

**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION**

EFFECTIVE DATE: October 20, 2015

ISSUED TO:

**The Reserve Group
Great Lakes Castings LLC**

State Registration Number (SRN): A3934

LOCATED AT:

800 North Washington Avenue, Ludington, Mason County, Michigan 49431

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-A3934-2015

Expiration Date: October 20, 2020

Administratively Complete ROP Renewal Application Due Between:
April 20, 2019 and April 20, 2020

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-A3934-2015

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


Janis Ransom, Cadillac 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 are identified for each ROP term or condition. All terms and conditions that are included in a PTI, are streamlined, subsumed and/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 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. **(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 reclaiming, 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):
- June 21, 1999,
 - Three years after the date on which a regulated substance is first listed under 40 CFR 68.130, or
 - 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:

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

²This 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.

SOURCE-WIDE CONDITIONS

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Individual HAP	Less than 10.0 tons ²	12-month rolling time period, as determined at the end of each calendar month.	All process equipment and practices used to produce metal castings for shipment.	SC VI.1	R 336.1205(1)
2. Aggregate HAPs	Less than 25.0 tons ²	12-month rolling time period, as determined at the end of each calendar month.	All process equipment and practices used to produce metal castings for shipment.	SC VI.1	R 336.1205(1)
3. Visible Emissions	20% opacity	6 minute average, except for one 6 minute average per hour of not more than 27%	Fugitive emissions from each building or structure housing foundry operations that is subject to 40 CFR 63.10895(e).	SC V.1	R 336.1301(1)(a) 40 CFR 63.10895(e)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- For each segregated metallic scrap storage area, bin or pile, the permittee shall comply with the materials acquisition requirements of 40 CFR 63.10885(a)(1) or (a)(2). **(40 CFR 63.10881(a)(1), 40 CFR 63.10885(a))**
- The permittee shall prepare written material specifications for the purchase and use of applicable categories of metallic scrap and operate at all times according to those materials. A copy of the materials specifications must be kept onsite and readily available to all personnel with materials acquisition duties, and provide a copy to each scrap provider. **(40 CFR 63.10881(a)(1), 40 CFR 63.10885(a))**
- The permittee must procure the scrap pursuant to one of the compliance options for mercury switches in 40 CFR 63.10885(b)(1), (b)(2), or (b)(3) for each scrap provider, contract or shipment for metallic scrap containing motor vehicle scrap. **(40 CFR 63.10881(a)(2), 40 CFR 63.10885(b))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

- The permittee shall perform opacity tests for each building or structure housing foundry operations that is subject to 40 CFR 63.10895(e) to demonstrate compliance with the fugitive emission limitation in SC I.3. The opacity tests for fugitive emissions shall be every 6 months and in accordance with 40 CFR 63.6(h)(5) and Table 1 to Subpart ZZZZZ of Part 63. **(40 CFR 63.10898(a), (h), and (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 calculate and record the individual HAP and aggregate HAPs emissions in tons per calendar month and tons per 12-month rolling time period, as determined at the end of each calendar month. The calculations shall be completed by no later than the 30th day of each calendar month for the previous month in a format acceptable to the AQD District Supervisor.² **(R 336.1205(1), R 336.1213(3)(b))**
2. The permittee shall maintain records of written material specifications according to 40 CFR 63.10885(a) and records that demonstrate compliance with the requirements for restricted metallic scrap in 40 CFR 63.10885(a)(1) and/or for the use of general scrap in 40 CFR 63.10885(a)(2) as applicable. **(40 CFR 63.10881(a)(1), 40 CFR 63.10899(b)(1))**
3. The permittee shall maintain records that demonstrate compliance with the requirements for mercury in 40 CFR 63.10885(b)(1) through (3) as applicable. **(40 CFR 63.10881(a)(2), 40 CFR 63.10899(b)(1))**
4. The permittee shall maintain records documenting compliance with 40 CFR 63.10885(b)(4) for scrap that does not contain motor vehicle scrap. **(40 CFR 63.10881(a)(2), 40 CFR 63.10899(b)(1))**
5. The permittee shall maintain the records specified in 40 CFR 63.10899(b)(2) for metallic scrap that is subject to the site-specific mercury monitoring plan under 40 CFR 63.10885(b)(1). **(40 CFR 63.10881(a)(2), 40 CFR 63.10899(b)(2))**
6. The permittee shall maintain records identifying each scrap provider and documenting the scrap provider's participation in an approved mercury switch removal program for metallic scrap subject to the option for approved mercury programs under 40 CFR 63.10885(b)(2). If the scrap provider is a broker, the permittee shall maintain records identifying each of the broker's scrap suppliers and documenting the scrap supplier's participation in an approved mercury switch removal program. **(40 CFR 63.10881(a)(2), 40 CFR 63.10899(b)(3))**
7. The permittee shall maintain records of corrective actions for exceedances required by 40 CFR 63.10897(g). **(40 CFR 63.10881(a)(3), 40 CFR 63.10899(b)(12))**
8. For scrap that is not subject to the requirements of 40 CFR 63.1885(b)(1) through (3), the permittee shall certify in the notification of compliance status and maintain records that the scrap does not contain motor vehicle scrap. **(40 CFR 63.10881(a)(2), 40 CFR 63.10885(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. The permittee shall provide the results of all opacity tests as required by Condition V.1 in the notification of compliance status. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor no less than 7 days prior to the anticipated test date. **(R 336.2001(4), 40 CFR 63.10898(a))**

5. The permittee shall submit semiannual compliance reports to the AQD according to the requirements of 40 CFR 63.10(e). At a minimum, the reports shall include the information in 40 CFR 63.10899(c). **(40 CFR 63.10899(c))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall implement and maintain a Malfunction Abatement Plan (MAP) approved by the District Supervisor for EUCUPOLA, EUCOLDBOXCORE, EUHUNTERSAND, EUDISAEWETDC, FGDISALINE, and FGCLEAN&FINISH. If the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall revise the MAP within 45 days after such an event occurs. The revised plan shall include procedures for operating and maintaining the process equipment, add-on air pollution control device, or monitoring equipment during similar malfunction events, and a program for corrective action for such events. **(R 336.1910, R 336.1911)**

Footnotes:

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

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

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
EUCUPOLA	Cupola and associated demister, afterburner, quencher, and venturi scrubber, metallic scrap storage area, coke storage area, and electric holding melting furnace.	05/01/1970 09/24/1976 02/19/1986 09/22/1995 04/20/2012	NA
EUCOLDBOXCORE	6 cold box core machines with packed tower scrubber including ancillary core making equipment.	08/14/1991	NA
EUHUNTERPOURING	Hunter line iron pouring process.	01/01/1946	NA
EUHUNTERDUSTAR	Hunter line mold cooling, shakeout, return mold sand system, sand mulling operations and Dustar baghouse.	03/05/2002 03/18/2009	FGDISALINE
EUHUNTERSAND	Hunter line sand system and CSI baghouse.	05/21/1974 07/29/1994 03/05/2002	NA
EUHUNTERMOLDCOOL	Hunter line mold cooling.	06/12/1992	NA
EUEASTCOREOVEN	East core oven and ancillary equipment.	05/06/1992	NA
EUDISADUSTAR	Disamatic line pouring, mold cooling, sand mulling operations, and Dustar baghouse.	10/15/1993 03/05/2002 03/18/2009	FGDISALINE
EUDISAEWETDC	Disamatic line shakeout and return mold sand system operations and East wet dust collector.	10/15/1993 03/05/2002 03/18/2009	NA
EURIAPPLICATION	Rust inhibitor application system.	08/14/1991	FGRULE290
EUOTHERDUSTAR	Sample shot blast unit and Dustar baghouse.	03/05/2002 03/18/2009	FGDISALINE
EUCLEANING	Shot blast machine and AAF baghouse used to clean castings prior to finishing.	02/13/1980	FGCLEAN&FINISH
EUFINISH	Casting finishing process using grinding wheels and AAF baghouse.	02/13/1980	FGCLEAN&FINISH
EUCOLDCLEANERM	Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278 and Rule 281(h) or Rule 285(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.	NA	FGCOLDCLEANERS

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUCOLDCLEANERF	Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278 and Rule 281(h) or Rule 285(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.	NA	FGCOLDCLEANERS
EUCOREWASH	Core coating.	01/01/1967	FGRULE290
EUPATTERNMAKING	Pattern making process.	01/01/1967	FGRULE290
EUSHELLCORE	Shell core machines.	01/01/1967	FGRULE290
EUEMER-GEN	Existing SI emergency engines less than 500 HP at an area source.	01/01/1990	NA

EUCUPOLA
EMISSION UNIT CONDITIONS

DESCRIPTION

Cupola and associated demister, afterburner, quencher, and venturi scrubber, metallic scrap storage area, coke storage area, and electric holding melting furnace.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Quench tower, afterburner, venturi scrubber, and demister.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Particulate Matter (PM)	0.25 pounds per 1,000 pounds of exhaust gases calculated on a dry gas basis ²	Test Protocol*	EUCUPOLA	SC V.1	R 336.1331(1)(a)
2. PM	28.0 pounds per hour ²	Test Protocol*	EUCUPOLA	SC V.1	R 336.1331(1)(c)
3. PM	50.8 tons per year ²	12 month rolling time period as determined at the end of each calendar month	EUCUPOLA	SC VI.3	R 336.1331(1)(c)
4. PM	1.4 pounds per ton of metal charged ²	Test Protocol*	EUCUPOLA	SC V.1	R 336.1331(1)(c)
5. PM-10	21.6 pounds per hour ²	Test Protocol*	EUCUPOLA	SC V.2	R 336.1205(1)
6. PM-10	39.2 tons per year ²	12 month rolling time period as determined at the end of each calendar month	EUCUPOLA	SC VI.3	R 336.1205(1)
7. PM-10	1.08 pounds per ton of metal charged ²	Test Protocol*	EUCUPOLA	SC V.2	R 336.1205(1)
8. Sulfur dioxide (SO ₂)	30.0 pounds per hour ²	Test Protocol*	EUCUPOLA	SC V.3	R 336.1205(1)
9. SO ₂	54.4 tons per year ²	12 month rolling time period as determined at the end of each calendar month	EUCUPOLA	SC VI.3	R 336.1205(1)
10. SO ₂	1.5 pounds per ton of metal charged ²	Test Protocol*	EUCUPOLA	SC V.3	R 336.1205(1)
11. Carbon monoxide (CO)	225.0 pounds per hour ²	Test Protocol*	EUCUPOLA	SC V.4	40 CFR 52.21
12. CO	408.0 tons per year ²	12 month rolling time period as determined at the end of each calendar month	EUCUPOLA	SC VI.3	40 CFR 52.21
13. CO	11.25 pounds per ton of metal charged ²	Test Protocol*	EUCUPOLA	SC V.4	40 CFR 52.21

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
14. VOC	8.4 pounds per hour ²	Test Protocol*	EUCUPOLA	SC V.5	R 336.1205(1)
15. VOC	13.6 tons per year ²	12 month rolling time period as determined at the end of each calendar month	EUCUPOLA	SC VI.3	R 336.1205(1)
16. VOC	0.42 pounds per ton of metal charged ²	Test Protocol*	EUCUPOLA	SC V.5	R 336.1205(1)
17. Lead (Pb)	0.4 pounds per hour ²	Test Protocol*	EUCUPOLA	SC V.6	R 336.1205(1)
18. Pb	0.76 tons per year ²	12 month rolling time period as determined at the end of each calendar month	EUCUPOLA	SC VI.3	R 336.1205(1)
19. Pb	0.02 pounds per ton of metal charged ²	Test Protocol*	EUCUPOLA	SC V.6	R 336.1205(1)
20. Arsenic (As)	0.0036 pounds per hour ¹	Test Protocol*	EUCUPOLA	SC V.7	R 336.1224, R 336.1225
21. Manganese (Mn)	0.87 pounds per hour ¹	Test Protocol*	EUCUPOLA	SC V.8	R 336.1224, R 336.1225
22. Particulate matter or Total metal HAP	0.8 pounds per ton of metal charged or 0.06 pounds per ton of metal charged	Test Protocol*	EUCUPOLA	SC V.9	40 CFR 63.10895(c)(1)

*Test protocol shall determine averaging time

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Sulfur content in coke fuel	2.5%, by weight ²	NA	Cupola	SC VI.2	R 336.1205(1)
2. Metal melt rate	20 tons per hour	NA	Cupola	SC VI.1	R 336.1205(1)
3. Metal melt rate	6050 tons per month	NA	Cupola	SC VI.1	R 336.1205(1)

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The differential pressure across the venturi while the cupola is in production mode shall be a minimum of 33 inches W.G. or an AQD approved pressure drop as determined by stack testing.² **(R 336.1910)**
2. The differential pressure across the demister while the cupola is in production mode shall be not be greater than of 1.0 inches W.G. or an AQD approved differential pressure as determined by stack testing.² **(R 336.1910)**
3. The liquid flow rate to the quencher while the cupola is in production mode shall not be less than 200 gallons per minute or an AQD approved liquid flow rate as determined by stack testing.² **(R 336.1910)**
4. The liquid flow rate to the venturi while the cupola is in production mode shall not be less than 200 gallons per minute or an AQD approved liquid flow rate as determined by stack testing.² **(R 336.1910)**
5. The liquid flow rate to the demister while the cupola is in production mode shall not be less than 40 gallons per minute or an AQD approved liquid flow rate as determined by stack testing.² **(R 336.1910)**
6. The cupola upper stack temperature while metal is being charged to the cupola shall not be less than 1150°F or an AQD approved upper stack temperature as determined by stack testing. Charging of metalics shall cease if the upper stack temperature is below the minimum temperature and shall not be restarted until the minimum temperature is again reached.² **(R 336.1910)**
7. The permittee shall not operate the cupola unless the afterburner system and wet scrubber emission control system (quencher, venturi, and demister) are installed and operating properly.² **(R 336.1910)**
8. The permittee shall prepare and operate at all times according to a written Operation and Maintenance (O&M) Plan for the cupola venturi scrubber. A copy of the O&M Plan shall be maintained at the facility and made available for review upon request. The plan shall include, but is not limited to, the following: **(40 CFR 63.10881(a)(3), 40 CFR 63.10896(a))**
 - a. General facility contact and information;
 - b. Positions responsible for inspecting, maintaining, and repairing the venturi scrubber;
 - c. Description of items, equipment and conditions that will be inspected, including an inspection schedule for items, equipment and conditions;
 - d. Identity and estimated quantity of the replacement parts that will be maintained in inventory.
9. The permittee shall operate a capture and collection system which meets accepted engineering standards for EUCUPOLA. **(40 CFR 63.10881(a)(3), 40 CFR 63.10895(b))**
10. The permittee shall perform periodic inspections and maintenance of the cupola venturi scrubber. The periodic inspections shall include, but are not limited to, the following: **(40 CFR 63.10897(a)(4)(i-iii))**
 - a. Daily inspections to verify the presence of water flow to the scrubber;
 - b. Monthly visual inspections of the system ductwork and scrubber unit for leaks;
 - c. Inspections of the interior of the scrubber to determine the structural integrity and condition of the demister and spray nozzle every 12 months.
11. The permittee shall make monthly inspections of the equipment that is important to the performance of the cupola emissions capture system and the inspections shall include observations of the physical appearance of the equipment. Any defect of deficiency of the capture system shall be repaired as soon as practicable, but no later than 90 days. **(40 CFR 63.10897(e))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall install and maintain a device to measure the differential pressure across the throat of the venturi scrubber. **(R 336.1910)**
2. The permittee shall install and maintain a device to measure the differential pressure across the demister. **(R 336.1910)**
3. The permittee shall install and maintain a device to measure the liquid flow rate to the venturi. **(R 336.1910)**
4. The permittee shall install and maintain a device to measure the liquid flow rate to the quencher. **(R 336.1910)**
5. The permittee shall install and maintain a device to measure the liquid flow rate to the demister. **(R 336.1910)**
6. The permittee shall install and maintain a device to measure the upper stack temperature. **(R 336.1910)**
7. The differential pressure monitoring systems for the venturi scrubber and demister shall be equipped with audible alarms which will be automatically activated when any of the differential pressures during production are less than the value listed in SC III.3 and or greater than the value listed in SC III.4.² **(R 336.1910)**
8. The liquid flow rate monitoring systems for the quencher, venturi scrubber and demister shall be equipped with audible alarms which will be automatically activated when any of the liquid flow rates during production are less than the values listed in SC III.5, SC III.6, and SC III.7.² **(R 336.1910)**
9. The cupola upper stack temperature monitoring system shall be equipped with audible alarms which will be automatically activated when the temperature is less than the value listed in SC III.8.² **(R 336.1910)**

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 performance tests, in a manner acceptable to the AQD, for verification of the PM emission demonstrate rate to compliance with the limits in SC I.1, SC I.2, and SC I.4. The performance tests shall be conducted no less than once every five years. **(R 336.1213(3)(a))**
2. The permittee shall conduct performance tests, in a manner acceptable to the AQD, for verification of PM-10 emission rate to demonstrate compliance with the limits in SC I.5 and SC I.7. The performance tests shall be conducted no less than once every five years. **(R 336.1213(3)(a))**
3. The permittee shall conduct performance tests, in a manner acceptable to the AQD, for verification of the SO₂ emission rate to demonstrate compliance with the limits in SC I.8 and SC I.10. The performance tests shall be conducted no less than once every five years. **(R 336.1213(3)(a))**
4. The permittee shall conduct performance tests, in a manner acceptable to the AQD, for verification of the CO emission rate to demonstrate compliance with the limits in SC I.11 and SC I.13. The performance tests shall be conducted no less than once every five years. **(R 336.1213(3)(a))**
5. The permittee shall conduct performance tests, in a manner acceptable to the AQD, for verification of the VOC emission rate to demonstrate compliance with the limits in SC I.14 and SC I.16. The performance tests shall be conducted no less than once every five years. **(R 336.1213(3)(a))**
6. The permittee shall conduct performance tests, in a manner acceptable to the AQD, for verification of the Pb emission rate to demonstrate compliance with the limits in SC I.17 and SC I.19. The performance tests shall be conducted no less than once every five years. **(R 336.1213(3)(a))**
7. The permittee shall conduct performance tests, in a manner acceptable to the AQD, for verification of the As emission rate to demonstrate compliance with the limits in SC I.20. The performance tests shall be conducted no less than once every five years. **(R 336.1213(3)(a))**

8. The permittee shall conduct performance tests, in a manner acceptable to the AQD, for verification of the Mn emission rate to demonstrate compliance with the limit in SC I.21. The performance tests shall be conducted no less than once every five years. **(R 336.1213(3)(a))**
9. The permittee shall conduct performance tests, in a manner acceptable to the AQD, for verification of PM or Total Metal HAPS emission rate to demonstrate compliance with the emission limits in SC I.22 and 40 CFR 63.10895(c)(1). The performance tests shall be conducted in accordance with the requirements of 40 CFR 63.7(e)(1) and Table 1 to Subpart ZZZZZ of Part 63. The performance tests shall be conducted no less than once every five years. **(40 CFR 63.10898(a), (b), and (c))**
10. The permittee shall use stack testing to correlate CO, PM, and PM-10 emission rates with the measured parameters for the Quench tower, afterburner, venturi scrubber, and demister as applicable. **(R 336.1205(1))**

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 monitor and record the charge time and charge weight, in tons of metal charged per hour, for the cupola in a manner and with instrumentation acceptable to the AQD. These records shall be logged daily and monthly.² **(R 336.1205(1))**
2. The permittee shall monitor and record the sulfur content of each shipment of coke received. Supplier data may be used for this purpose.² **(R 336.1205(1))**
3. Permittee shall calculate PM, PM-10, SO₂, CO, VOC, and Pb emissions using emission factors from the most recent stack testing.² **(R 336.1205(1), 40 CFR 52.21)**
4. Within 15 days following the end of each calendar month, the permittee shall calculate and record the amount of metal charged, in tons per 12-month rolling average. **(R 336.1213(3)(b))**
5. The differential pressure across the venturi shall be monitored continuously and recorded once per day in a manner and with instrumentation acceptable to the AQD.² **(R 336.1910, 40 CFR 64.6(c)(1)(iii))**
6. The differential pressure across the demister shall be continuously monitored and recorded once per day in a manner and with instrumentation acceptable to the AQD.² **(R 336.1910, 40 CFR 64.6(c)(1)(iii), R 336.1213(3)(b))**
7. The liquid flow rate to the venturi shall be monitored continuously and recorded once per day in a manner and with instrumentation acceptable to the AQD.² **(R 336.1910, 40 CFR 64.6(c)(1)(i) and (iii), 40 CFR 64.6(c)(4), R 336.1213(3)(b))**
8. The liquid flow rate to the quencher shall be monitored continuously and recorded once per day in a manner and with instrumentation acceptable to the AQD.² **(R 336.1910, 40 CFR 64.6(c)(1)(iii), R 336.1213(3)(b))**
9. The liquid flow rate to the demister shall be monitored continuously and recorded once per day in a manner and with instrumentation acceptable to the AQD.² **(R 336.1910, 40 CFR 64.6(c)(1)(iii), R 336.1213(3)(b))**
10. The permittee shall properly maintain the monitoring systems, including keeping necessary parts for routine repair of the monitoring equipment. **(R 336.1911, 40 CFR 64.7(b))**
11. The permittee shall use upper stack temperature monitoring as an indicator of a properly functioning afterburner. The appropriate temperature is greater than 1150°F. **(40 CFR 64.6(c)(1)(i and ii))**
12. The permittee shall use differential pressure data and liquid flow rate data as indicators of a properly functioning venturi scrubber. The appropriate differential pressure is greater than or equal to 33 inches of water, gauge, the appropriate flow rate is greater than or equal to 200 gallons per minute. **(40 CFR 64.6(c)(1)(i and ii))**

13. The permittee shall use differential pressure data and liquid flow rate data as indicators of a properly functioning demister. The appropriate differential pressure less than or equal to 1.0 inches of water, gauge, the appropriate flow rate is greater than or equal to 40 gallons per minute. **(40 CFR 64.6(c)(1)(i and ii))**
14. The permittee shall use liquid flow rate data as an indicator of a properly functioning quencher. The appropriate differential pressure greater than or equal to 200 gallons per minute. **(40 CFR 64.6(c)(1)(i and ii))**
15. The permittee shall use the cupola upper stack temperature to assure compliance with the CO limits in SC I.11 and SC I.13. An excursion for CO shall be a cupola upper stack temperature which activates the audible alarm referenced in SC IV.9. **(40 CFR 64.6(c)(2))**
16. The permittee shall use the differential pressure across the venturi to assure compliance with the PM and PM-10 limits in SC I.1, SC I.2, SC I.4, SC I.5, and SC I.7. An excursion for PM and PM-10 shall be a differential pressure across the venturi which activates the audible alarm referenced in SC IV.7. This condition does not affect compliance with R 336.1331 and R 336.1205. **(40 CFR 64.6(c)(2))**
17. The permittee shall use the differential pressure across the demister to assure compliance with the PM and PM-10 limits in SC I.1, SC I.2, SC I.4, SC I.5, and SC I.7. An excursion for PM and PM-10 shall be a differential pressure across the demister which activates the audible alarm referenced in SC IV.7. This condition does not affect compliance with R 336.1331 and R 336.1205. **(40 CFR 64.6(c)(2))**
18. The permittee shall use the liquid flow rate to the quencher to assure compliance with the PM and PM-10 limits in SC I.1, SC I.2, SC I.4, SC I.5, and SC I.7. An excursion for PM and PM-10 shall be a liquid flow rate to the quencher which activates the audible alarm referenced in SC IV.8. This condition does not affect compliance with R 336.1331 and R 336.1205. **(40 CFR 64.6(c)(2))**
19. The permittee shall use the liquid flow rate to the venturi to assure compliance with the PM and PM-10 limits in SC I.1, SC I.2, SC I.4, SC I.5, and SC I.7. An excursion for PM and PM-10 shall be a liquid flow rate to the venturi which activates the audible alarm referenced in SC IV.8. This condition does not affect compliance with R 336.1331 and R 336.1205. **(40 CFR 64.6(c)(2))**
20. The permittee shall use the liquid flow rate to the demister to assure compliance with the PM and PM-10 limits in SC I.1, SC I.2, SC I.4, SC I.5, and SC I.7. An excursion for PM and PM-10 shall be a liquid flow rate to the demister which activates the audible alarm referenced in SC IV.8. This condition does not affect compliance with R 336.1331 and R 336.1205. **(40 CFR 64.6(c)(2))**
21. 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). In response to an excursion as defined in this section, the permittee shall conduct an investigation and take actions as specified in the AQD approved MAP. **(40 CFR 64.7(d))**
22. 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, infrequent, 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), 40 CFR 64.7(c))**

23. The permittee shall record the results of each inspection and maintenance required by 40 CFR 63.10897(a) for the venturi scrubber in a logbook (written or electronic format). The logbook shall be kept onsite and made available to the AQD upon request. The records maintained shall consist of the date and time of each recorded action for the scrubber and ductwork, the results of each inspection, and the results of any maintenance performed on the scrubber. **(40 CFR 63.10897(a)(4), 40 CFR 63.10899(b)(13)(iii))**
24. 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))**
25. The permittee shall maintain records of monthly metal melt production for each calendar year. **(40 CFR 63.10899(b)(6))**
26. The permittee shall maintain records of the O&M Plan for the venturi scrubber as required by 40 CFR 63.10896(a) and records that demonstrate compliance with the plan requirements. **(40 CFR 63.10899(b)(7))**
27. The permittee shall maintain records of the capture system inspections and repairs as required by 40 CFR 63.10897(e). **(40 CFR 63.10899(b)(10))**
28. The permittee shall maintain records of corrective actions for exceedances required by 40 CFR 63.10897(g). **(40 CFR 63.10899(b)(12))**
29. The permittee shall record the date and time of each inspection required by SC III.13 and 40 CFR 63.10897(e) and the date and time of repair of any defect or deficiency of the capture system. **(40 CFR 63.10897(e))**
30. In the event of an exceedance of the established emission limitation in SC I.22 the permittee shall record the date and time corrective action was initiated, the corrective action taken, and the date corrective action was completed. **(40 CFR 63.10897(g))**

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 01 to December 31 and September 15 for reporting period January 01 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 and deviations shall include summary information on the number, duration and cause of excursions and/or exceedances and the corrective actions taken. If there were no excursions and/or exceedances in the reporting period, then this report shall include a statement that there were no excursions and/or exceedances. **(40 CFR 64.9(a)(2)(i))**
5. Each semiannual 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. **(40 CFR 64.9(a)(2)(ii))**
6. Each semiannual report of monitoring and deviations shall include a description of the actions taken to implement a QIP during the reporting period (if appropriate). If a QIP has been completed the report shall include documentation that the plan has been implemented and if it has reduced the likelihood of excursions or exceedances. **(40 CFR 64.9(a)(2)(iii))**

7. The permittee shall submit two complete test protocols to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor for approval at least 30 days prior to the anticipated test date. The protocol shall describe the test method(s) and the maximum routine operating conditions, including targets for key operational parameters associated with air pollution control equipment to be monitored and recorded during testing. **(R 336.2001(3))**
8. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor no less than 7 days prior to the anticipated test date. **(R 336.2001(4))**
9. The permittee shall submit two complete test reports of the test results to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor, within 60 days following the last date of the test. **(R 336.2001(5))**
10. The permittee shall provide the results of all performance tests pursuant to 40 CFR 63 Subpart ZZZZZ in the notification of compliance status and shall certify the capture system for EUCUPOLA operated normally during the performance test. **(40 CFR 63.10898(a) and (j))**
11. The permittee shall submit semiannual compliance reports to the AQD according to the requirements of 40 CFR 63.10(e). At a minimum, the reports shall include the information in 40 CFR 63.10899(c). **(40 CFR 63.10899(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. SVCUPOLA	45 ²	142 ²	R 336.1201(3)

IX. OTHER REQUIREMENT(S)

1. 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 of the CAM Plan 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))**
2. The permittee shall comply with all applicable requirements of 40 CFR Part 64. **(40 CFR Part 64)**

Footnotes:

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

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

**EUCOLDBOXCORE
 EMISSION UNIT CONDITIONS**

DESCRIPTION

6 cold box core machines with packed tower scrubber including ancillary core making equipment.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Sulfuric acid recirculating packed tower scrubber

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	10 tons per year ²	12 month rolling time period as determined at the end of each calendar month	EUCOLDBOXCORE	SC VI.6	R 336.1702(c)
2. Visible Emissions	0% opacity ²	based on a 6 minute average	EUCOLDBOXCORE	SC V.1	R 336.1301(1)(c)
3. N,n-dimethylisoprop anolamine (DMIPA)	0.50 tons per year ¹	12 month rolling time period as determined at the end of each calendar month	EUCOLDBOXCORE	SC VI.7	R 336.1224

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Resin	23,000 pounds per month ¹	Monthly	EUCOLDBOXCORE	SC VI.4	R 336.1225(1)

III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee shall maintain the scrubber liquid pH below 4.5.² (R 336.1910)
- The permittee shall not operate EUCOLDBOXCORE unless the packed tower scrubber is installed and operating properly.² (R 336.1224, R 336.1910)

IV. DESIGN/EQUIPMENT PARAMETER(S)

- The permittee shall equip the scrubber with a properly installed and operating pH meter.² (R 336.1910)

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 perform and document 6 minute non-certified visible emissions observations once per week when the equipment is operating. Records of the non-certified visible emissions observations, the reason for any visible emissions observed and any corrective actions taken shall be kept on file and in a format acceptable to the AQD.² **(R 336.1301)**

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 monitor and record the scrubber liquid pH once per day during operation.² **(R 336.1910)**
2. The permittee shall record the VOC content of the resin used.² **(R 336.1702)**
3. The permittee shall maintain a record of the pounds of VOC emissions per pound of resin used, based upon manufacturer's data, for each resin used in the process.² **(R 336.1702)**
4. The permittee shall record the monthly usage rate of each resin.² **(R 336.1225, R 336.1702)**
5. The permittee shall record the monthly usage rate of DMIPA, in pounds per month.² **(R 336.1225)**
6. The permittee shall calculate and maintain records of VOC emissions on a monthly basis. **(R 336.1702)**
7. The permittee shall calculate and maintain records of DMIPA emissions on a monthly basis. **(R 336.1225)**
8. The permittee shall maintain records of the annual quantity and composition of each HAP-containing chemical binder or coating material used to make molds and cores. These records shall consist of Material Safety Data Sheets, copies of purchasing records, or other documentation that provide information on the binder or coating materials used. **(40 CFR 63.10899(b)(5))**
9. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period VOC and DMIPA emission calculation records for FGFACILITY, as required by SC I.1 and I.3. The permittee shall keep all records on file at for a period of at least five years and make them available to the Department upon request. **(R 336.1225, R 336.1702)**
10. The permittee shall perform inspections of the packed bed scrubber system as follows:
 - a. Determine pressure drop across the packed bed scrubber on a daily basis. If the pressure drop across the control varies by more than ± 1 inch of water gauge, from the pressure drop range of 0.1 to 6.0 inches of water gauge, the permittee shall document the variation, and review the operation and maintenance procedures. The permittee shall document any corrective action.
 - b. Visually inspect the packed bed scrubber, on a quarterly basis, to ensure there is proper drainage, no acid build up on packed beds, and no evidence of chemical attack on the structural integrity of the control device. The permittee shall document any corrective action.
 - c. Visually inspect the mist eliminator, on a quarterly basis, to ensure that it is dry and clear of other debris. The permittee shall document any corrective action.
 - d. Visually inspect ductwork from core machines to the packed bed scrubber, on a quarterly basis, to ensure there are no leaks. . The permittee shall document any corrective action. The permittee shall keep all records on file at the facility for a period of at least 5 years and make them available to the Department upon request. **(R 336.1224, R 336.1225, R 336.1910)**
11. Records of the non-certified visible emissions observations the reason for any visible emissions observed and any corrective actions taken shall be kept on file and in a format acceptable to the AQD.² **(R 336.1301(1)(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)

Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVGAYLORD	24 ²	39 ²	R 336.1225, R 336.1702

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

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

**EUHUNTERPOURING
 EMISSION UNIT CONDITIONS**

DESCRIPTION

Iron pouring process of the Hunter line.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Particulate matter	0.10 pound per 1,000 pounds of exhaust gases ²	Test Protocol*	EUHUNTERPOURING	SC V.1 SC V.2	R 336.1331(1)(a)

*Test protocol shall specify averaging time

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The EUHUNTERPOURING pouring rate shall not exceed 20 tons per hour.² **(R 336.1205(1))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

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 performance tests, in a manner acceptable to the AQD, for verification of the particulate matter emission rate. The performance tests shall be conducted every five years. **(R 336.1213(3)(a))**
2. The permittee shall perform and document 6 minute non-certified visible emissions observations once per week when the equipment is operating. Records of the non-certified visible emissions observations, the reason for any visible emissions observed and any corrective actions taken shall be kept on file and in a format acceptable to the AQD. **(R 336.1213(3)(a))**

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 maintain monthly records of the amount of metal poured, in tons per hour.² **(R 336.1313(3)(b))**

2. Records of the non-certified visible emissions observations the reason for any visible emissions observed and any corrective actions taken shall be kept on file and in a format acceptable to the AQD. **(R 336.1213(3)(a))**

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. The permittee shall submit two complete test protocols to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor for approval at least 30 days prior to the anticipated test date. The protocol shall describe the test method(s) and the maximum routine operating conditions, including targets for key operational parameters associated with air pollution control equipment to be monitored and recorded during testing. **(R 336.2001(3))**
5. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor no less than 7 days prior to the anticipated test date. **(R 336.2001(4))**
6. The permittee shall submit two complete test reports of the test results to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor, within 60 days following the last date of the test. **(R 336.2001(5))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

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

**EUHUNTERSAND
 EMISSION UNIT CONDITIONS**

DESCRIPTION

Hunter line sand system

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

CSI Baghouse

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Particulate matter	0.10 pound per 1,000 pounds of exhaust gases, calculated on a dry gas basis ²	Test Protocol*	EUHUNTERSAND	SC V.1 SC VI.2	R 336.1331(1)(c)

*Test protocol shall specify averaging time

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EUHUNTERSAND unless the baghouse is installed and operating properly.² **(R 336.1910)**
2. The permittee shall maintain the differential pressure across the baghouse within the normal operating range identified in the approved MAP.² **(R 336.1910)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall install and maintain a device to measure the differential pressure across the baghouse.² **(R 336.1910)**

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 performance tests, in a manner acceptable to the AQD, for verification of the particulate matter emission rates. The performance tests shall be conducted every five years. The permittee shall use stack testing to correlate PM emission rate in pounds per 1,000 pounds of exhaust gases with baghouse differential pressure readings measured during testing. Monitoring based on the tests shall begin no later than 180 days after completion of testing. **(R 336.1213(3)(a), 40 CFR 64.4(e), 40 CFR 64.6(d))**

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 utilize baghouse differential pressure readings as an indicator of a properly functioning baghouse. The appropriate range defining proper function is between 1 and 6 inches of water, gauge. **(40 CFR 64.6(c)(1)(i and ii))**
2. The permittee shall continuously monitor and record once per day the differential pressure across the baghouse in a manner and with instrumentation acceptable to the AQD. **(R 336.1213(3)(b), 40 CFR 64.6(c)(i) and (iii), 40 CFR 64.6(c)(4))**
3. The permittee shall properly maintain the differential pressure monitoring system, including keeping necessary parts for routine repair of the monitoring equipment. **(40 CFR 64.7(b))**
4. The permittee shall use differential pressure across the baghouse to assure compliance with the particulate matter limit. An excursion for particulate matter shall be a differential pressure less than 1 inch W.G. or greater than 6 inches W.G. This condition does not affect compliance with R 336.1331. **(40 CFR 64.6(c)(2))**
5. 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), 40 CFR 64.7(c))**
6. 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). In response to an excursion as defined in this section, the permittee shall conduct an investigation and take actions as specified in the AQD approved MAP. In response to an excursion as defined in this section, the permittee shall conduct an investigation and take actions as specified in the AQD approved MAP. **(40 CFR 64.7(d))**
7. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan, 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))**

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. The permittee shall submit two complete test protocols to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor for approval at least 30 days prior to the anticipated test date. The protocol shall describe the test method(s) and the maximum routine operating conditions, including targets for key operational parameters associated with air pollution control equipment to be monitored and recorded during testing. **(R 336.2001(3))**
5. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor no less than 7 days prior to the anticipated test date. **(R 336.2001(4))**
6. The permittee shall submit two complete test reports of the test results to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor, within 60 days following the last date of the test. **(R 336.2001(5))**
7. Each semiannual report of monitoring and deviations shall include summary information on the number, duration and cause of excursions and/or exceedances and the corrective actions taken. If there were no excursions and/or exceedances in the reporting period, then this report shall include a statement that there were no excursions and/or exceedances. **(40CFR 64.9(a)(2)(i))**
8. Each semiannual 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. **(40 CFR 64.9(a)(2)(ii))**
9. Each semiannual report of monitoring and deviations shall include a description of the actions taken to implement a QIP during the reporting period (if appropriate). If a QIP has been completed the report shall include documentation that the plan has been implemented and if it has reduced the likelihood of excursions or exceedances. **(40 CFR 64.9(a)(2)(iii))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. 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 of the CAM Plan 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))**
2. The permittee shall comply with all applicable requirements of 40 CFR Part 64. **(40 CFR Part 64)**

Footnotes:

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

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

**EUHUNTERMOLDCOOL
 EMISSION UNIT CONDITIONS**

DESCRIPTION

Hunter line mold cooling

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Particulate matter	0.10 pound per 1,000 pounds of exhaust gases, calculated on a dry gas basis. ²	NA	EUHUNTERMOLDCOOL	SC V.1	R 336.1331(1)(c)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

- The permittee shall perform and document 6 minute non-certified visible emissions observations once per week when the equipment is operating. Records of the non-certified visible emissions observations, the reason for any visible emissions observed and any corrective actions taken shall be kept on file and in a format acceptable to the AQD. (R 336.1213(3)(a))

VI. MONITORING/RECORDKEEPING

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

- Records of the non-certified visible emissions observations the reason for any visible emissions observed and any corrective actions taken shall be kept on file and in a format acceptable to the AQD. (R 336.1213(3)(a))

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. SVH-MOLDCOOL-7	NA	55 ¹	R 336.1901
2. SVH-MOLDCOOL-9	NA	55 ¹	R 336.1901
3. SVH-MOLDCOOL-12	NA	55 ¹	R 336.1901
4. SVH-MOLDCOOL-14	NA	55 ¹	R 336.1901

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

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

**EUEASTCOREOVEN
EMISSION UNIT CONDITIONS**

DESCRIPTION

East core oven and ancillary equipment

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Visible Emissions	0% opacity ²	Based on a 6 minute average	EUEASTCOREOVEN	SC V.1	R 336.1301(1)(c)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

1. The permittee shall perform and document 6 minute non-certified visible emissions observations once per week when the equipment is operating. Records of the non-certified visible emissions observations, the reason for any visible emissions observed and any corrective actions taken shall be kept on file and in a format acceptable to the AQD. (R 336.1213(3)(a))

VI. MONITORING/RECORDKEEPING

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

1. Records of the non-certified visible emissions observations the reason for any visible emissions observed and any corrective actions taken shall be kept on file and in a format acceptable to the AQD. (R 336.1213(3)(a))

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. SVCOREOVEN	10 ²	35 ²	R 336.1201(3)

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).

**EUDISAEWETDC
 EMISSION UNIT CONDITIONS**

DESCRIPTION

Disamatic line shakeout and return mold sand system operations and East wet dust collector.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

East wet dust collector

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM-10	0.10 pound per 1,000 pounds of exhaust gases, calculated on a dry gas basis. ²	Test protocol*	EUDISAEWETDC	SC V.1	R 336.1331(c)
2. PM-10	64.8 tpy	12 month rolling time period as determined at the end of each calendar month	EUDISAEWETDC	SC VI.4	R 336.1331(c)
3. Visible Emissions	5% opacity	Based on a 6 minute average ²	EUDISAEWETDC	SC V.2	R336.1301(1)(c)

*Test protocol shall specify averaging time

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EUDISAEWETDC unless the wet dust collector is installed and operating properly.² **(R 336.1910)**
2. The permittee shall not operate EUDISAEWETDC unless the liquid flow rate across the wet dust collector is within the normal operating range identified in the approved MAP.² **(R 336.1910)**
3. The permittee shall not operate EUDISAEWETDC for more than 6,000 hours per year.² **(R 336.1205(3))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall install and maintain a device to measure the liquid flow rate through the wet scrubber. **(R 336.1910)**

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 performance tests, in a manner acceptable to the AQD, for verification of the particulate matter emission rates. The performance tests shall be conducted every five years. The permittee shall use stack testing to correlate PM emission rate in pounds per 1,000 pounds of exhaust gases with baghouse differential pressure readings measured during testing. Monitoring based on the tests shall begin no later than 180 days after completion of testing. **(R 336.1213(3)(a))**
2. The permittee shall perform and document 6 minute non-certified visible emissions observations once per week when the equipment is operating. Records of the non-certified visible emissions observations, the reason for any visible emissions observed and any corrective actions taken shall be kept on file and in a format acceptable to the AQD. **(R 336.1213(3)(a))**

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 utilize liquid flow rate data as an indicator of the proper functioning of the wet dust collector. The appropriate range of flow 150 gallons per minute to 275 gallons per minute. **(40 CFR 64.6(c)(1)(i and ii))**
2. The permittee shall monitor continuously and record once per day liquid flow rate through the wet dust collector with instrumentation acceptable to the AQD. **(R 336.1213(3)(b), 40 CFR 64.6(c)(1)(iii), 40 CFR 64.6(c)(4))**
3. The permittee shall maintain a written log of the hours of operation of EUDISAEWETDC.² **(R 336.1213(3)(b))**
4. The permittee shall calculate and record the PM-10 emission rate, in tons per year, using emission factors based upon the most recent performance test. **(R 336.1213(3)(b))**
5. The permittee shall use the liquid flow rate through the wet scrubber to assure compliance with the PM-10 limit. An excursion for PM-10 shall be a liquid flow rate less than 150 gallons per minute or greater than 275 gallons per minute. **(40 CFR 64.6(c)(2))**
6. 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). In response to an excursion as defined in this section, the permittee shall conduct an investigation and take actions as specified in the AQD approved MAP. **(40 CFR 64.7(d))**
7. The permittee shall properly maintain the liquid flow rate monitoring system, including keeping necessary parts for routine repair of the monitoring equipment. **(40 CFR 64.7(b))**
8. 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), 40 CFR 64.7(c))**

9. 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 CFR64.9(b)(1))**
10. Records of the non-certified visible emissions observations the reason for any visible emissions observed and any corrective actions taken shall be kept on file and in a format acceptable to the AQD. **(R 336.1213(3)(a))**

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 and deviations shall include summary information on the number, duration and cause of excursions and/or exceedances and the corrective actions taken. If there were no excursions and/or exceedances in the reporting period, then this report shall include a statement that there were no excursions and/or exceedances. **(40 CFR 64.9(a)(2)(i))**
5. Each semiannual 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. **(40 CFR 64.9(a)(2)(ii))**
6. Each semiannual report of monitoring and deviations shall include a description of the actions taken to implement a QIP during the reporting period (if appropriate). If a QIP has been completed the report shall include documentation that the plan has been implemented and if it has reduced the likelihood of excursions or exceedances. **(40 CFR64.9(a)(2)(iii))**
7. The permittee shall submit two complete test protocols to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor for approval at least 30 days prior to the anticipated test date. The protocol shall describe the test method(s) and the maximum routine operating conditions, including targets for key operational parameters associated with air pollution control equipment to be monitored and recorded during testing. **(R 336.2001(3))**
8. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor no less than 7 days prior to the anticipated test date. **(R 336.2001(4))**
9. The permittee shall submit two complete test reports of the test results to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor, within 60 days following the last date of the test. **(R 336.2001(5))**

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. SVEASTWET	36 ²	52 ²	40 CFR 52.21 (c) and (d)

IX. OTHER REQUIREMENT(S)

1. 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 of the CAM Plan 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))**
2. The permittee shall comply with all applicable requirements of 40 CFR Part 64. **(40 CFR Part 64)**

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).

EUEMER-GEN EMISSION UNIT CONDITIONS

DESCRIPTION

Existing SI emergency engines less than 500 HP at an area source for Hazardous Air Pollutants (HAPs).

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall operate and maintain any affected SI RICE, including associated air pollution control equipment and 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))**
2. The permittee shall comply with the following requirements, except during periods of startup: **(40 CFR 63.6603(a))**
For SI Engines: (40 CFR 63.6603(a), 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 spark plugs every 1,000 hours of operation or annually, whichever comes first.
 - c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
3. The permittee shall operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air-pollution control practice for minimizing emissions. **(40 CFR 62.6625(e), 40 CFR 63.6640(a), Table 6, Item 9)**
4. The permittee may utilize an oil analysis program in order to extend the specified oil change requirement in 40 CFR 63.6603(a) and as listed in SC III.2. The oil analysis program must be performed at the same frequency as oil changes are required. The analysis program must analyze the parameters and keep records as required in 40 CFR 63.6625(i). **(40 CFR 63.6625(i))**

5. The permittee shall not allow the SI engine(s) to exceed 100 hours for Maintenance checks and readiness testing. The owner or operator 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)(ii))**
6. The permittee shall not allow the SI engine(s) to operate more than 50 hours per year for non-emergency situations, as allowed in 40 CFR 63.6640(f)(iii). **(40 CFR 63.6640(f)(iii))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain the SI engine with a non-resettable hour meter. **(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 the oil analysis program for SI Engine(s), the permittee shall test for Total Base 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 records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. **(40 CFR 63.6655(a)(2), 40 CFR 63.6660)**
2. The permittee shall keep records of all required maintenance performed on the air pollution control and monitoring equipment. **(40 CFR 63.6655(a)(4), 40 CFR 63.6660)**
3. The permittee shall keep records of actions taken during periods of malfunction to minimize emissions in accordance with 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. **(40 CFR 63.6655(a)(5), 40 CFR 63.6660)**
4. The permittee shall keep records as required to show continuous compliance with each emission or operating limit that applies. **(40 CFR 63.6655(d), 40 CFR 63.6660)**
5. The permittee shall keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the permittee operated and maintained the stationary RICE and after-treatment control device (if any) according to the permittee's maintenance plan. **(40 CFR 63.6655(e), 40 CFR 63.6660)**
6. The permittee shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response. **(40 CFR 63.6655(f), 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, as they apply to EUEMER-GEN. The permittee may choose an alternative compliance method not listed in EUEMER-GEN by complying with all applicable provisions required by Subpart ZZZZ for the compliance option chosen. **(40 CFR 70.6(9), 40 CFR 63.9(j), 40 CFR Part 63, Subparts A and ZZZZ)**

Footnotes:

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

²This 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
FGDISALINE	Hunter line mold cooling, shakeout, return mold sand system, and sandmulling; Disamatic line pouring, mold cooling, and sand mulling operations; sample shot blast unit. All processes are controlled by the Duster baghouse.	EUDISADUSTAR EUHUNTERDUSTAR EUOTHERDUSTAR
FGCLEAN&FINISH	Shot blast machine used to clean castings prior to finishing and casting finishing process using grinding wheels controlled by the AAF baghouse.	EUCLEAN EUFINISH
FGCOLDCLEANERS	Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278 and Rule 281(h) or Rule 285(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.	EUCOLDCLEANERM EUCOLDCLEANERF
FGRULE290	Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and 290.	EURIAPPLICATION EUPATTERNMAKING EUSHELLCORE EUCOREWASH

**FGDISALINE
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Hunter line mold cooling, shakeout, return mold sand system, and sandmulling; Disamatic line pouring, mold cooling, and sand mulling operations; sample shot blast unit.

Emission Units: EUDISADUSTAR, EUHUNTERDUSTAR, EUOTHERDUSTAR

POLLUTION CONTROL EQUIPMENT

Dustar baghouse

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM-10	0.0205 pounds per 1,000 pounds of exhaust gases on a dry gas basis ²	Test Protocol*	FGDISALINE	SC V.1	R 336.1331(1)(c)
2. PM-10	6.5 tons per year ²	NA	EUHUNTERDUSTAR	SC VI.4	R 336.1331(1)(c)
3. PM-10	7.5 tons per year ²	NA	EUDISADUSTAR	SC VI.4	R 336.1331(1)(c)
4. PM-10	3.6 tons per year ²²	NA	EUOTHERDUSTAR	SC VI.4	R 336.1331(1)(c)
5. Visible Emissions	5% opacity ²	Based on a 6 minute average	FGDISALINE	SC V.2	R 336.1301(1)(c)
6. VOC	14.0 pounds per hour ²	Test Protocol*	EUDISADUSTAR	SC V.3	R 336.1702(c)
7. VOC	42.0 tons per year ²	NA	EUDISADUSTAR	SC VI.5	R 336.1702(c)
8. Formaldehyde	2.0 milligrams per cubic meter, corrected to 70°F and 29.92 inches Hg ¹	Test Protocol*	EUDISADUSTAR	SC V.4	R 336.1224(1), R 336.1225(1)

*Test protocol shall specify averaging time.

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee shall not operate FGDISALINE unless the baghouse is installed and operating properly.² (R 336.1910)
- The permittee shall maintain the differential pressure across the baghouse within the normal operating range identified in the approved MAP.² (R 336.1910)

IV. DESIGN/EQUIPMENT PARAMETER(S)

- The permittee shall install and maintain a device to measure the differential pressure across the baghouse. (R 336.1910)

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 performance tests, in a manner acceptable to AQD, for verification of the PM-10 emission rates to demonstrate compliance with the limit in SC I.1. The performance tests shall be completed every five years. **(R 336.1213(3)(a))**
2. The permittee shall perform and document 6 minute non-certified visible emissions observations once per week when the equipment is operating. Records of the non-certified visible emissions observations, the reason for any visible emissions observed and any corrective actions taken shall be kept on file and in a format acceptable to the AQD. **(R 336.1213(3)(a))**
3. The permittee shall conduct performance tests, in a manner acceptable to the AQD, for verification of the VOC emission rates to demonstrate compliance with the limit in SC I.7. The performance tests shall be conducted every five years. **(R 336.1213(3)(a))**
4. The permittee shall conduct performance tests, in a manner acceptable to the AQD, for verification of the formaldehyde emission rate to demonstrate compliance with the limit in SC I.9. The performance tests shall be conducted every five years. **(R 336.1213(3)(a))**

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 utilize differential pressure data as an indicator of a properly functioning baghouse. The appropriate range of differential pressure defining proper function of the baghouse is 1.0 inches to 6.0 inches W.G. **(40 CFR 64.6(c)(1)(i and ii))**
2. The permittee shall continuously monitor and record once per day the differential pressure across the baghouse once per day in a manner and with instrumentation acceptable to the AQD.² **(40 CFR 64.6(c)(iii))**
3. 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))**
4. The permittee shall calculate and record the PM-10 emission rates, in tons per year, using emission factors based upon the most recent performance testing to demonstrate compliance with the limits in SC I.2, SC I.3, and SC I.4. The calculations shall be completed by no later than January 30th for the previous calendar year. **(R 336.1213(3)(b))**
5. The permittee shall calculate and record the VOC emission rate from EUDISADUSTAR, in tons per year, using emission factors based upon the most recent performance testing to demonstrate compliance with the limit in SC I.8. The calculations shall be completed by no later than January 30th for the previous calendar year. **(R 336.1213(3)(b))**
6. The permittee shall properly maintain the differential pressure monitoring system, including keeping necessary parts for routine repair of the monitoring equipment. **(40 CFR 64.7(b))**
7. The permittee shall use the differential pressure across the baghouse to assure compliance with the PM-10 limit. An excursion for PM-10 shall be a differential pressure less than 1.0 inches W.G. or greater than 6.0 inches W.G.. This SC does not affect compliance with R 336.1331. **(40 CFR 64.6(c)(2))**

8. 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). In response to an excursion as defined in this section, the permittee shall conduct an investigation and take actions as specified in the AQD approved MAP. **(40 CFR 64.7(d))**
9. 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), 40 CFR 64.7(c))**
10. Records of the non-certified visible emissions observations the reason for any visible emissions observed and any corrective actions taken shall be kept on file and in a format acceptable to the AQD. **(R 336.1213(3)(a))**

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. The permittee shall submit two complete test protocols to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor for approval at least 30 days prior to the anticipated test date. The protocol shall describe the test method(s) and the maximum routine operating conditions, including targets for key operational parameters associated with air pollution control equipment to be monitored and recorded during testing. **(R 336.2001(3))**
5. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor no less than 7 days prior to the anticipated test date. **(R 336.2001(4))**
6. The permittee shall submit two complete test reports of the test results to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor, within 60 days following the last date of the test. **(R 336.2001(5))**
7. Each semiannual report of monitoring and deviations shall include summary information on the number, duration and cause of excursions and/or exceedances and the corrective actions taken. If there were no excursions and/or exceedances in the reporting period, then this report shall include a statement that there were no excursions and/or exceedances. **(40 CFR 64.9(a)(2)(i))**
8. Each semiannual 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. **(40 CFR 64.9(a)(2)(ii))**

- Each semiannual report of monitoring and deviations shall include a description of the actions taken to implement a QIP during the reporting period (if appropriate). If a QIP has been completed the report shall include documentation that the plan has been implemented and if it has reduced the likelihood of excursions or exceedances. **(40 CFR 64.9(a)(2)(iii))**

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. SVDUSTAR	52 ²	69 ²	40 CFR 52.21(c) and (d)

IX. OTHER REQUIREMENT(S)

- 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 of the CAM Plan 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))**
- The permittee shall comply with all applicable requirements of 40 CFR Part 64. **(40 CFR Part 64)**

Footnotes:

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

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

**FGCLEAN&FINISH
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Shot blast machine and AAF baghouse used to clean castings prior to finishing and casting finishing process using grinding wheels and AAF baghouse.

Emission Unit: EUCLEAN, EUFINISH

POLLUTION CONTROL EQUIPMENT

AAF baghouse

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Particulate matter	0.10 pounds per 1,000 pounds of exhaust gases, calculated on a dry gas basis ²	NA	EUFINISH	SC V.1	R 336.1331(1)(c)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate FGCLEAN&FINISH unless the baghouse is installed and operating properly.² (R 336.1910)
2. The permittee shall maintain the differential pressure across the baghouse within the normal operating range identified in the approved MAP. (R 336.1910)

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall install and maintain a device to measure the differential pressure across the baghouse. (R 336.1910, 40 CFR 64.6(c)(1)(ii))

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 perform and document 6 minute non-certified visible emissions observations once per week when the equipment is operating. Records of the non-certified visible emissions observations, the reason for any visible emissions observed and any corrective actions taken shall be kept on file and in a format acceptable to the AQD. (R 336.1213(3)(a))

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 utilize differential pressure data as an indicator of a properly functioning baghouse. The appropriate range of differential pressure defining proper function of the baghouse is 1.0 to 6.0 inches W.G. **(40 CFR 64.6(c)(1)(i and ii))**
2. 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))**
3. The permittee shall continuously monitor and record once per day the differential pressure across the baghouse. **(R 336.1213(3)(b), 40 CFR 64.6(c)(1)(iii))**
4. The permittee shall properly maintain the differential pressure monitoring system, including keeping necessary parts for routine repair of the monitoring equipment. **(40 CFR 64.7(b))**
5. The permittee shall use differential pressure across the baghouse to assure compliance with the particulate matter limit. An excursion for particulate matter shall be a differential pressure less than 1.0 inches W.G. or greater than 6.0 inches W.G. **(40 CFR 64.6(c)(2))**
6. 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). In response to an excursion as defined in this section, the permittee shall conduct an investigation and take actions as specified in the AQD approved MAP. **(40 CFR 64.7(d))**
7. 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), 40 CFR 64.7(c))**
8. Records of the non-certified visible emissions observations the reason for any visible emissions observed and any corrective actions taken shall be kept on file and in a format acceptable to the AQD. **(R 336.1213(3)(a))**

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 and deviations shall include summary information on the number, duration and cause of excursions and/or exceedances and the corrective actions taken. If there were no excursions and/or exceedances in the reporting period, then this report shall include a statement that there were no excursions and/or exceedances. **(40CFR 64.9(a)(2)(i))**
5. Each semiannual 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. **(40 CFR 64.9(a)(2)(ii))**
6. Each semiannual report of monitoring and deviations shall include a description of the actions taken to implement a QIP during the reporting period (if appropriate). If a QIP has been completed the report shall include documentation that the plan has been implemented and if it has reduced the likelihood of excursions or exceedances. **(40 CFR 64.9(a)(2)(iii))**

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. 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 of the CAM Plan 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))**
2. The permittee shall comply with all applicable requirements of 40 CFR Part 64. **(40 CFR Part 64)**

Footnotes:

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

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

FG-COLD CLEANERS FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278 and Rule 281(h) or Rule 285(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: EUCOLDCLEANERM, EUCOLDCLEANERF

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(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(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°F, 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(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%, 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

FG-RULE 290 FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and 290.

Emission Unit: EURIAPPLICATION, EUPATTERNMAKING, EUSHELLCORE, EUCOREWASH

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

1. Each emission unit that emits only noncarcinogenic volatile organic compounds or noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone if the total uncontrolled or controlled emissions of air contaminants are not more than 1,000 or 500 pounds per month, respectively. **(R 336.1290(a)(i))**
2. Each emission unit that the total uncontrolled or controlled emissions of air contaminants are not more than 1,000 or 500 pounds per month, respectively, and all the following criteria listed below are met: **(R 336.1290(a)(ii))**
 - a. For noncarcinogenic air contaminants, excluding noncarcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with initial threshold screening levels greater than or equal to 2.0 micrograms per cubic meter, the uncontrolled or controlled emissions shall not exceed 1,000 or 500 pounds per month, respectively. **(R 336.1290(a)(ii)(A))**
 - b. For noncarcinogenic air contaminants, excluding noncarcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with initial threshold screening levels greater than or equal to 0.04 microgram per cubic meter and less than 2.0 micrograms per cubic meter, the uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively. **(R 336.1290(a)(ii)(B))**
 - c. For carcinogenic air contaminants with initial risk screening levels greater than or equal to 0.04 microgram per cubic meter, the uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively. **(R 336.1290(a)(ii)(C))**
 - d. The emission unit shall not emit any air contaminants, excluding non-carcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with an initial threshold screening level or initial risk screening level less than 0.04 microgram per cubic meter. **(R 336.1290(a)(ii)(D))**
3. Each emission unit that emits only noncarcinogenic particulate air contaminants and other air contaminants that are exempted under Rule 290(a)(i) and/or Rule 290(a)(ii), if all of the following provisions are met: **(R 336.1290(a)(iii))**
 - a. The particulate emissions are controlled by an appropriately designed and operated fabric filter collector or an equivalent control system which is designed to control particulate matter to a concentration of less than or equal to 0.01 pound of particulate per 1,000 pounds of exhaust gases and which does not have an exhaust gas flow rate more than 30,000 actual cubic feet per minute. **(R 336.1290(a)(iii)(A))**
 - b. The visible emissions from the emission unit are not more than 5% opacity in accordance with the methods contained in Rule 303. **(R 336.1290(a)(iii)(B))**
 - c. The initial threshold screening level for each particulate air contaminant, excluding nuisance particulate, is more than 2.0 micrograms per cubic meter. **(R 336.1290(a)(iii)(C))**

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The provisions of Rule 290 apply to each emission unit that is operating pursuant to Rule 290. **(R 336.1290)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall maintain records of the following information for each emission unit for each calendar month using the methods outlined in the DEQ, AQD Rule 290, Permit to Install Exemption Record form (EQP 3558) or in a format that is acceptable to the AQD District Supervisor. **(R 336.1213(3))**
 - a. Records identifying each air contaminant that is emitted. **(R 336.1213(3))**
 - b. Records identifying if each air contaminant is controlled or uncontrolled. **(R 336.1213(3))**
 - c. Records identifying if each air contaminant is either carcinogenic or non-carcinogenic. **(R 336.1213(3))**
 - d. Records identifying the ITSL and IRSL, if established, of each air contaminant that is being emitted under the provisions of Rules 290(a)(ii) and (iii). **(R 336.1213(3))**
 - e. Material use and calculations identifying the quality, nature, and quantity of the air contaminant emissions in sufficient detail to demonstrate that the actual emissions of the emission unit meet the emission limits outlined in this table and Rule 290. **(R 336.1213(3), R 336.1290(c))**
2. The permittee shall maintain an inventory of each emission unit that is exempt pursuant to Rule 290. This inventory shall include the following information. **(R 336.1213(3))**
 - a. The permittee shall maintain a written description of each emission unit as it is maintained and operated throughout the life of the emission unit. **(R 336.1290(b), R 336.1213(3))**
 - b. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(a)(iii), the permittee shall maintain a written description of the control device, including the designed control efficiency and the designed exhaust gas flow rate. **(R 336.1213(3))**
3. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(a)(iii), the permittee shall perform a monthly visible emission observation of each stack or vent during routine operating conditions. This observation need not be performed using Method 9. The permittee shall keep a written record of the results of each observation. **(R 336.1213(3))**

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

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

The following is an alphabetical listing of abbreviations/acronyms that may be used in this permit.

AQD	Air Quality Division	MM	Million
acfm	Actual cubic feet per minute	MSDS	Material Safety Data Sheet
BACT	Best Available Control Technology	MW	Megawatts
BTU	British Thermal Unit	NA	Not Applicable
°C	Degrees Celsius	NAAQS	National Ambient Air Quality Standards
CAA	Federal Clean Air Act	NESHAP	National Emission Standard for Hazardous Air Pollutants
CAM	Compliance Assurance Monitoring	NMOC	Non-methane Organic Compounds
CEM	Continuous Emission Monitoring	NOx	Oxides of Nitrogen
CFR	Code of Federal Regulations	NSPS	New Source Performance Standards
CO	Carbon Monoxide	NSR	New Source Review
COM	Continuous Opacity Monitoring	PM	Particulate Matter
department	Michigan Department of Environmental Quality	PM-10	Particulate Matter less than 10 microns in diameter
dscf	Dry standard cubic foot	pph	Pound per hour
dscm	Dry standard cubic meter	ppm	Parts per million
EPA	United States Environmental Protection Agency	ppmv	Parts per million by volume
EU	Emission Unit	ppmw	Parts per million by weight
°F	Degrees Fahrenheit	PS	Performance Specification
FG	Flexible Group	PSD	Prevention of Significant Deterioration
GACS	Gallon of Applied Coating Solids	psia	Pounds per square inch absolute
GC	General Condition	psig	Pounds per square inch gauge
gr	Grains	PeTE	Permanent Total Enclosure
HAP	Hazardous Air Pollutant	PTI	Permit to Install
Hg	Mercury	RACT	Reasonable Available Control Technology
hr	Hour	ROP	Renewable Operating Permit
HP	Horsepower	SC	Special Condition
H ₂ S	Hydrogen Sulfide	scf	Standard cubic feet
HVLP	High Volume Low Pressure *	sec	Seconds
ID	Identification (Number)	SCR	Selective Catalytic Reduction
IRSL	Initial Risk Screening Level	SO ₂	Sulfur Dioxide
ITSL	Initial Threshold Screening Level	SRN	State Registration Number
LAER	Lowest Achievable Emission Rate	TAC	Toxic Air Contaminant
lb	Pound	Temp	Temperature
m	Meter	THC	Total Hydrocarbons
MACT	Maximum Achievable Control Technology	tpy	Tons per year
MAERS	Michigan Air Emissions Reporting System	µg	Microgram
MAP	Malfunction Abatement Plan	VE	Visible Emissions
MDEQ	Michigan Department of Environmental Quality	VOC	Volatile Organic Compounds
mg	Milligram	yr	Year
mm	Millimeter	%	Percent

*For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 pounds per square inch gauge (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

Specific recordkeeping requirement formats and procedures 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 5. Testing Procedures

There are no specific testing requirement plans or procedures for this ROP. 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-A3934-2009. 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 A3934-2009b is being reissued as Source-Wide PTI No. MI-PTI-A3934-2015

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
438-80F	201200157*	Removal of NOx and Mn-10 limitations from EUCUPOLA	EUCUPOLA
151-93B	201300099*	The Disa Line pouring, mold cooling, and sand mulling operations controlled by the Dustar baghouse.	EUDISALINE
NA	201300119*	Name change	NA
210-91B	201300187*	Six cold box core machines with packed tower scrubber including ancillary core making equipment.	EUCOLDBOXCORE

Appendix 7. Emission Calculations

There are no specific emission calculations to be used for this ROP. Therefore, this appendix is not applicable.

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.