)(2))**

5. The permittee shall conduct visible emission observations of the EAF's control device at least once per day for at least three 6-minute periods when the EAF is operating in the melting and refining period. If an excursion occurs (opacity 3% or greater), an investigation and corrective actions will be performed.[2] **(40 CFR 60.273a(c), 40 CFR 64.6(c)(1)(i),(ii))**

6. The permittee shall keep records of the tons of steel melted on a three-batch-cycle basis, on a monthly basis, and on a 12-month rolling basis. The permittee shall keep all records on file at the facility and make them available to the Department no later than the 15th day of the following month.[2] **(R 336.205(1)(a)(i))**

7. The permittee shall calculate CO emissions, in pounds per ton of melted steel, on a daily basis, in accordance with SC I.1. Calculations shall be based on the most recent CO source testing results and shall be formatted according to Appendix 7. Records of the daily calculations shall be compiled on a monthly basis. The permittee shall keep all records on file at the facility and make them available to the Department no later the 15th day of the following month.[2] **(R 336.205(1)(a)(i))**

8. The permittee shall calculate CO emissions in tons per year on a monthly basis and on a 12-month rolling basis, in accordance with SC I.3. The permittee shall keep all records on file at the facility and make them available to the Department no later the 15th day of the following month.[2] **(R 336.205(1)(a)(i))**

9. The permittee shall keep records of PM mass emission rate calculations, in pounds per hour, on a yearly basis, in accordance with the limit in SC I.4. Calculations shall be made according to Appendix 7, using the most recent source testing data. The permittee shall keep all records on file at the facility and make them available to the Department no later January 15th for the previous year.[2] **(R 336.1331(1)(b))**

10. The permittee shall record the hours of operation of the baghouse on a monthly basis and on a 12-month rolling basis. The baghouse is considered in operation anytime the primary baghouse fan or auxiliary fan, EUAUXFAN is in use.[2] **(R 336.1205(1)(a)(ii)(B))**

11. The permittee shall perform monthly operational status inspections of the equipment that is important to the performance of the total capture system (i.e., pressure sensors, dampers, and damper switches). This inspection shall include observations of the physical appearance of the equipment (e.g., presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in ductwork, and fan erosion). Any deficiencies shall be noted and proper maintenance performed.[2] **(40 CFR 60.274a(d), 40 CFR 64.3(a)(2))**

12. The permittee shall make visible emissions observations, on a monthly basis, of the EAF's emissions from the melt shop, the EAF baghouse's dust-handling system, and hot metal transfer emissions from the baghouse and from the melt shop. The permittee shall keep all records on file at the facility and make them available to the Department no later than the 15th day of the following month.[2] **(R 336.1358(1), R 336.1365(1), 40 CFR 60.272a(a)(3), 40 CFR 60.272a(b), 40 CFR 64.3(a)(2))**

13. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for 40 CFR Part 64 compliance, including data averages and calculations or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, in frequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. **(40 CFR 64.6(c)(3), 64.7(c))**

14. Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). **(40 CFR 64.7(d))**

15. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan and any activities undertaken to implement a quality improvement plan, and other information such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions. **(40 CFR 64.9(b)(1))**

16. The permittee shall properly maintain the monitoring system including keeping necessary parts for routine repair of the monitoring equipment. **(40 CFR64.7(b))**

See Appendices 4 and 7

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**

2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**

3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

4. Each semiannual report of monitoring deviations shall include summary information on the number, duration, and cause of CAM exceedances/excursions in the reporting period; and the corrective actions taken in response. If there were no excursions/exceedances in the reporting period, then this report shall include a statement that there were no excursions/exceedances. **(40 CFR 64.9(a)(2)(i))**

5. Each semi-annual report of monitoring and deviations shall include summary information on monitor downtime. If there were no periods of monitor downtime in the reporting period, then this report shall include a statement that there were no periods of monitor downtime. **(R 336.1213(3)(c), 40 CFR 64.9(a)(2)(ii))**

See Appendix 8

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 Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV13 (Baghouse ridge vent)	207.6[2]	100[2]	R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

1. Personnel responsible for assessing visible emissions from the exhaust stack or roof monitor shall be trained and certified in conducting EPA Method 9 evaluations.[2] **(40 CFR 60.273a(c))**

2. The permittee shall comply with all applicable requirements of 40 CFR Part 64.[2] **(40 CFR Part 64)**

3. The permittee shall comply with all applicable provisions of the New Source Performance Standard for "Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 17, 1983."[2] **(40 CFR Part 60, Subparts A and AAa)**

4. The permittee shall comply with all applicable provisions of the National Emissions Standard for Hazardous Air Pollutants for "Area Sources: Electric Arc Furnace Steelmaking Facilities."[2] **(40 CFR Part 63, Subparts A and YYYYY.)**

5. If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the AQD and if necessary, submit a proposed modification to the ROP to address the necessary monitoring changes. Such a modification may include but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. **(40 CFR 64.7(e))**

Footnotes:

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

[2] This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

[3] This condition is federally enforceable and was originally established in Administrative Consent Order No. EPA-5-17-13(a)-MI-05 and also pursuant to Act 451, Section 324.5503(b), and will remain in effect after termination of the consent order.

FGMACT-YYYYY
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

The affected source is an existing electric arc furnace (EAF) steelmaking facility that is an area source of hazardous air pollutant (HAP) emissions. The affected source is an EAF steelmaking facility as defined by 40 CFR Part 63, Subpart YYYYY.

Emission Unit: FG0009

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM	0.0052 gr/dscf[2]	Hourly	EAF control device	SC VI.2	**40 CFR 63.10686(b)(1)**
2. VE	6% opacity[2]	6-minute average	Melt Shop*	SC V.1	**40 CFR 63.10686(b)(2)**
-OR- If the new or existing affected source has a production capacity of less than 150,000 tons per year of stainless or specialty steel:					
1. PM	0.8 pounds per ton of steel charged -OR- 0.0052 gr/dscf[2]	Hourly	EAF control device	SC VI.2	**40 CFR 63.10686(c)(1)**
2. VE	6% opacity[2]	6-minute average	Melt Shop*	SC V.1	**40 CFR 63.10686(c)(2)**
* Melt shop fugitive emissions include only emissions from an EAF					

II. MATERIAL LIMIT(S)

1. For scrap managed as restricted metal scrap per 40 CFR 63.10685(a)(2), and used in the production of steel other than leaded steel, the permittee shall not charge to a furnace metallic scrap that contains scrap from motor vehicle bodies, engine blocks, oil filters, oily turnings, machine shop borings, transformers or capacitors containing polychlorinated biphenyls, lead-containing components, chlorinated plastics, or free organic liquids.[2] **(40 CFR 63.10685(a)(2))**

2. For scrap managed as restricted metal scrap per 40 CFR 63.10685(a)(2), and used in the production leaded steel, the permittee shall not charge to a furnace metallic scrap that contains scrap from motor vehicle bodies, engine blocks, oil filters, oily turnings, machine shop borings, transformers or capacitors containing polychlorinated biphenyls, lead-containing components, chlorinated plastics, or free organic liquids; except for:[2] **(40 CFR 63.10685(a)(2))**

   a. any post-consumer engine blocks, post-consumer oil filters, or oily turnings that are processed or cleaned to the extent practicable such that the materials do not include lead components, chlorinated plastics, or free organic liquids

b. motor vehicle scrap used for the recovery of chromium or nickel content and the mercury, and the requirements of 40 CFR 63.10685 (b)(3) are met.

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.[2] **(40 CFR 63.10885)**

2. The permittee shall implement and maintain an approved plan to address the Control of Contaminants from Scrap, by the applicable compliance date specified in 40 CFR 63.10680. The plan shall be kept on site and include the following, as applicable:

   a. Pollution prevention plan and/or restricted metallic scrap plan **(40 CFR 63.10685(a))**
   b. Mercury requirements plan **(40 CFR 63.10685(b))**

   The permittee shall revise the plan within 30 days after a change occurs.[2] **(40 CFR 63.10685)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate any EAF at the steelmaking facility unless a capture and collection system is properly installed, maintained, and operated. Collection from an EAF must include charging, melting and tapping operations.[2] **(40 CFR 63.10686(a))**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall conduct each opacity test for melt shop fugitive emissions according to the requirements in 40 CFR 63.6(h) and Method 9 of Appendix A-4 of 40 CFR Part 60. When emissions from an EAF are combined with emissions from emission sources not subject to this subpart, compliance with the melt shop opacity limit shall be based on emissions from only the emission sources subject to this subpart. 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 within 60 days following the last date of the test.[2] **(40 CFR 63.10686(d)(2))**

2. During any performance test, the permittee shall monitor and record the information specified in 40 CFR 60.274a(h) for all heats covered by the test.[2] **(40 CFR 63.10686(d)(3)))**

See Appendix 5

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall keep records, on a monthly basis, as required by 40 CFR 63.10685(c), concerning the Control of Contaminants from Scrap plan, or records that the scrap does not contain motor vehicle scarp, as applicable. The permittee shall keep all records on file at the facility and make them available to the Department upon request.[2] **(40 CFR 63.10685(c))**

2. The permittee shall keep a record of the initial compliance performance test results demonstrating compliance with PM emission limits from the EAF, as required in 40 CFR 63.7 and 40 CFR 63.10686(d)(1)(i)-(vi).[2] **(40 CFR 63.10686)**

3. The permittee shall comply with the requirements of the General Provisions (40 CFR Part 63, Subpart A) according to Table 1 in 40 CFR Part 63, Subpart YYYYY.[2] **(40 CFR 63.10690(a))**

4. The notification of compliance status required by 40 CFR 63.9(h) shall include each applicable certification of compliance, signed by a responsible official, according to 40 CFR 63.10690(b)(1)-(6).[2] **(40 CFR 63.10690(b))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**

2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**

3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

4. If subject to the requirements for a site-specific plan for mercury under 40 CFR 63.10685 (b)(1) of this section, 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 shall include a certification that the permittee has conducted inspections or taken other means of corroboration as required under 40 CFR 63.10685(b)(1)(ii)(C). This information may be included in the semiannual compliance reports required under SC VII.2.[2] **(40 CFR 63.10685(c)(i)(2))**

5. The permittee shall submit semiannual compliance reports regarding the control of contaminants from scrap according to the requirements in 40 CFR 63.10(e). The report must clearly identify any deviation from the requirements in 40 CFR 63.10685 (a) and (b) and the corrective action taken. The permittee shall identify which compliance option in paragraph (b) applies to each scrap provider, contract, or shipment.[2] **(40 CFR 63.10685(c)(3))**

See Appendix 8

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 YYYYY for Area Sources: Electric Arc Furnace Steelmaking Facilities, by the initial compliance date.[2] **(40 CFR Part 63, Subparts A and YYYYY)**

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

FGSI-RICEMACT
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Existing emergency spark ignition engine < 500 HP that commenced construction or reconstruction before June 12, 2006 shall meet the requirements of 40 CFR Part 63, Subpart ZZZZ.

Emission Unit: EU-ELECGEN

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Any stationary RICE shall be installed, maintained, and operated in a satisfactory manner. The permittee shall meet the following work practice standards as specified in 40 CFR 63.6603 & Table 2d item 5:

   a. Change oil and filter every 500 hours of operation or annually, whichever comes first, except as allowed in SC III.4;

   b. Inspect the spark plugs every 1,000 hours of operation or annually, whichever comes first; and

   c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

   If the affected source is being operated during an emergency and it is not possible to shut down the engine to perform the work practice standards on the schedule required, the work practice standard can be delayed until the emergency is over. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State or local law has been abated. Sources must report any failure to perform the work practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable. **(40 CFR 63.6603; 40 CFR Part 63, Subpart ZZZZ, Table 2d, Item 5)**

2. The permittee must be in compliance with the operating limitations in this subpart that apply to the source at all times. **(40 CFR 63.6605(a))**

3. The permittee at all times must operate and maintain any affected source, including associated monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. **(40 CFR 63.6605(b))**

4. The permittee may utilize an oil analysis program in order to extend the specified oil change requirement. The oil analysis must be performed at the same frequency as oil changes are required in Table 2c. **(40 CFR 63.6625(j))**

5. If the results of oil analysis exceed limits as specified below, the permittee must change the oil within two days or before commencing operation, whichever is later.

   a. Total Acid Number is less than 30% of the Total Acid Number of the oil when new.

   b. Viscosity of the oil has changed by more than 20% from the viscosity of the oil when new.

   c. Percent water content (by volume) is greater than 0.5%. **(40 CFR 63.6625(j))**

6. The permittee shall maintain and operate the stationary RICE per the manufacturer's emission related written instructions or develop a maintenance plan which must provide for the maintenance and operation of the engine in a manner consistent with good air pollution control practices for minimizing emissions. **(40 CFR 63.6625(e), 40 CFR 63.6640(a), 40 CFR Part 63, Subpart ZZZZ, Table 6, Item 9)**

7. The permittee shall minimize the time spent at idle during startup and minimize the startup time of the stationary RICE to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup apply. **(40 CFR 63.6625(h))**

8. The permittee shall not exceed 100 hours per year for maintenance checks and readiness testing. The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but 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 RICE beyond 100 hours per year. **(40 CFR 63.6640(f)(1)(ii))**

9. The permittee may operate the stationary RICE for non-emergency situations for up to 50 hours per year as allowed in 40 CFR 63.6640 (f)(1)(iii). **(40 CFR 63.6640(f)(1)(iii))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain the stationary RICE with a non-resettable hour meter to track the hours of operation. **(40 CFR 63.6625(f))**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. If using an oil analysis program, the permittee shall, at a minimum analyze the Total Acid Number, Viscosity, and percent water content. **(40 CFR 63.6625(i))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall keep the following records:

   a. Records of the occurrence and duration of each malfunction of operation or the air monitoring equipment. **(40 CFR 63.6655(a)(2), 40 CFR 63.6660)**

   b. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore malfunctioning process and monitoring equipment to its normal or usual manner of operation. **(40 CFR 63.6655(a)(5), 40 CFR 63.6660, 40 CFR 63.6605(b))**

   c. Records to demonstrate continuous compliance with operating limitations in SC III.1. **(40 CFR 63.6655(d), 40 CFR 63.6660)**

d. Records of the maintenance conducted to demonstrate the stationary RICE was operated and maintained according to the manufacturer's emission related written instructions or developed maintenance plan. **(40 CFR 63.6655(e)(2), 40 CFR 63.6660)**

e. Records of hours of operation recorded through the non-resettable hour meter. The permittee shall document how many hours were spent during emergency operation; including what classified the operation as emergency and how many hours were spent during non-emergency operation. **(40 CFR 63.6655(f)(2), 40 CFR 63.6660)**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**

2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**

3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8

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 ZZZZ, for Stationary Reciprocating Internal Combustion Engines by the initial compliance date of October 19, 2013. **(40 CFR 63.6595(a)(1), 40 CFR Part 63, Subparts A and ZZZZ)**

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

E. NON-APPLICABLE REQUIREMENTS

At the time of the ROP issuance, the AQD has determined that no non-applicable requirements have been identified for incorporation into the permit shield provision set forth in the General Conditions in Part A pursuant to Rule 213(6)(a)(ii).

APPENDICES

Appendix 1. Abbreviations and Acronyms

Common Acronyms		Pollutant / Measurement Abbreviations	
AQD	Air Quality Division	acfm	Actual cubic feet per minute
BACT	Best Available Control Technology	BTU	British Thermal Unit
CAA	Clean Air Act	°C	Degrees Celsius
CAM	Compliance Assurance Monitoring	CO	Carbon Monoxide
CEM	Continuous Emission Monitoring	CO_2e	Carbon Dioxide Equivalent
CFR	Code of Federal Regulations	dscf	Dry standard cubic foot
COM	Continuous Opacity Monitoring	dscm	Dry standard cubic meter
Department/ department	Michigan Department of Environmental Quality	°F	Degrees Fahrenheit
		gr	Grains
EU	Emission Unit	HAP	Hazardous Air Pollutant
FG	Flexible Group	Hg	Mercury
GACS	Gallons of Applied Coating Solids	hr	Hour
GC	General Condition	HP	Horsepower
GHGs	Greenhouse Gases	H_2S	Hydrogen Sulfide
HVLP	High Volume Low Pressure*	kW	Kilowatt
ID	Identification	lb	Pound
IRSL	Initial Risk Screening Level	m	Meter
ITSL	Initial Threshold Screening Level	mg	Milligram
LAER	Lowest Achievable Emission Rate	mm	Millimeter
MACT	Maximum Achievable Control Technology	MM	Million
MAERS	Michigan Air Emissions Reporting System	MW	Megawatts
MAP	Malfunction Abatement Plan	NMOC	Non-methane Organic Compounds
MDEQ	Michigan Department of Environmental Quality	NO_x	Oxides of Nitrogen
		ng	Nanogram
MSDS	Material Safety Data Sheet	PM	Particulate Matter
NA	Not Applicable	PM10	Particulate Matter equal to or less than 10 microns in diameter
NAAQS	National Ambient Air Quality Standards		
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter
NSPS	New Source Performance Standards	pph	Pounds per hour
NSR	New Source Review	ppm	Parts per million
PS	Performance Specification	ppmv	Parts per million by volume
PSD	Prevention of Significant Deterioration	ppmw	Parts per million by weight
PTE	Permanent Total Enclosure	psia	Pounds per square inch absolute
PTI	Permit to Install	psig	Pounds per square inch gauge
RACT	Reasonable Available Control Technology	scf	Standard cubic feet
ROP	Renewable Operating Permit	sec	Seconds
SC	Special Condition	SO_2	Sulfur Dioxide
SCR	Selective Catalytic Reduction	TAC	Toxic Air Contaminant
SNCR	Selective Non-Catalytic Reduction	Temp	Temperature
SRN	State Registration Number	THC	Total Hydrocarbons
TEQ	Toxicity Equivalence Quotient	tpy	Tons per year
USEPA/EPA	United States Environmental Protection Agency	µg	Microgram
		µm	Micrometer or Micron
VE	Visible Emissions	VOC	Volatile Organic Compounds
		yr	Year

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

Appendix 2. Schedule of Compliance

The permittee certified in the ROP application that this stationary source is in compliance with all applicable requirements and the permittee shall continue to comply with all terms and conditions of this ROP. A Schedule of Compliance is not required. **(R 336.1213(4)(a), R 336.1119(a)(ii))**

Appendix 3. Monitoring Requirements

Specific monitoring requirement procedures, methods or specifications are detailed in Part A or the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, this appendix is not applicable.

Appendix 4. Recordkeeping

The permittee shall use the following approved formats and procedures for the recordkeeping requirements referenced in FGCOLDCLEANERS, EU0007, FG0005 and FG0009. Alternative formats must be approved by the AQD District Supervisor.

FGCOLDCLEANERS:

1. Solvent usage, in gallons, and density of solvent to be compiled and recorded during solvent addition or replacement.

2. Date of addition or exchange will be recorded along with solvent identification, requiring a non-HAP degreasing fluid.

EU0007, FG0005 and FG0009:

1. Pressure drop readings, in inches of H_2O, will be recorded at the fabric filter collector at least once per day and placed in an appropriate log sheet for review that will also identify the date, time and collector in use. These sheets will also contain the normal operational pressure drop range of the collector. Any deviations outside the normal operational ranges shall require recordings every four hours until such time that the collector is brought back to within that normal operational range. The logs will contain comments that indicate the possible reason for the deviation and on actions taken to bring the collector back to within the normal operational range. The log sheets will also contain zeroing checks of the gauges at least once per week. Gauge lines will be purged as needed with such action recorded on the log sheets.

2. Whenever visual observations are necessary to evaluate performance of the system, the results shall be recorded in 15 second increments using the required format as outlined in EPA Method 9. This data will be placed in a tabular form and compiled on a quarterly (3 month) basis.

Appendix 5. Testing Procedures

Specific testing requirement plans, procedures, and averaging times are detailed in the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, this appendix is not applicable.

Appendix 6. Permits to Install

The following table lists any PTIs issued or ROP revision applications received since the effective date of the previously issued ROP No. MI-ROP-B1754-2013. Those ROP revision applications that are being issued concurrently with this ROP renewal are identified by an asterisk (*). Those revision applications not listed with an asterisk were processed prior to this renewal.

Source-Wide PTI No MI-PTI-B1754-2013 is being reissued as Source-Wide PTI No. MI-PTI-B1754-2018.

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
PTI 53-12A	NA	For the last two pick up points for AAF dust collector (shot forming area collection) moved to the Flowers dust collector (EAF and Melt shop collection).	FG0009
PTI 53-12B	NA	For the addition of an auxiliary 300 hp bypass fan to the Flowers dust collector (EAF and Melt shop collection).	FG0009
PTI 53-12C	NA	To add federally enforceable permit requirements so that all wall fan installations in the Melt shop have gravity louvers installed, and be operated by controls which disable the fans during EAF production. The intent of the fans is to prove ventilation for Melt shop repair activities, keeping the heat buildup in the shop minimized. The two south wall fans are direct drive fans, each producing approximately 10,000 cfm each. The east wall fan is belt driven and approximately 20,000 cfm.	FG0009

Appendix 7. Emission Calculations

The permittee shall use the following calculations in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable requirements referenced in EU0005 and FG0009.

FG0005:

For the purpose of assessing the PM emissions in pounds per hour, the following formula shall be used:
Emission (lbs/hr)= (scfm) x (60 min/hr) x (0.075 lbs/cu. ft) x (emission conc. in lbs/1000 lbs air)

FG0009:

1. For the purpose of assessing the CO emissions in pounds per ton of melted metal, the following formula shall be used:
   Emission rate in lbs CO/ton metal melted = (CO emissions in lbs/hr) / (melt rate in tons/hr)

2. For the purposes of assessing the PM emissions in pounds per hour, the following formula shall be used:
   Emission (lbs/hr) = (emissions concentration in grains/dscf) x (flow rate in scfm) x (60min/hr) x (1 lb./7000 grains)

Appendix 8. Reporting

A. Annual, Semiannual, and Deviation Certification Reporting

The permittee shall use the MDEQ, AQD, Report Certification form (EQP 5736) and MDEQ, AQD, Deviation Report form (EQP 5737) for the annual, semiannual and deviation certification reporting referenced in the Reporting Section of the Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Alternative formats must meet the provisions of Rule 213(4)(c) and Rule 213(3)(c)(i), respectively, and be approved by the AQD District Supervisor.

B. Other Reporting

Specific reporting requirement formats and procedures are detailed in Part A or the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, Part B of this appendix is not applicable.

Appendix 9. Miscellaneous - Fugitive Dust Program

FUGITIVE DUST PROGRAM

HARD CAST DUST COLLECTOR

ERVIN AMASTEEL

915 TABOR STREET, ADRIAN, MICHIGAN 49221

ORIGINAL DATE: 5-8-91
REVISION DATE: 8-2-08

I. Use of Technologies, Operating Practices or Methods to control Fugitive Hard Cast Dust listed in R336.1372.

A. Transporting of Bulk Hard Cast Dust.

1. Loaded Roura Hoppers of Hard Cast Dust-will be transported with Lift Trucks at speeds not to exceed 5 M.P.H. so Dust will not. blow out of the Hoppers. This will be implemented immediately.

2. All Lift Trucks and Roura Hoppers used to transport Hard Cast Dust will be cleaned of residue at the pile site after unloading. This will be implemented immediately.

3. Roura Hoppers used to transport Hard Cast Dust will be filled to a level (6" under top of Hopper) that prevents spillage during transport. This will be implemented immediately.

4. Roura Hoppers being used to transport Hard Cast Dust will be inspected every three months to insure that they do not leak. This will be implemented immediately.

B. Conveying of Hard Cast Dust.

1. Roura Hoppers used to transport Hard Cast Dust will be Positioned under the Dust Separator Non-Metallic Discharge Point so that the Discharge Dust drops no further than the total height of the Roura Hopper. This will be implemented immediately.

2. Spilled Hard Cast Dust under the Discharge Points will be cleaned up daily. This will. be implemented immediately.

C. Building Ventilation of Hard Cast Dust.

1. Localized Hoods and Duct Work are currently in operation to collect Fugitive Dust off the Hard Cast Operation. These Hoods and Duct Work are directly connected to the Hard Cast Dust Collector.

II. Methods for controlling dust Generated from driveways between the months of April through October.

A. When visible opacity is noted at wind speeds less than 30 MPH the concrete and asphalt driveways will be swept or treated by approved methods. Dirt driveways will be sprayed with water or other approved methods.

Michigan Department of Environment, Great Lakes, and Energy (EGLE) - Air Quality Division
Michigan Air Emissions Reporting System (MAERS)

2021 Source Form

Authorized under 1994 P.A. 451, as amended. Completion of information is required. Civil and/or criminal penalties possible for providing false information.

FORM REFERENCE

Form Type	**Source**	AQD Source ID (SRN)	**B1754**

SOURCE IDENTIFICATION

Source Name	**Ervin Amasteel Division**				
NAICS Code	**327910**			Portable	**No**
Physical Address (Street Address 1)			**915 TABOR ST.**		
Physical Address (Street Address 2)					
County	**LENAWEE**	City	**ADRIAN**	Zip Code	**49221-**
Latitude	**41.8852216 Decimal Degrees**			Longitude	**-84.02622116 Decimal Degrees**
Horizontal Collection Method	**001**				
Source Map Scale Number				Horizontal Accuracy Measure	**50 Meters**
Horizontal Reference Datum Code	**02**			Reference Point Code	**102**
Principal Product	**CAST STEEL ABRASIVES**			Number of Employees	**90**
Employer Federal Identification Number	**380522445**				

OWNER INFORMATION

Owner Name	**Ervin Industies, Inc.**		
Mailing Address (Street Address 1)	**3893 Research Park Drive**		
Mailing Address (Street Address 2)			
City	**Ann Arbor**	State/Pro vince	**MI**
Country	**USA**	Zip or Postal Code	**48106-**

Michigan Department of Environment, Great Lakes, and Energy (EGLE)
Michigan Air Emissions Reporting System (MAERS)

2021 Contact Form

Authorized under 1994 P.A. 451, as amended. Completion of information is required. Civil and/or criminal penalties possible for providing false information.

FORM REFERENCE			
Form Type	**Contact**	AQD Source ID (SRN)	**B1754**

EMISSION INVENTORY CONTACT (PRIMARY) INFORMATION			
Contact First Name, Middle Initial	**John M**	Contact Last Name	**Gramm**
Contact Title	**Plant Manager**		
Mailing Address (Street Address 1)	**915 Tabor St.**		
Mailing Address (Street Address 2)			
City **Adrian**	State/Province **MI**	Country **USA**	Zip Code **49221**
E-Mail Address (if available)	**jgramm@ervinindustries.com**		
Telephone Number	**(517) 2656118**	Telephone Extension	**1311**
Fax Number	**(517) 2655636**		

EMISSION INVENTORY CONTACT (SECONDARY) INFORMATION			
Contact First Name, Middle Initial	**Richard F**	Contact Last Name	**Payne III**
Contact Title	**Plant Engineer**		
Mailing Address (Street Address 1)	**915 Tabor St.**		
Mailing Address (Street Address 2)			
City **Adrian**	State/Province **MI**	Country **USA**	Zip Code **49221**
E-Mail Address (if available)	**rpayne@ervinindustries.com**		
Telephone Number	**(517) 2656118**	Telephone Extension	**1317**
Fax Number	**(517) 2655636**		

Michigan Department of Environment, Great Lakes, and Energy (EGLE) - Air Quality Division
Michigan Air Emissions Reporting System (MAERS)

2021 Contact Form

Authorized under 1994 P.A. 451, as amended. Completion of information is required. Civil and/or criminal penalties possible for providing false information.

FORM REFERENCE			
Form Type	**Contact**	AQD Source ID (SRN)	**B1754**

FEE INVOICE CONTACT INFORMATION (Fee Subject Facilities Only)			
Contact First Name, Middle Initial	**John M**	Contact Last Name	**Gramm**
Contact Title	**Plant Manager**		
Mailing Address (Street Address 1)	**915 Tabor St.**		
Mailing Address (Street Address 2)			
City **Adrian**	State/Province **MI**	Country **USA**	Zip Code **49221**
E-Mail Address (if available)	**jgramm@ervinindustries.com**		
Telephone Number	**(517) 2656118**	Telephone Extension	
Fax Number	**(517) 2655636**		

Michigan Department of Environment, Great Lakes, and Energy (EGLE) - Air Quality Division
Michigan Air Emissions Reporting System (MAERS)

2021 Stack Form

Authorized under 1994 P.A. 451, as amended. Completion of information is required. Civil and/or criminal penalties possible for providing false information.

FORM REFERENCE			
Form Type	**Stack**	AQD Source ID (SRN)	**B1754**

STACK IDENTIFICATION					
AQD Stack ID	**SV0002**		Stack ID	**SV12**	
Dismantle Date (MM/DD/YYYY)					
Stack Description	**Shot Drying Dust Collector.**				
Actual Stack Height Above Ground	**7**	feet	Inside Stack Diameter	**36**	inches
Exit Gas Temperature	**70**	degrees Fahrenheit	Actual Exit Gas Flow Rate	**20000**	cubic feet per minute
Stack Orientation	**Vertical**		Exit Velocity of Gas (in feet per second):	**47.157**	
Latitude	**41.8852216**	Decimal Degrees	Longitude	**-84.02622116**	Decimal Degrees
Horizontal Collection Method	**001**	Source Map Scale Number	Horizontal Accuracy Measure	**50**	Meters
Horizontal Reference Datum Code	**02**		Reference Point Code	**102**	
Bypass Stack Only	**N**		If yes, Stack ID of main stack		

Michigan Department of Environment, Great Lakes, and Energy (EGLE) - Air Quality Division
Michigan Air Emissions Reporting System (MAERS)

2021 Stack Form

Authorized under 1994 P.A. 451, as amended. Completion of information is required. Civil and/or criminal penalties possible for providing false information.

FORM REFERENCE			
Form Type	**Stack**	AQD Source ID (SRN)	**B1754**

STACK IDENTIFICATION					
AQD Stack ID	**SV0003**		Stack ID	**SV11**	
Dismantle Date (MM/DD/YYYY)					
Stack Description		**Stack for Processing Dust Collector**			
Actual Stack Height Above Ground	**12**	feet	Inside Stack Diameter	**51.96**	inches
Exit Gas Temperature	**70**	degrees Fahrenheit	Actual Exit Gas Flow Rate	**26420**	cubic feet per minute
Stack Orientation	**Vertical**		Exit Velocity of Gas (in feet per second):	**29.9031**	
Latitude	**41.8852216**	Decimal Degrees	Longitude	**-84.02622116**	Decimal Degrees
Horizontal Collection Method	**001**	Source Map Scale Number	Horizontal Accuracy Measure	**50**	Meters
Horizontal Reference Datum Code	**02**		Reference Point Code	**102**	
Bypass Stack Only	**N**		If yes, Stack ID of main stack		

Michigan Department of Environment, Great Lakes, and Energy (EGLE) - Air Quality Division
Michigan Air Emissions Reporting System (MAERS)

2021 Stack Form

Authorized under 1994 P.A. 451, as amended. Completion of information is required. Civil and/or criminal penalties possible for providing false information.

FORM REFERENCE			
Form Type	**Stack**	AQD Source ID (SRN)	**B1754**

STACK IDENTIFICATION					
AQD Stack ID	**SV0004**		Stack ID	**SV13**	
Dismantle Date (MM/DD/YYYY)					
Stack Description		**Stack for 30 Ton Electric Arc Furnace**			
Actual Stack Height Above Ground	**100**	feet	Inside Stack Diameter	**207.6**	inches
Exit Gas Temperature	**165**	degrees Fahrenheit	Actual Exit Gas Flow Rate	**225000**	cubic feet per minute
Stack Orientation	**Vertical**		Exit Velocity of Gas (in feet per second):	**15.9533**	
Latitude	**41.8852216**	Decimal Degrees	Longitude	**-84.02622116**	Decimal Degrees
Horizontal Collection Method	**001**	Source Map Scale Number	Horizontal Accuracy Measure	**50**	Meters
Horizontal Reference Datum Code	**02**		Reference Point Code	**102**	
Bypass Stack Only	**N**		If yes, Stack ID of main stack		

Michigan Department of Environment, Great Lakes, and Energy (EGLE) - Air Quality Division
Michigan Air Emissions Reporting System (MAERS)

2021 Emission Unit Form

Authorized under 1994 P.A. 451, as amended. Completion of information is required. Civil and/or criminal penalties possible for providing false information.

FORM REFERENCE	
Form Type **Emission Unit**	AQD Source ID (SRN) **B1754**

EMISSION UNIT IDENTIFICATION		
AQD Emission Unit ID **EU0024**	EU ID **EU0008A**	
NAICS Code (if different from Source Form) **327910**		
Installation Date MM/DD/YYYY **06/01/1962**	Dismantle Date MM/DD/YYYY	
Emission Unit Description - (Include Process Equipment and Control Devices)	**#1 Line W.Q. Furnaces (13)- Nominal 1.05 mmbtu/hr ea, Max 2.0 mmbtu/hr.**	
Emission Unit Type	**Furnace**	
Is this a combustion source?	**Y**	
Is this combustion source used to generate electricity?	**N**	
Design Capacity **26.0**	Design Capacity Numerator **MMBTU**	Design Capacity Denominator **HR**
Maximum Nameplate Capacity		Megawatts

RULE 201 APPLICABILITY	
Grandfathered? **Y**	
Exempt from Rule 201?	If Yes, Rule Number
If Rule 201 Exempt, Is Throughput Below Reporting Thresholds?	
Permit? **N**	If Yes, Enter the Permit Number
Is This Emission Unit Required To Report Emissions To MAERS For This Reporting Year? **Y**	

CONTROL DEVICE(S)

EMISSION UNIT STACK(S)

Michigan Department of Environment, Great Lakes, and Energy (EGLE) - Air Quality Division
Michigan Air Emissions Reporting System (MAERS)

2021 Emission Unit Form

Authorized under 1994 P.A. 451, as amended. Completion of information is required. Civil and/or criminal penalties possible for providing false information.

FORM REFERENCE	
Form Type **Emission Unit**	AQD Source ID (SRN) **B1754**

EMISSION UNIT IDENTIFICATION		
AQD Emission Unit ID **EU0010**	EU ID **EU0008G**	
NAICS Code (if different from Source Form) **327910**		
Installation Date MM/DD/YYYY **05/01/1967**	Dismantle Date MM/DD/YYYY	
Emission Unit Description - (Include Process Equipment and Control Devices)	**#3 Line Tempering Furnaces (12) - 0.67 mmbtu/hr ea, Max 1.2 mmbtu/hr.**	
Emission Unit Type	**Furnace**	
Is this a combustion source?	**Y**	
Is this combustion source used to generate electricity?	**N**	
Design Capacity **14.4**	Design Capacity Numerator **MMBTU**	Design Capacity Denominator **HR**
Maximum Nameplate Capacity		Megawatts

RULE 201 APPLICABILITY

Grandfathered? **Y**	
Exempt from Rule 201?	If Yes, Rule Number
If Rule 201 Exempt, Is Throughput Below Reporting Thresholds?	
Permit? **N**	If Yes, Enter the Permit Number
Is This Emission Unit Required To Report Emissions To MAERS For This Reporting Year? **Y**	

CONTROL DEVICE(S)

EMISSION UNIT STACK(S)

Michigan Department of Environment, Great Lakes, and Energy (EGLE) - Air Quality Division
Michigan Air Emissions Reporting System (MAERS)

2021 Emission Unit Form

Authorized under 1994 P.A. 451, as amended. Completion of information is required. Civil and/or criminal penalties possible for providing false information.

FORM REFERENCE	
Form Type **Emission Unit**	AQD Source ID (SRN) **B1754**

EMISSION UNIT IDENTIFICATION		
AQD Emission Unit ID **EU0007**	EU ID **EU0008D**	
NAICS Code (if different from Source Form) **327910**		
Installation Date MM/DD/YYYY **07/01/1963**	Dismantle Date MM/DD/YYYY	
Emission Unit Description - (Include Process Equipment and Control Devices)	**#2 Line W.Q. Furnaces (12) - Nominal 1.05 mmbtu/hr ea, Max 2.0 mmbtu/hr.**	
Emission Unit Type	**Furnace**	
Is this a combustion source?	**Y**	
Is this combustion source used to generate electricity?	**N**	
Design Capacity **24.0**	Design Capacity Numerator **MMBTU**	Design Capacity Denominator **HR**
Maximum Nameplate Capacity		Megawatts

RULE 201 APPLICABILITY

Grandfathered? **Y**	
Exempt from Rule 201?	If Yes, Rule Number
If Rule 201 Exempt, Is Throughput Below Reporting Thresholds?	
Permit? **N**	If Yes, Enter the Permit Number
Is This Emission Unit Required To Report Emissions To MAERS For This Reporting Year? **Y**	

CONTROL DEVICE(S)

EMISSION UNIT STACK(S)

Michigan Department of Environment, Great Lakes, and Energy (EGLE) - Air Quality Division
Michigan Air Emissions Reporting System (MAERS)

2021 Emission Unit Form

Authorized under 1994 P.A. 451, as amended. Completion of information is required. Civil and/or criminal penalties possible for providing false information.

FORM REFERENCE	
Form Type **Emission Unit**	AQD Source ID (SRN) **B1754**

EMISSION UNIT IDENTIFICATION		
AQD Emission Unit ID **EU0005**	EU ID **EU0008B**	
NAICS Code (if different from Source Form) **327910**		
Installation Date MM/DD/YYYY **06/01/1962**	Dismantle Date MM/DD/YYYY	
Emission Unit Description - (Include Process Equipment and Control Devices)	**#1 Line Tempering Furnaces (8) - Nominal 0.67 mmbtu/hr ea, Max 1.2 mmbtu/hr**	
Emission Unit Type	**Furnace**	
Is this a combustion source?	**Y**	
Is this combustion source used to generate electricity?	**N**	
Design Capacity **9.60**	Design Capacity Numerator **MMBTU**	Design Capacity Denominator **HR**
Maximum Nameplate Capacity		Megawatts

RULE 201 APPLICABILITY	
Grandfathered? **Y**	
Exempt from Rule 201?	If Yes, Rule Number
If Rule 201 Exempt, Is Throughput Below Reporting Thresholds?	
Permit? **N**	If Yes, Enter the Permit Number
Is This Emission Unit Required To Report Emissions To MAERS For This Reporting Year? **Y**	

CONTROL DEVICE(S)

EMISSION UNIT STACK(S)

Michigan Department of Environment, Great Lakes, and Energy (EGLE) - Air Quality Division
Michigan Air Emissions Reporting System (MAERS)

2021 Emission Unit Form

Authorized under 1994 P.A. 451, as amended. Completion of information is required. Civil and/or criminal penalties possible for providing false information.

FORM REFERENCE	
Form Type **Emission Unit**	AQD Source ID (SRN) **B1754**

EMISSION UNIT IDENTIFICATION		
AQD Emission Unit ID **EU0028**	EU ID **EU0005**	
NAICS Code (if different from Source Form) **327910**		
Installation Date MM/DD/YYYY **09/01/1972**	Dismantle Date MM/DD/YYYY	
Emission Unit Description - (Include Process Equipment and Control Devices)	**Ascast Dryer, Ascast Holding Tank, ReMelt Dump Hoist, #2 Beater & Elevator, #3 Beater & Elevators (2), #4 Beater & Dump Hoist & Elevator, Amaline Elevators (3), #1 Line Dryer Elevators (2), and Bag House (Fabric Filter).**	
Emission Unit Type	**Direct-fired Dryer**	
Is this a combustion source?	**Y**	
Is this combustion source used to generate electricity?	**N**	
Design Capacity **7**	Design Capacity Numerator **MMBTU**	Design Capacity Denominator **HR**
Maximum Nameplate Capacity		Megawatts

RULE 201 APPLICABILITY	
Grandfathered? **N**	
Exempt from Rule 201? **N**	If Yes, Rule Number
If Rule 201 Exempt, Is Throughput Below Reporting Thresholds?	
Permit? **Y**	If Yes, Enter the Permit Number **MI-ROP-B1754-2007a**
Is This Emission Unit Required To Report Emissions To MAERS For This Reporting Year? **Y**	

CONTROL DEVICE(S)
21. Control Device Code **FLTR,FABRIC**

EMISSION UNIT STACK(S)
22. Stack ID **SV12**

Michigan Department of Environment, Great Lakes, and Energy (EGLE) - Air Quality Division
Michigan Air Emissions Reporting System (MAERS)

2021 Emission Unit Form

Authorized under 1994 P.A. 451, as amended. Completion of information is required. Civil and/or criminal penalties possible for providing false information.

FORM REFERENCE	
Form Type **Emission Unit**	AQD Source ID (SRN) **B1754**

EMISSION UNIT IDENTIFICATION		
AQD Emission Unit ID **EU0006**	EU ID **EU0008C**	
NAICS Code (if different from Source Form) **327910**		
Installation Date MM/DD/YYYY **06/01/1962**	Dismantle Date MM/DD/YYYY	
Emission Unit Description - (Include Process Equipment and Control Devices)	**#1 Line W.Q. Dryer(s) (2) - 3.0 mmbtu/hr, and 4.0 mmbtu/hr.**	
Emission Unit Type	**Direct-fired Dryer**	
Is this a combustion source?	**Y**	
Is this combustion source used to generate electricity?	**N**	
Design Capacity **7.0**	Design Capacity Numerator **MMBTU**	Design Capacity Denominator **HR**
Maximum Nameplate Capacity		Megawatts

RULE 201 APPLICABILITY

Grandfathered? **Y**	
Exempt from Rule 201?	If Yes, Rule Number
If Rule 201 Exempt, Is Throughput Below Reporting Thresholds?	
Permit? **N**	If Yes, Enter the Permit Number
Is This Emission Unit Required To Report Emissions To MAERS For This Reporting Year? **Y**	

CONTROL DEVICE(S)

EMISSION UNIT STACK(S)

Michigan Department of Environment, Great Lakes, and Energy (EGLE) - Air Quality Division
Michigan Air Emissions Reporting System (MAERS)

2021 Emission Unit Form

Authorized under 1994 P.A. 451, as amended. Completion of information is required. Civil and/or criminal penalties possible for providing false information.

FORM REFERENCE	
Form Type **Emission Unit**	AQD Source ID (SRN) **B1754**

EMISSION UNIT IDENTIFICATION		
AQD Emission Unit ID **EU0009**	EU ID **EU0008F**	
NAICS Code (if different from Source Form) **327910**		
Installation Date MM/DD/YYYY **07/01/1963**	Dismantle Date MM/DD/YYYY	
Emission Unit Description - (Include Process Equipment and Control Devices)	**#2 Line W.Q. Dryer #2**	
Emission Unit Type	**Direct-fired Dryer**	
Is this a combustion source?	**Y**	
Is this combustion source used to generate electricity?	**N**	
Design Capacity **0.25**	Design Capacity Numerator **MMBTU**	Design Capacity Denominator **HR**
Maximum Nameplate Capacity		Megawatts

RULE 201 APPLICABILITY	
Grandfathered? **Y**	
Exempt from Rule 201?	If Yes, Rule Number
If Rule 201 Exempt, Is Throughput Below Reporting Thresholds?	
Permit? **N**	If Yes, Enter the Permit Number
Is This Emission Unit Required To Report Emissions To MAERS For This Reporting Year? **Y**	

CONTROL DEVICE(S)

EMISSION UNIT STACK(S)

Michigan Department of Environment, Great Lakes, and Energy (EGLE) - Air Quality Division
Michigan Air Emissions Reporting System (MAERS)

2021 Emission Unit Form

Authorized under 1994 P.A. 451, as amended. Completion of information is required. Civil and/or criminal penalties possible for providing false information.

FORM REFERENCE	
Form Type **Emission Unit**	AQD Source ID (SRN) **B1754**

EMISSION UNIT IDENTIFICATION		
AQD Emission Unit ID **EU0008**	EU ID **EU0008E**	
NAICS Code (if different from Source Form) **327910**		
Installation Date MM/DD/YYYY **07/01/1963**	Dismantle Date MM/DD/YYYY	
Emission Unit Description - (Include Process Equipment and Control Devices)	**#2 Line W.Q. Dryer #1**	
Emission Unit Type	**Direct-fired Dryer**	
Is this a combustion source?	**Y**	
Is this combustion source used to generate electricity?	**N**	
Design Capacity **6.0**	Design Capacity Numerator **MMBTU**	Design Capacity Denominator **HR**
Maximum Nameplate Capacity		Megawatts

RULE 201 APPLICABILITY	
Grandfathered? **Y**	
Exempt from Rule 201?	If Yes, Rule Number
If Rule 201 Exempt, Is Throughput Below Reporting Thresholds?	
Permit? **N**	If Yes, Enter the Permit Number
Is This Emission Unit Required To Report Emissions To MAERS For This Reporting Year? **Y**	

CONTROL DEVICE(S)

EMISSION UNIT STACK(S)

Michigan Department of Environment, Great Lakes, and Energy (EGLE) - Air Quality Division
Michigan Air Emissions Reporting System (MAERS)

2021 Emission Unit Form

Authorized under 1994 P.A. 451, as amended. Completion of information is required. Civil and/or criminal penalties possible for providing false information.

FORM REFERENCE	
Form Type **Emission Unit**	AQD Source ID (SRN) **B1754**

EMISSION UNIT IDENTIFICATION			
AQD Emission Unit ID **EU0030**		EU ID **EU0009**	
NAICS Code (if different from Source Form) **327910**			
Installation Date MM/DD/YYYY **04/08/1994**		Dismantle Date MM/DD/YYYY	
Emission Unit Description - (Include Process Equipment and Control Devices)	**30 ton Electric Arc Furnace & associated components: Furnace burners (3), Ladle burners (2), Tundish burners (4), Ladles (4), Tundish (4).**		
Emission Unit Type	**Other combustion**		
Is this a combustion source?	**Y**		
Is this combustion source used to generate electricity?	**N**		
Design Capacity **7**	Design Capacity Numerator **MMBTU**	Design Capacity Denominator **HR**	
Maximum Nameplate Capacity		Megawatts	

RULE 201 APPLICABILITY			
Grandfathered? **N**			
Exempt from Rule 201? **N**		If Yes, Rule Number	
If Rule 201 Exempt, Is Throughput Below Reporting Thresholds?			
Permit? **Y**		If Yes, Enter the Permit Number	**MI-ROP-B1754-2007a**
Is This Emission Unit Required To Report Emissions To MAERS For This Reporting Year?	**Y**		

CONTROL DEVICE(S)	
21. Control Device Code	**FLTR,FABRIC**

EMISSION UNIT STACK(S)	
22. Stack ID	**SV13**

Michigan Department of Environment, Great Lakes, and Energy (EGLE) - Air Quality Division
Michigan Air Emissions Reporting System (MAERS)

2021 Emission Unit Form

Authorized under 1994 P.A. 451, as amended. Completion of information is required. Civil and/or criminal penalties possible for providing false information.

FORM REFERENCE	
Form Type **Emission Unit**	AQD Source ID (SRN) **B1754**

EMISSION UNIT IDENTIFICATION			
AQD Emission Unit ID **EU0023**		EU ID **EUCOLDCLEANER**	
NAICS Code (if different from Source Form) **327910**			
Installation Date MM/DD/YYYY **08/29/1988**		Dismantle Date MM/DD/YYYY	
Emission Unit Description - (Include Process Equipment and Control Devices) **Solvent cleaning**			
Emission Unit Type **Degreaser**			
Is this a combustion source? **N**			
Is this combustion source used to generate electricity?			
Design Capacity	Design Capacity Numerator	Design Capacity Denominator	
Maximum Nameplate Capacity		Megawatts	

RULE 201 APPLICABILITY			
Grandfathered? **N**			
Exempt from Rule 201? **Y**		If Yes, Rule Number **Rule 281(h)**	
If Rule 201 Exempt, Is Throughput Below Reporting Thresholds? **Y**			
Permit? **Y**		If Yes, Enter the Permit Number **MI-ROP-B1754-2007a**	
Is This Emission Unit Required To Report Emissions To MAERS For This Reporting Year? **Y**			

CONTROL DEVICE(S)

EMISSION UNIT STACK(S)

Michigan Department of Environment, Great Lakes, and Energy (EGLE) - Air Quality Division
Michigan Air Emissions Reporting System (MAERS)

2021 Emission Unit Form

Authorized under 1994 P.A. 451, as amended. Completion of information is required. Civil and/or criminal penalties possible for providing false information.

FORM REFERENCE	
Form Type **Emission Unit**	AQD Source ID (SRN) **B1754**

EMISSION UNIT IDENTIFICATION			
AQD Emission Unit ID **EU0029**		EU ID **EU0007**	
NAICS Code (if different from Source Form) **327910**			
Installation Date MM/DD/YYYY **11/01/1976**		Dismantle Date MM/DD/YYYY	
Emission Unit Description - (Include Process Equipment and Control Devices)	**#1 Beater and Elevator, W.Q. Screen Elevators (3), Small Grit Machine Elevators (15), Small Grit Machines (15), Grit ReScreen Elevators (2), Grit ReRun Elevator (1), #3 ReScreen and Dump Hoist, #6 ReScreen and Dump Hoist, Grit Screen Line Elevators (3), Fabric Filter (Bag House).**		
Emission Unit Type	**Crusher**		
Is this a combustion source?	**N**		
Is this combustion source used to generate electricity?			
Design Capacity	Design Capacity Numerator	Design Capacity Denominator	
Maximum Nameplate Capacity		Megawatts	

RULE 201 APPLICABILITY

Grandfathered? **N**			
Exempt from Rule 201? **N**		If Yes, Rule Number	
If Rule 201 Exempt, Is Throughput Below Reporting Thresholds?			
Permit? **Y**		If Yes, Enter the Permit Number	**MI-ROP-B1754-2007a**
Is This Emission Unit Required To Report Emissions To MAERS For This Reporting Year?			**Y**

CONTROL DEVICE(S)

21. Control Device Code **FLTR,FABRIC**

EMISSION UNIT STACK(S)

22. Stack ID **SV11**

Michigan Department of Environment, Great Lakes, and Energy (EGLE) - Air Quality Division
Michigan Air Emissions Reporting System (MAERS)

2021 Reporting Group Form

Authorized under 1994 P.A. 451, as amended. Completion of this form is optional.

FORM REFERENCE			
Form Type	**Reporting Group**	AQD Source ID (SRN)	**B1754**

REPORTING GROUP IDENTIFICATION			
AQD Reporting Group ID	**RG0032**	Reporting Group ID	**RGFURNACEGROUP1**
Reporting Group Description	**COMBINED ALL HEAT TREAT FURNACES AND DRYERS**		

REPORTING GROUP EMISSION UNITS	
7. Emission Unit ID	**EU0008A**
7. Emission Unit ID	**EU0008B**
7. Emission Unit ID	**EU0008C**
7. Emission Unit ID	**EU0008D**
7. Emission Unit ID	**EU0008E**
7. Emission Unit ID	**EU0008F**
7. Emission Unit ID	**EU0008G**

Michigan Department of Environment, Great Lakes, and Energy (EGLE) - Air Quality Division
Michigan Air Emissions Reporting System (MAERS)

2021 Activity Form

Authorized under 1994 P.A. 451, as amended. Completion of information is required. Civil and/or criminal penalties possible for providing false information.

FORM REFERENCE					
Form Type	**Activity**	AQD Source ID (SRN)	**B1754**	EU ID	**EUCOLDCLEANER**

ACTIVITY INFORMATION			
Source Classification Code(SCC)	**40100296**		
SCC Comment	**Mineral Spirits Degreasing (replaces obsolete SCC 40100295)**		
SEASONAL MATERIAL USAGE SCHEDULE, IF THROUGHPUT IS > 0, THEN SEASONAL PERCENTAGES MUST TOTAL 100%			
Winter (Jan,Feb, Dec)	Spring (Mar-May)	Summer (Jun-Aug)	Fall (Sep-Nov)
23	**26**	**26**	**25**
OPERATING SCHEDULE			
Hours per Day	Days per Week	Days per Year	
2	**5**	**257**	
MATERIAL INFORMATION			
Material Code	Material Throughput	Unit Code	
SOLVENTS	**108**	**GAL**	
Material Description	**mineral spirits**		
VOC Content (coatings or solvent)	**100 % by Weight**	Density	**6.7 LB/GAL**
BTUs (fuel)			
Sulfur Content (fuel)	**% by Weight**	Ash Content (fuel)	**% by Weight**

ATTACHMENT:

Document Name: **Solvent Use Report** File Name: **Solvent Record.pdf**

Document Name: **MAERS Calc Sheet** File Name: **MAERS Calc Sheet 2021.pdf**

Michigan Department of Environment, Great Lakes, and Energy (EGLE) - Air Quality Division
Michigan Air Emissions Reporting System (MAERS)

2021 Activity Form

Authorized under 1994 P.A. 451, as amended. Completion of information is required. Civil and/or criminal penalties possible for providing false information.

FORM REFERENCE					
Form Type	**Activity**	AQD Source ID (SRN)	**B1754**	EU ID	**EU0005**

ACTIVITY INFORMATION			
Source Classification Code(SCC)	**30490003**		
SCC Comment	**As-Cast Drying**		
SEASONAL MATERIAL USAGE SCHEDULE, IF THROUGHPUT IS > 0, THEN SEASONAL PERCENTAGES MUST TOTAL 100%			
Winter (Jan,Feb, Dec)	Spring (Mar-May)	Summer (Jun-Aug)	Fall (Sep-Nov)
23	**26**	**26**	**25**
OPERATING SCHEDULE			
Hours per Day	Days per Week	Days per Year	
16	**5**	**257**	
MATERIAL INFORMATION			
Material Code	Material Throughput	Unit Code	
NATURAL GAS	**32.4726**	**MMCF**	
Material Description	**Natural Gas**		
VOC Content (coatings or solvent)	**% by Weight**	Density	
BTUs (fuel)	**1020 BTU/FT3**		
Sulfur Content (fuel)	**0 % by Weight**	Ash Content (fuel)	**0 % by Weight**

ATTACHMENT:

Document Name: **Gas Usage** File Name: **2021 Gas Usage.pdf**

Document Name: **MAERS Calc Sheet** File Name: **MAERS Calc Sheet 2021.pdf**

Michigan Department of Environment, Great Lakes, and Energy (EGLE) - Air Quality Division
Michigan Air Emissions Reporting System (MAERS)

2021 Activity Form

Authorized under 1994 P.A. 451, as amended. Completion of information is required. Civil and/or criminal penalties possible for providing false information.

FORM REFERENCE					
Form Type	**Activity**	AQD Source ID (SRN)	**B1754**	EU ID	**EU0005**

ACTIVITY INFORMATION			
Source Classification Code(SCC)	**30400799**		
SCC Comment	**As-cast dryer #1, As-cast bins, remelt dump, and fabric filter**		
SEASONAL MATERIAL USAGE SCHEDULE, IF THROUGHPUT IS > 0, THEN SEASONAL PERCENTAGES MUST TOTAL 100%			
Winter (Jan,Feb, Dec)	Spring (Mar-May)	Summer (Jun-Aug)	Fall (Sep-Nov)
23	**26**	**26**	**25**
OPERATING SCHEDULE			
Hours per Day	Days per Week	Days per Year	
16	**5**	**257**	
MATERIAL INFORMATION			
Material Code	Material Throughput	Unit Code	
MATERIAL	**668.55**	**TON**	
Material Description	**steel shot abrasive collectate**		
VOC Content (coatings or solvent)	**0 % by Weight**	Density	
BTUs (fuel)			
Sulfur Content (fuel)	**0 % by Weight**	Ash Content (fuel)	**0 % by Weight**

ATTACHMENT:

Document Name:	**AsCast Op Record**	File Name:	**AsCast operating record.pdf**
Document Name:	**MAERS Calc Sheet**	File Name:	**MAERS Calc Sheet 2021.pdf**

Michigan Department of Environment, Great Lakes, and Energy (EGLE) - Air Quality Division
Michigan Air Emissions Reporting System (MAERS)

2021 Activity Form

Authorized under 1994 P.A. 451, as amended. Completion of information is required. Civil and/or criminal penalties possible for providing false information.

FORM REFERENCE					
Form Type	**Activity**	AQD Source ID (SRN)	**B1754**	EU ID	**EU0007**

ACTIVITY INFORMATION			
Source Classification Code(SCC)	**30400799**		
SCC Comment	**Processing Dust Collector**		
SEASONAL MATERIAL USAGE SCHEDULE, IF THROUGHPUT IS > 0, THEN SEASONAL PERCENTAGES MUST TOTAL 100%			
Winter (Jan,Feb, Dec)	Spring (Mar-May)	Summer (Jun-Aug)	Fall (Sep-Nov)
23	**26**	**26**	**25**
OPERATING SCHEDULE			
Hours per Day	Days per Week	Days per Year	
24	**5**	**257**	
MATERIAL INFORMATION			
Material Code	Material Throughput	Unit Code	
MATERIAL	**101.96**	**TON**	
Material Description	**steel shot and grit-fines-collectate**		
VOC Content (coatings or solvent)	**% by Weight**	Density	
BTUs (fuel)			
Sulfur Content (fuel)	**% by Weight**	Ash Content (fuel)	**% by Weight**

ATTACHMENT:

Document Name: **Processing Dust 4.4.6-38f** File Name: **4.4.6-38f processing dust.pdf**

Document Name: **MAERS Calc Sheet** File Name: **MAERS Calc Sheet 2021.pdf**

Michigan Department of Environment, Great Lakes, and Energy (EGLE) - Air Quality Division
Michigan Air Emissions Reporting System (MAERS)

2021 Activity Form

Authorized under 1994 P.A. 451, as amended. Completion of information is required. Civil and/or criminal penalties possible for providing false information.

FORM REFERENCE					
Form Type	**Activity**	AQD Source ID (SRN)	**B1754**	EU ID	**EU0009**

ACTIVITY INFORMATION			
Source Classification Code(SCC)	**30400733**		
SCC Comment	**Dust Collector for 40 Ton EAF**		
SEASONAL MATERIAL USAGE SCHEDULE, IF THROUGHPUT IS > 0, THEN SEASONAL PERCENTAGES MUST TOTAL 100%			
Winter (Jan,Feb, Dec)	Spring (Mar-May)	Summer (Jun-Aug)	Fall (Sep-Nov)
23	**26**	**26**	**25**
OPERATING SCHEDULE			
Hours per Day	Days per Week	Days per Year	
16	**5**	**257**	
MATERIAL INFORMATION			
Material Code	Material Throughput	Unit Code	
MATERIAL	**668.55**	**TON**	
Material Description	**baghouse collectate**		
VOC Content (coatings or solvent)	**% by Weight**	Density	
BTUs (fuel)			
Sulfur Content (fuel)	**% by Weight**	Ash Content (fuel)	**% by Weight**

Michigan Department of Environment, Great Lakes, and Energy (EGLE) - Air Quality Division
Michigan Air Emissions Reporting System (MAERS)

2021 Activity Form

Authorized under 1994 P.A. 451, as amended. Completion of information is required. Civil and/or criminal penalties possible for providing false information.

FORM REFERENCE					
Form Type	**Activity**	AQD Source ID (SRN)	**B1754**	EU ID	**EU0009**

ACTIVITY INFORMATION			
Source Classification Code(SCC)	**30490003**		
SCC Comment	**Ladle & Tundish Heating**		
SEASONAL MATERIAL USAGE SCHEDULE, IF THROUGHPUT IS > 0, THEN SEASONAL PERCENTAGES MUST TOTAL 100%			
Winter (Jan,Feb, Dec)	Spring (Mar-May)	Summer (Jun-Aug)	Fall (Sep-Nov)
23	**26**	**26**	**25**
OPERATING SCHEDULE			
Hours per Day	Days per Week	Days per Year	
16	**5**	**257**	
MATERIAL INFORMATION			
Material Code	Material Throughput	Unit Code	
NATURAL GAS	**20.2954**	**MMCF**	
Material Description	**natural gas**		
VOC Content (coatings or solvent)	**% by Weight**	Density	
BTUs (fuel)	**1020 BTU/FT3**		
Sulfur Content (fuel)	**0 % by Weight**	Ash Content (fuel)	**0 % by Weight**

ATTACHMENT:

Document Name:	**Gas Usage**	File Name:	**2021 Gas Usage.pdf**
Document Name:	**MAERS Calc Sheet**	File Name:	**MAERS Calc Sheet 2021.pdf**
Document Name:	**Melting Record**	File Name:	**Melting Production Record.pdf**

Michigan Department of Environment, Great Lakes, and Energy (EGLE) - Air Quality Division
Michigan Air Emissions Reporting System (MAERS)

2021 Activity Form

Authorized under 1994 P.A. 451, as amended. Completion of information is required. Civil and/or criminal penalties possible for providing false information.

FORM REFERENCE					
Form Type	**Activity**	AQD Source ID (SRN)	**B1754**	EU ID	**EU0009**

ACTIVITY INFORMATION			
Source Classification Code(SCC)	**30400701**		
SCC Comment	**40 Ton EAF**		
SEASONAL MATERIAL USAGE SCHEDULE, IF THROUGHPUT IS > 0, THEN SEASONAL PERCENTAGES MUST TOTAL 100%			
Winter (Jan,Feb, Dec)	Spring (Mar-May)	Summer (Jun-Aug)	Fall (Sep-Nov)
23	**26**	**26**	**25**
OPERATING SCHEDULE			
Hours per Day	Days per Week	Days per Year	
16	**5**	**257**	
MATERIAL INFORMATION			
Material Code	Material Throughput	Unit Code	
IRON	**94602**	**TON**	
Material Description	**steel**		
VOC Content (coatings or solvent)	**% by Weight**	Density	
BTUs (fuel)			
Sulfur Content (fuel)	**% by Weight**	Ash Content (fuel)	**% by Weight**

ATTACHMENT:

Document Name:	**Melting Record**	File Name:	**Melting Production Record.pdf**
Document Name:	**MAERS Calc Sheet**	File Name:	**MAERS Calc Sheet 2021.pdf**

Michigan Department of Environment, Great Lakes, and Energy (EGLE) - Air Quality Division
Michigan Air Emissions Reporting System (MAERS)

2021 Activity Form

Authorized under 1994 P.A. 451, as amended. Completion of information is required. Civil and/or criminal penalties possible for providing false information.

FORM REFERENCE					
Form Type	**Activity**	AQD Source ID (SRN)	**B1754**	EU ID	**RGFURNACEGROUP1**

ACTIVITY INFORMATION			
Source Classification Code(SCC)	**30490003**		
SCC Comment	**Natural gas used for heat treat furnaces**		
SEASONAL MATERIAL USAGE SCHEDULE, IF THROUGHPUT IS > 0, THEN SEASONAL PERCENTAGES MUST TOTAL 100%			
Winter (Jan,Feb, Dec)	Spring (Mar-May)	Summer (Jun-Aug)	Fall (Sep-Nov)
23	**26**	**26**	**25**
OPERATING SCHEDULE			
Hours per Day	Days per Week	Days per Year	
24	**5**	**257**	
MATERIAL INFORMATION			
Material Code	Material Throughput	Unit Code	
NATURAL GAS	**199.656**	**MMCF**	
Material Description	**NATURAL GAS USED TO HEAT TREAT STEEL**		
VOC Content (coatings or solvent)	**% by Weight**	Density	
BTUs (fuel)	**1020 BTU/FT3**		
Sulfur Content (fuel)	**0 % by Weight**	Ash Content (fuel)	**0 % by Weight**

ATTACHMENT:

Document Name: **Gas Usage** File Name: **2021 Gas Usage.pdf**

Document Name: **MAERS Calc Sheet** File Name: **MAERS Calc Sheet 2021.pdf**

Michigan Department of Environment, Great Lakes, and Energy (EGLE) - Air Quality Division
Michigan Air Emissions Reporting System (MAERS)

2021 Emissions Form

Authorized under 1994 P.A. 451, as amended. Completion of information is required. Civil and/or criminal penalties possible for providing false information.

FORM REFERENCE					
Form Type	**Emissions**	AQD Source ID (SRN)	**B1754**	EU ID	**EU0009**
SCC	**30400701**	Material Code	**IRON**		

EMISSION INFORMATION			
Pollutant Code	**NOX**	Annual Emissions	**18920.4 LB**
Emission Basis	**MAERS EF**		
List Emission Factor	**2.00**	Exponent	**-1**
Emission Factor Unit Code	**LB / TON**	Control Efficiency	**%**
Comment			

EMISSION INFORMATION			
Pollutant Code	**VOC**	Annual Emissions	**33110.7 LB**
Emission Basis	**MAERS EF**		
List Emission Factor	**3.50**	Exponent	**-1**
Emission Factor Unit Code	**LB / TON**	Control Efficiency	**%**
Comment			

EMISSION INFORMATION			
Pollutant Code	**SO2**	Annual Emissions	**22704.48 LB**
Emission Basis	**MAERS EF**		
List Emission Factor	**2.40**	Exponent	**-1**
Emission Factor Unit Code	**LB / TON**	Control Efficiency	**%**
Comment			

Michigan Department of Environment, Great Lakes, and Energy (EGLE) - Air Quality Division
Michigan Air Emissions Reporting System (MAERS)

2021 Emissions Form

Authorized under 1994 P.A. 451, as amended. Completion of information is required. Civil and/or criminal penalties possible for providing false information.

FORM REFERENCE					
Form Type	**Emissions**	AQD Source ID (SRN)	**B1754**	EU ID	**EU0009**
SCC	**30400733**	Material Code	**MATERIAL**		

EMISSION INFORMATION			
Pollutant Code	**PM2.5,FLTRBL**	Annual Emissions	**1337.11 LB**
Emission Basis	**Mass Bal**		
List Emission Factor		Exponent	
Emission Factor Unit Code		Control Efficiency	%
Comment			

Michigan Department of Environment, Great Lakes, and Energy (EGLE) - Air Quality Division
Michigan Air Emissions Reporting System (MAERS)

2021 Emissions Form

Authorized under 1994 P.A. 451, as amended. Completion of information is required. Civil and/or criminal penalties possible for providing false information.

FORM REFERENCE					
Form Type	**Emissions**	AQD Source ID (SRN)	**B1754**	EU ID	**EU0009**
SCC	**30490003**	Material Code	**NATURAL GAS**		

EMISSION INFORMATION			
Pollutant Code	**VOC**	Annual Emissions	**56.83 LB**
Emission Basis	**MAERS EF**		
List Emission Factor	**2.80**	Exponent	**0**
Emission Factor Unit Code	**LB / MMCF**	Control Efficiency	**%**
Comment			

EMISSION INFORMATION			
Pollutant Code	**NOX**	Annual Emissions	**2841.35 LB**
Emission Basis	**MAERS EF**		
List Emission Factor	**1.40**	Exponent	**2**
Emission Factor Unit Code	**LB / MMCF**	Control Efficiency	**%**
Comment			

EMISSION INFORMATION			
Pollutant Code	**SO2**	Annual Emissions	**12.18 LB**
Emission Basis	**MAERS EF**		
List Emission Factor	**6.00**	Exponent	**-1**
Emission Factor Unit Code	**LB / MMCF**	Control Efficiency	**%**
Comment			

Michigan Department of Environment, Great Lakes, and Energy (EGLE) - Air Quality Division
Michigan Air Emissions Reporting System (MAERS)

2021 Emissions Form

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FORM REFERENCE					
Form Type	**Emissions**	AQD Source ID (SRN)	**B1754**	EU ID	**RGFURNACEGROUP1**
SCC	**30490003**	Material Code	**NATURAL GAS**		

EMISSION INFORMATION			
Pollutant Code	**VOC**	Annual Emissions	**559.04 LB**
Emission Basis	**MAERS EF**		
List Emission Factor	**2.80**	Exponent	**0**
Emission Factor Unit Code	**LB / MMCF**	Control Efficiency	**%**
Comment			

EMISSION INFORMATION			
Pollutant Code	**NOX**	Annual Emissions	**27951.8 LB**
Emission Basis	**MAERS EF**		
List Emission Factor	**1.40**	Exponent	**2**
Emission Factor Unit Code	**LB / MMCF**	Control Efficiency	**%**
Comment			

EMISSION INFORMATION			
Pollutant Code	**SO2**	Annual Emissions	**119.79 LB**
Emission Basis	**MAERS EF**		
List Emission Factor	**6.00**	Exponent	**-1**
Emission Factor Unit Code	**LB / MMCF**	Control Efficiency	**%**
Comment			

Michigan Department of Environment, Great Lakes, and Energy (EGLE) - Air Quality Division
Michigan Air Emissions Reporting System (MAERS)

2021 Emissions Form

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FORM REFERENCE					
Form Type	**Emissions**	AQD Source ID (SRN)	**B1754**	EU ID	**EU0005**
SCC	**30490003**	Material Code	**NATURAL GAS**		

EMISSION INFORMATION			
Pollutant Code	**VOC**	Annual Emissions	**90.92 LB**
Emission Basis	**MAERS EF**		
List Emission Factor	**2.80**	Exponent	**0**
Emission Factor Unit Code	**LB / MMCF**	Control Efficiency	**%**
Comment			

EMISSION INFORMATION			
Pollutant Code	**NOX**	Annual Emissions	**4546.16 LB**
Emission Basis	**MAERS EF**		
List Emission Factor	**1.40**	Exponent	**2**
Emission Factor Unit Code	**LB / MMCF**	Control Efficiency	**%**
Comment			

EMISSION INFORMATION			
Pollutant Code	**SO2**	Annual Emissions	**19.48 LB**
Emission Basis	**MAERS EF**		
List Emission Factor	**6.00**	Exponent	**-1**
Emission Factor Unit Code	**LB / MMCF**	Control Efficiency	**%**
Comment			

Michigan Department of Environment, Great Lakes, and Energy (EGLE) - Air Quality Division
Michigan Air Emissions Reporting System (MAERS)

2021 Emissions Form

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FORM REFERENCE					
Form Type	**Emissions**	AQD Source ID (SRN)	**B1754**	EU ID	**EUCOLDCLEANER**
SCC	**40100296**	Material Code	**SOLVENTS**		

EMISSION INFORMATION			
Pollutant Code	**VOC**	Annual Emissions	**87.1 LB**
Emission Basis	**MAERS EF**		
List Emission Factor	**7.20**	Exponent	**0**
Emission Factor Unit Code	**LB / GAL**	Control Efficiency	**%**
Comment			

Michigan Department of Environment, Great Lakes, and Energy (EGLE) - Air Quality Division
Michigan Air Emissions Reporting System (MAERS)

2021 Emissions Form

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FORM REFERENCE					
Form Type	**Emissions**	AQD Source ID (SRN)	**B1754**	EU ID	**EU0007**
SCC	**30400799**	Material Code	**MATERIAL**		

EMISSION INFORMATION			
Pollutant Code	**PM2.5,FLTRBL**	Annual Emissions	**203.93 LB**
Emission Basis	**Mass Bal**		
List Emission Factor		Exponent	
Emission Factor Unit Code		Control Efficiency	%
Comment			

Michigan Department of Environment, Great Lakes, and Energy (EGLE) - Air Quality Division
Michigan Air Emissions Reporting System (MAERS)

2021 Emissions Form

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FORM REFERENCE					
Form Type	**Emissions**	AQD Source ID (SRN)	**B1754**	EU ID	**EU0005**
SCC	**30400799**	Material Code	**MATERIAL**		

EMISSION INFORMATION			
Pollutant Code	**PM2.5,FLTRBL**	Annual Emissions	**1337.11 LB**
Emission Basis	**Mass Bal**		
List Emission Factor		Exponent	
Emission Factor Unit Code		Control Efficiency	**%**
Comment			

Michigan Department of Environment, Great Lakes, and Energy (EGLE) - Air Quality Division
Michigan Air Emissions Reporting System (MAERS)

2021 Preparer Form

Authorized under 1994 P.A. 451, as amended. Completion of information is required. Civil and/or criminal penalties possible for providing false information.

FORM REFERENCE			
Form Type	**Preparer**	AQD Source ID (SRN)	**B1754**

PREPARER'S INFORMATION			
Preparer's First Name, Middle Initial	**Richard**	Preparer's Last Name	**Payne III**
Preparer's Title	**Plant Engineer**		
Mailing Address (Street Address 1)	**915 Tabor St.**		
Mailing Address (Street Address 2)			
City	**Adrian**	State/Province	**MI**
Country	**USA**	Zip Code	**49221**
E-Mail Address (if available)	**rpayne@ervinindustries.com**		
Telephone Number	**(517) 2656118**	Telephone Extension	**1317**
Fax Number	**()**		

PREPARER'S ID (only complete this area if you have more than one preparer)	
Preparer's Reporting Group or Emission Unit ID	**EUCOLDCLEANER**
Preparer's Reporting Group or Emission Unit ID	**EU0005**
Preparer's Reporting Group or Emission Unit ID	**EU0007**
Preparer's Reporting Group or Emission Unit ID	**EU0009**
Preparer's Reporting Group or Emission Unit ID	**RGFURNACEGROUP1**

Michigan Department of Environment, Great Lakes, and Energy (EGLE) - Air Quality Division
Michigan Air Emissions Reporting System (MAERS)

2021 Submittal Form

(Required Form)

Authorized under 1994 P.A. 451, as amended. Completion of information is required. Civil and/or criminal penalties possible for providing false information.

FORM REFERENCE			
Form Type	**Submittal**	AQD Source ID (SRN)	**B1754**

SOURCE IDENTIFICATION					
Source Name	**Ervin Amasteel Division**				
Mailing Address (Street Address 1)			**915 TABOR ST.**		
Mailing Address (Street Address 2)					
County	**LENAWEE**	City	**ADRIAN**	Zip Code	**49221-**
Submittal Method	**Electronic**			Amended Submittal	

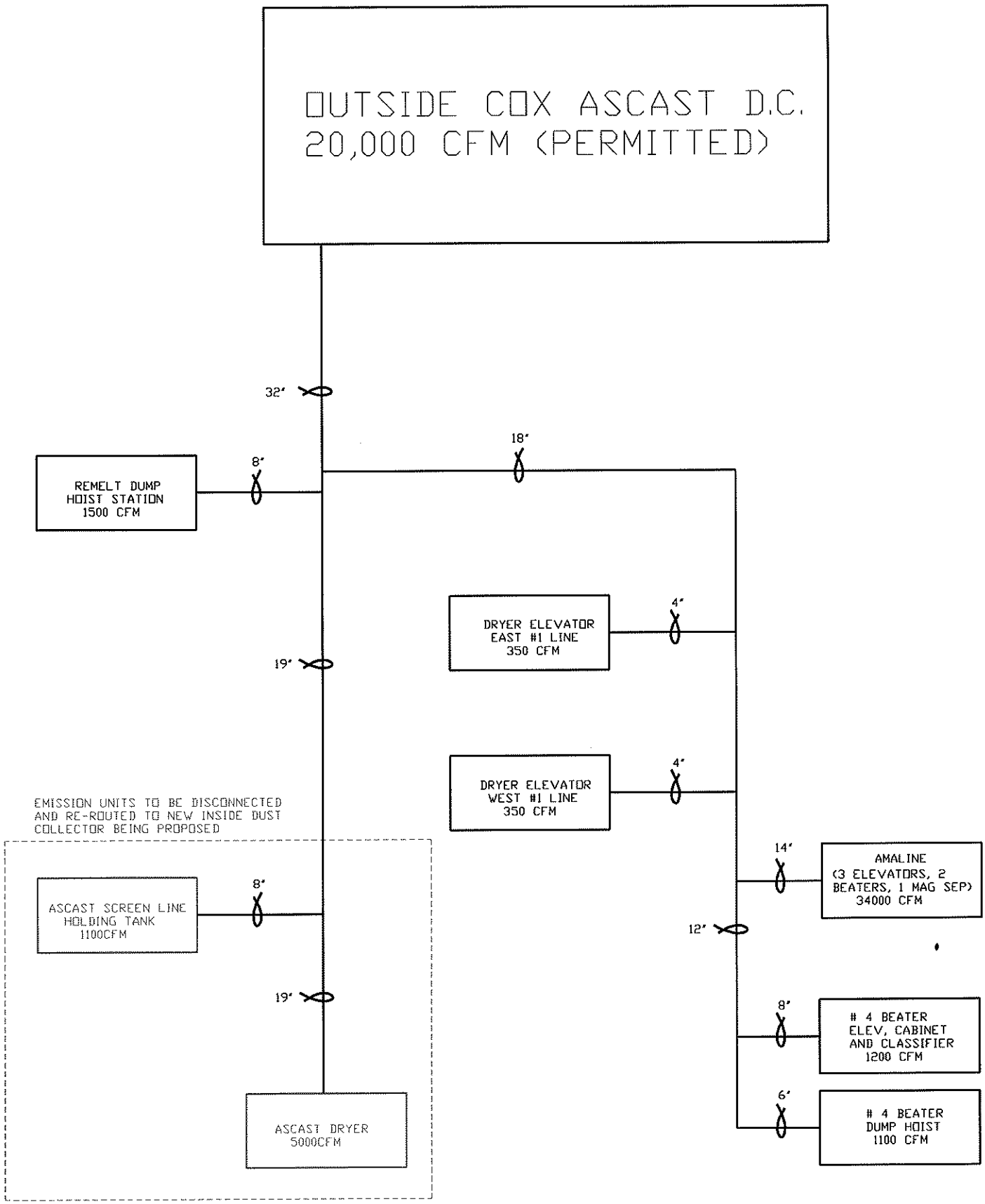
PRIMARY PREPARER'S AUTHORIZATION			
Based on information and belief formed after reasonable inquiry, the statements and information in this submittal are true, accurate, and complete.			
Primary Preparer	**Richard Payne III**		
Telephone Number	**(517)2656118**	Telephone Extension	**(517)2656118**
E-Mail Address (if available)	**rpayne@ervinindustries.com**		
Signature		Date	

Certification Receipt:

- Submission ID: 18032
- Submission Received Date: 3/8/2022 9:52:48 AM
- Certifier's (Primary Preparer) full name: Richard Payne III
- Certifier's Address: 915 Tabor St. Adrian MI 49221
- Email Address: rpayne@ervinindustries.com
- Certification Statement: Based on the information and belief formed after reasonable inquiry, the statements and information in this submittal are true, accurate, and complete.
- Security Question: what street was your high school located on?
- Answer to the security question: Encrypted on file
- PIN used: Encrypted on file
- Submitter's IP address: 63.143.25.5

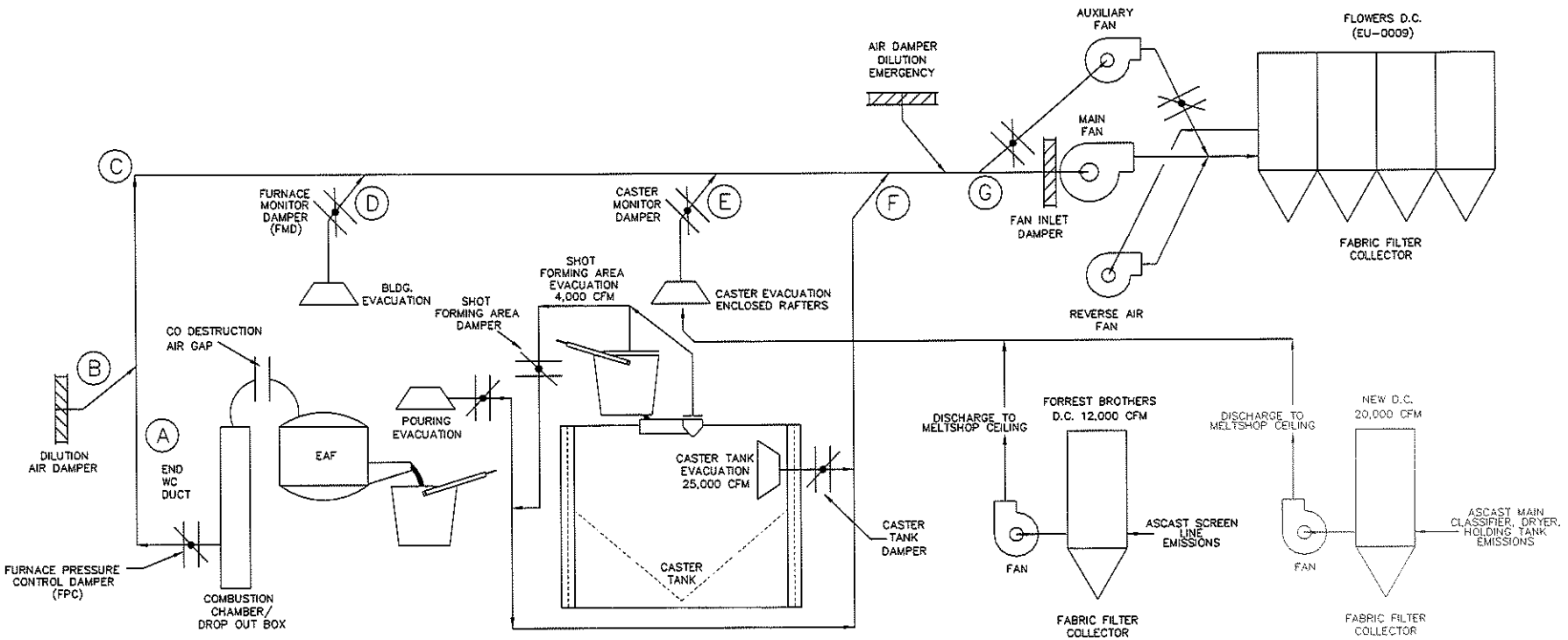
Attachment Details:

Document Name	File Name	File Size	Description
AsCast Op Record	AsCast operating record.pdf	341023	
Gas Usage	2021 Gas Usage.pdf	258392	
Gas Usage	2021 Gas Usage.pdf	258392	
Gas Usage	2021 Gas Usage.pdf	258392	
MAERS Calc Sheet	MAERS Calc Sheet 2021.pdf	858895	
MAERS Calc Sheet	MAERS Calc Sheet 2021.pdf	858895	
MAERS Calc Sheet	MAERS Calc Sheet 2021.pdf	858895	
MAERS Calc Sheet	MAERS Calc Sheet 2021.pdf	858895	
MAERS Calc Sheet	MAERS Calc Sheet 2021.pdf	858895	
MAERS Calc Sheet	MAERS Calc Sheet 2021.pdf	858895	
MAERS Calc Sheet	MAERS Calc Sheet 2021.pdf	858895	
Melting Record	Melting Production Record.pdf	368089	
Melting Record	Melting Production Record.pdf	368089	
Processing Dust 4.4.6-38f	4.4.6-38f processing dust.pdf	625758	
Solvent Use Report	Solvent Record.pdf	446156	



PROPOSED ARRANGMENT

7/28/21



	Ⓐ			STATIC LOSSES TO THIS POINT	Ⓑ			STATIC LOSSES TO THIS POINT	Ⓒ			STATIC LOSSES TO THIS POINT	Ⓓ			STATIC LOSSES TO THIS POINT	Ⓔ		Ⓕ		Ⓖ			STATIC LOSSES TO THIS POINT	DELTA P FROM FAN OUTLET TO MONITOR	FAN TOTAL STATIC PRESSURE
CONDITION	ACFM	T°F	SCFM	"WC	ACFM	T°F	SCFM	"WC	ACFM	T°F	SCFM	"WC	ACFM	T°F	SCFM	"WC	ACFM	T°F	ACFM	T°F	ACFM	T°F	SCFM	"WC	"WC	"WC
MELTING	31223	624	15266	2.7	15000	100	14196	-----	46223	344	29462	3.0	76250	100	69762	-----	0	----	0	----	122473	140	116640	5.9	13.0	18.9
CHARGING / POURING	15000	100	14285	-----	0	----	0	----	0	----	0	-----	265000	180	252000	2.3	0	----	36000	250	292000	180	278095	5.1	13.0	18.1
CASTING (WHILE ALSO MELTING)	31223	624	15266	2.7	15000	100	14196	-----	46223	344	29462	3.0	76250	100	69762	-----	24740	150	36000	120	176213	180	152964	5.5	13.0	18.1
CASTING ONLY	0	100	0	----	0	100	0	----	0	344	0	3.0	0	100	0	----	24740	150	36000	120	93000	140	80000	2.5	4.5	15.5

NEW ARRANGEMENT
7/28/21

COMMENTS	1				AS BUILT
EXAMINED	0				RELEASED FOR CONSTRUCTION
DATE	REVN	ZONE	BY	LOC CRTL'S	DESCRIPTION

REVISIONS

R.L. FLOWERS & ASSOC., INC.
AIR POLLUTION & DUST CONTROL ENGINEERS
LOUISVILLE, KY., U.S.A.

ERVIN INDUSTRIES
ANN ARBOR, MICHIGAN 48106-1168

NONE	RFB,JR	T.R.K.
4-27-94		RFB,JR

TOLERANCES
UNLESS OTHERWISE SPECIFIED ARE IN INCHES
FRACTIONS ±
DECIMALS ±
ANGULAR ±
SURFACE ±

TITLE

PROCESS FLOW DIAGRAM

DRAWN BY:	ORIGINALLY DRAWN AT:	DATE:
SCALE:	DRAWING NUMBER	REVISION
APPROVED BY:	FACILITY APPLICATION	SHEET

PF-93-1301 | 1301-101 | 1

FACILITY APPLICATION KEY: A=ANN ARBOR A=ADRIAN B=BUTLER T=TECUMSEH