

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

EFFECTIVE DATE: September 10, 2020

ISSUED TO

**Gerdau Special Steel North America - Jackson Mill
and TMS International LLC**

State Registration Number (SRN): B4306

LOCATED AT

3100 Brooklyn Road, Jackson Michigan 49203

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-B4306-2020

Expiration Date: September 10, 2025

Administratively Complete ROP Renewal Application Due Between
March 10, 2024 and March 10, 2025

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 Rule 210(1) of the administrative rules promulgated under Act 451, 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-B4306-2020

This Permit to Install (PTI) is issued in accordance with and subject to Section 5505(1) of Act 451. Pursuant to Rule 214a of the administrative rules promulgated under Act 451, 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 Environment, Great Lakes, and Energy



Scott Miller, Jackson District Supervisor

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AUTHORITY AND ENFORCEABILITY

For the purpose of this permit, the **permittee** is defined as any person who owns or operates an emission unit at a stationary source for which this permit has been issued. The **department** is defined in Rule 104(d) as the Director of the Michigan Department of Environment, Great Lakes, and Energy (EGLE) 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 is 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.

This permit does not relieve the permittee from any responsibilities or obligations imposed on the permittee, at the source under Consent Decree U.S. v Gerdau Specialty Steel North America, Civil Action No. 18-12228, entered in 2018 between the USEPA and the permittee.

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SECTION 1 – Gerdau Special Steel North America - Jackson Mill

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))**

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- 6. A challenge by any person, the Administrator of the USEPA, or the department to a particular condition or a part of this ROP shall not set aside, delay, stay, or in any way affect the applicability or enforceability of any other condition or part of this ROP. **(R 336.1213(1)(f))**
- 7. The permittee shall pay fees consistent with the fee schedule and requirements pursuant to Section 5522 of Act 451. **(R 336.1213(1)(g))**
- 8. This ROP does not convey any property rights or any exclusive privilege. **(R 336.1213(1)(h))**

Equipment & Design

- 9. Any collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2).² **(R 336.1370)**
- 10. Any air cleaning device shall be installed, maintained, and operated in a satisfactory manner and in accordance with the Michigan Air Pollution Control rules and existing law. **(R 336.1910)**

Emission Limits

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

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

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

Testing/Sampling

- 13. The department may require the owner or operator of any source of an air contaminant to conduct acceptable performance tests, at the owner’s or operator’s expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001(1).² **(R 336.2001)**
- 14. Any required performance testing shall be conducted in accordance with Rule 1001(2), Rule 1001(3) and Rule 1003. **(R 336.2001(2), R 336.2001(3), R 336.2003(1))**
- 15. Any required test results shall be submitted to the Air Quality Division (AQD) in the format prescribed by the applicable reference test method within 60 days following the last date of the test. **(R 336.2001(5))**

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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 state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. **(R 336.1213(3)(c))**
19. A Responsible Official shall certify to the appropriate AQD District Office and to the USEPA that the stationary source is and has been in compliance with all terms and conditions contained in the ROP except for deviations that have been or are being reported to the appropriate AQD District Office pursuant to Rule 213(3)(c). This certification shall include all the information specified in Rule 213(4)(c)(i) through (v) and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete. The USEPA address is: USEPA, Air Compliance Data - Michigan, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, Illinois 60604-3507. **(R 336.1213(4)(c))**
20. The certification of compliance shall be submitted annually for the term of this ROP as detailed in the special conditions, or more frequently if specified in an applicable requirement or in this ROP. **(R 336.1213(4)(c))**
21. The permittee shall promptly report any deviations from ROP requirements and certify the reports. The prompt reporting of deviations from ROP requirements is defined in Rule 213(3)(c)(ii) as follows, unless otherwise described in this ROP. **(R 336.1213(3)(c))**
 - a. For deviations that exceed the emissions allowed under the ROP, prompt reporting means reporting consistent with the requirements of Rule 912 as detailed in Condition 25. All reports submitted pursuant to this paragraph shall be promptly certified as specified in Rule 213(3)(c)(iii).
 - b. For deviations which exceed the emissions allowed under the ROP and which are not reported pursuant to Rule 912 due to the duration of the deviation, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe reasons for each deviation and the actions taken to minimize or correct each deviation.
 - c. For deviations that do not exceed the emissions allowed under the ROP, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe the reasons for each deviation and the actions taken to minimize or correct each deviation.

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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))**
- 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.
 - 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))**
- The applicable requirements are included and are specifically identified in the ROP.
 - 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:
- 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))**
 - 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))**
 - The applicable requirements of the acid rain program, consistent with Section 408(a) of the CAA. **(R 336.1213(6)(b)(iii))**

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- 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))**

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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(9))**

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))**

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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, EGLE.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, EGLE, 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).

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B. SOURCE-WIDE CONDITIONS

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

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

C. EMISSION UNIT SPECIAL 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
EU-HTOV001	30 MMBTU/hr. natural gas fired heat treat furnace. (PTI 24-06)	07-01-1981	FG-STEELMILL
EU-ROOFMONITOR	This emission unit is comprised of the melt shop roof monitor. The roof monitor is an enclosed vent at the apex of the roof line of the melt shop. The emissions emitted from the roof monitor are fugitive emissions that escape the roof canopies. All roof monitor vents in the Melt shop have been sealed as of 2018.	07-31-2018	FG-SHOP
EU-AF01	60.2 MMBTU/hr. annealing furnace #1. (PTI 183-01)	09-08-2001	FG-STEELMILL
EU-AF02	38.4 MMBTU/hr. annealing furnace #2. (PTI 183-01)	09-25-2001	FG-STEELMILL
EU-EAF-01	Electric arc furnace (EAF #1) melts scrap iron in a batch process. It is a refractory-lined cylindrical vessel with bowl shaped hearth and dome-shaped movable roof. The EAF emissions are ducted to a positive pressure baghouse (DV-BH03) and also to a negative pressure pulse jet baghouse (DV-CASTBAG).	01-01-1973	FG-EAF FG-EAF/LMF/VAD FG-SHOP FG-STEELMILL
EU-EAF-02	Electric arc furnace (EAF #2) melts scrap iron in a batch process. It is a refractory-lined cylindrical vessel with bowl shaped hearth and dome-shaped movable roof. The EAF emissions are ducted to a positive pressure baghouse (DV-BH03) and also to a negative pressure pulse jet baghouse (DV-CASTBAG).	01-01-1973	FG-EAF FG-EAF/LMF/VAD FG-SHOP FG-STEELMILL
EU-LMF	A ladle metallurgy furnace (LMF). Exhaust gases from the LMF are captured by the removable hood and associated canopy hoods and then routed to the melt shop baghouse (DV-BH03) for PM emission control.	07-07-1989	FG-EAF/LMF/VAD FG-SHOP FG-STEELMILL

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Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-VAD	A vacuum arc degasser (VAD). Exhaust gases from the VAD are captured by the close-fitting hood at the vacuum chamber door and associated canopy hoods and then routed to the melt shop baghouse (DV-BH03) for PM emission control.	07-07-1989	FG-EAF/LMF/VAD FG-SHOP FG-STEELMILL
EU-binfilter	This device is a small baghouse atop a silo. Its use is to prevent fugitive emissions from escaping the silo, which stores EAF dust.	03-01-1998	FG-STEELMILL
EU-limeBH	This is a small baghouse attached to the lime system. Its purpose is to collect fugitive emissions during lime system operation. It operates about 2 hours per day.	06-01-1999	FG-STEELMILL
EU-COLDCLEANERS	New cold solvent cleaners exempt from Rule 201 pursuant to Rule 278, 278a and Rule 281(2)(h) or Rule 285(2)(r)(iv).	After 7-01-1979	FG-COLDCLEANER FG-STEELMILL
EU-ENGINE1	Existing Emergency Compression Ignition Generator < 500 HP (Clean 1 West)	June 1984	FG-RICE FG-STEELMILL
EU-ENGINE2	Existing Emergency Compression Ignition Generator <500 HP (Clean 1 East)	05-23-1997	FG-RICE FG-STEELMILL
EU-ENGINE3	Existing Emergency Compression Ignition Generator < 500 HP (Turn Office)	Before 07-11-2005	FG-RICE FG-STEELMILL
EU-ENGINE4	Existing Emergency Compression Ignition Generator >500 HP. (New Heat Treat)	2001	FG-RICE FG-STEELMILL
EU-ENGINE5	Existing Emergency Spark Ignition Engine < 500 HP (Outside #1 STR)	07-14-1998	FG-RICE FG-STEELMILL
EU-ENGINE6	Existing Emergency Spark Ignition Engine <500 HP (Admin Bldg.)	06-08-2006	FG-RICE FG-STEELMILL

**EU-HTOV001
 EMISSION UNIT CONDITIONS**

DESCRIPTION

30 MMBTU/hr. natural gas fired heat treat furnace.

Flexible Group ID: FG-STEELMILL

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NOx	18.4 Tons ²	Per 12-month rolling time period	EU-HTOV001	SC VI.1	R 336.1205(3)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The only fuel the applicant may burn in the EU-HTOV001 is natural gas.² **(R 336.1205(3))**

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))**

NA

VI. MONITORING/RECORDKEEPING

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

1. The applicant shall keep natural gas usage records, acceptable to the AQD District Supervisor, indicating the amount of natural gas used, in cubic feet, on a calendar month basis and a 12-month rolling time period basis. The records must indicate the total amount of natural gas used by the EU-HTOV001. Based upon these records, the applicant shall calculate the NOx emissions from the EU-HTOV001. These calculations shall be on a calendar month basis and a 12-month rolling time period basis. In the absence of any actual emissions test data, and unless an alternative emission factor is approved in writing by the AQD District Supervisor, the applicant shall use an emission factor of 140 pounds of NOx emitted per million cubic feet of gas burned.² **(R 336.1205(3))**

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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 8-1

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. None of the operations within the EU-HTOV001 shall be directly vented to the outside atmosphere.¹ **(R 336.1225)**

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).

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**EU-AF01
 EMISSION UNIT CONDITIONS**

DESCRIPTION

60.2 MMBTU/hr. annealing furnace #1.

Flexible Group ID: FG-STEELMILL

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NOx	4.92 Pounds ²	Per hour, based upon a 24-hour averaging period	EU-AF01	SC VI.1	R 336.1205 40 CFR 52.21(c) & (d)
2. NOx	22 Tons ²	Per 12-month Rolling Time Period	EU-AF01	SC VI.2	R 336.1205 40 CFR 52.21(c) & (d)
3. CO	20 Tons ²	Per 12-month Rolling Time Period	EU-AF01	SC VI.2	R 336.1205 40 CFR 52.21(c) & (d)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Natural Gas	Not combust more than 527 million cubic feet ²	Per 12 month rolling time period	EU-AF01	SC VI.2	R 336.1205
2. Natural Gas	Not combust more than 0.06 million cubic feet ²	Per hour, based upon a 24-hour averaging period	EU-AF01	SC VI.1	R 336.1205

III. PROCESS/OPERATIONAL RESTRICTION(S)

- The only fuels the applicant may burn in the EU-AF01 are natural gas and propane.² (R 336.1205, 40 CFR 52.21(c) & (d))

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))

NA

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VI. MONITORING/RECORDKEEPING

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

1. The applicant shall determine the hourly amount of natural gas burned. The hourly natural gas usage rate shall be determined as an average over a 24-hour period. In the absence of any actual emissions data, and unless an alternative emission factor is approved in writing by the AQD District Supervisor, the applicant shall use an emission factor of 82 pounds of nitrogen oxides (NOx) emitted per million cubic feet of gas burned. All data, amounts of natural gas burned and calculations for NOx shall be kept on file for a period of at least five years and made available to the Air Quality Division upon request.² **(R 336.1205)**
2. The applicant shall keep natural gas usage records, acceptable to the AQD District Supervisor indicating the amount of natural gas used, in cubic feet, on a calendar month basis and a 12-month rolling time period basis. The records must indicate the total amount of natural gas used by the EU-AF01. Based upon these records, the applicant shall calculate the NOx and CO emissions from the EU-AF01. These calculations shall be on a calendar month basis and a 12-month rolling time period basis. In the absence of any actual emissions test data, and unless an alternative emission factor is approved in writing by the AQD District Supervisor, the applicant shall use an emission factor of 82 pounds of NOx emitted per million cubic feet of gas burned and an emission factor of 76.1 pounds of CO emitted per million cubic feet of gas burned. All data, amounts of natural gas burned and calculations shall be kept on file for a period of at least five years and made available to the Air Quality Division upon request.² **(R 336.1205)**

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 8-1

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-001	80 ²	84 ²	40 CFR 52.21(c) & (d)

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).

**EU-AF02
EMISSION UNIT CONDITIONS**

DESCRIPTION

38.4 MMBTU/hr. annealing furnace #2.

Flexible Group ID: FG-STEELMILL

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NOx	3.12 Pounds ²	Per hour, based upon a 24-hour averaging period	EU-AF02	SC VI.1	R 336.1205 40 CFR 52.21 (c) & (d)
2. NOx	13.9 Tons ²	Per 12-month Rolling Time Period	EU-AF02	SC VI.2	R 336.1205 40 CFR 52.21 (c) & (d)
3. CO	15 Tons ²	Per 12-month Rolling Time Period	EU-AF02	SC VI.2	R 336.1205 40 CFR 52.21 (c) & (d)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Natural gas	336 million cubic feet ²	Per 12 month rolling time period	EU-AF02	SC VI.2	R 336.1205
2. Natural gas	0.038 million cubic feet ²	Per hour based upon a 24-hour averaging period	EU-AF02	SC VI.1	R 336.1205

III. PROCESS/OPERATIONAL RESTRICTION(S)

- The only fuels the applicant may burn in the EU-AF02 are natural gas and propane.² (R 336.1205, 40 CFR 52.21 (c) & (d))

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))

NA

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VI. MONITORING/RECORDKEEPING

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

1. The applicant shall determine the hourly amount of natural gas burned. The hourly natural gas usage rate shall be determined as an average over a 24-hour period. In the absence of any actual emissions test data, and unless an alternative emission factor is approved in writing by the AQD District Supervisor, the applicant shall use an emission factor of 82 pounds of NOx emitted per million cubic feet of gas burned. All data, amounts of natural gas burned and calculations for NOx shall be kept on file for a period of at least five years and made available to the Air Quality Division upon request.² **(R 336.1205)**
2. The applicant shall keep natural gas usage records, acceptable to the AQD District Supervisor, indicating the amount of natural gas used, in cubic feet, on a calendar month basis and a 12-month rolling time period basis. The records must indicate total amount of natural gas used by the EU-AF02. Based upon these records, the applicant shall calculate NOx and CO emissions from the EU-AF02. These calculations shall be on a calendar month basis and a 12-month rolling time period basis. In the absence of any actual emissions test data, and unless an alternative emission factor is approved in writing by the AQD District Supervisor, the applicant shall use an emission factor of 82 pounds of NOx emitted per million cubic feet of gas burned and an emission factor of 76.1 pounds of CO emitted per million cubic feet of gas burned. All data, amounts of natural gas burned and calculations shall be kept on file for a period of at least five years and made available to the Air Quality Division upon request.² **(R 336.1205)**

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 8-1

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. None of the operations within EU-AF02 shall be directly vented to the outside atmosphere.¹ **(R 336.1225)**

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 SPECIAL 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
FG-EAF	Two (2) Electric Arc Furnaces.	EU-EAF-01, EU-EAF-02
FG-EAF/LMF/VAD	Two (2) Electric Arc Furnaces, a ladle metallurgy furnace (LMF), and a vacuum arc degasser (VAD). Fugitive emissions from all process inside the Melt Shop are all captured by canopy hood ventilation systems that are located just below the roof which direct these emissions to either a negative pressure pulse jet baghouse (DV-CASTBAG) and/or a positive pressure baghouse (DV-BH03).	EU-EAF-01, EU-EAF-02, EU-LMF, EU-VAD
FG-SHOP (Roof Monitor)	The Melt Shop roof monitors have been permanently sealed. Fugitive emissions from all processes inside the Melt Shop such as EU-EAF-01, EU-EAF-02, EU-LMF, EU-VAD and the Caster process are all captured by canopy hood ventilation systems that are located just below the roof which direct these emissions to either a negative pressure pulse jet baghouse (DV-CASTBAG) and/or a positive pressure baghouse (DV-BH03).	EU-EAF-01, EU-EAF-02, EU-LMF, EU-VAD, EU-ROOFMONITOR
FG-STEELMILL	All equipment at the facility including the FG-EAF, FG-EAF/LMF/VAD and the equipment covered by other permits, grand-fathered equipment and exempt equipment.	EU-HTOV001, EU-AF01, EU-AF02, EU-EAF-01, EU-EAF-02, EU-LMF, EU-VAD, EU-ROOFMONITOR, EU-binfilter, EU-limeBH, EU-ENGINE1, EU-ENGINE2, EU-ENGINE3, EU-ENGINE4, EU-ENGINE5, EU-ENGINE6, EU-COLDCLEANERS
FG-RICE	Four (4) Compression Ignition Emergency Generators and Two (2) Spark Ignition Emergency Generators subject to the RICE MACT Requirements.	EU-ENGINE1, EU-ENGINE2, EU-ENGINE3, EU-ENGINE4, EU-ENGINE5, EU-ENGINE6
FG-COLDCLEANERS	Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278, 278a and Rule 281(2)(h) or Rule 285(2)(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.	EU-COLDCLEANERS

**FG-EAF
FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Two (2) electric arc furnaces.

Emission Units: EU-EAF-01, EU-EAF-02

POLLUTION CONTROL EQUIPMENT

A positive pressure baghouse (DV-BH03) that has a long horizontal opening in the ceiling of the baghouse rather than a stack and a negative pressure pulse jet baghouse (DV-CASTBAG) with a stack.

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Scrap Steel (includes all metal charged to FG-EAF)	1,920 tons ²	Per calendar day as determined at the end of each calendar month	FG-EAF	SC VI.1 and VI.2.	40 CFR 52.21(j) R 336.1224 R 336.1225 R 336.1226(d)
2. Scrap Steel (includes all metal charged to FG-EAF)	560,000 tons ²	Per 12-month rolling time period as determined at the end of each calendar month	FG-EAF	SC VI.1 and VI.2	40 CFR 52.21(j) R 336.1224 R 336.1225 R 336.1226(d)

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

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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 tons of scrap steel charged to FG-EAF, by using methods approved in writing by the AQD District Supervisor.² **(40 CFR 52.21(j), R 336.1224, R 336.1225, R 336.1226(d))**
2. The permittee shall keep records of the tons of scrap steel charged to FG-EAF on a daily average basis and in tons per 12-month rolling time period, by using methods approved in writing by the AQD District Supervisor. All such records shall be kept on file for a period of at least five years and made available to the Air Quality Division upon request.² **(40 CFR 52.21(j), R 336.1224, R 336.1225, R 336.1226(d))**

See Appendix 3-1

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))**

See Appendix 8-1

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-BH03-STACK	NA	90 ^{2,3}	R 336.1224, R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall operate and maintain the EAFs and associated air pollution control equipment to minimize emissions through the implementation of good air pollution control practices as required by 40 CFR 63.6(e)(1)(i) at all times.^{2,3 4} **(U.S. v Gerdau Specialty Steel North America , Civil Action No. 18-12228, Paragraph 8 and Act 451, Section 324.5503(b))**

Footnotes:

¹ This condition is state-only enforceable and was established pursuant to Rule 201(1)(b).
² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).
³ This condition is federally enforceable and was originally established in the consent decree settling, “U.S. v Gerdau Specialty Steel North America, Civil Action No. 18-12228” and also pursuant to Act 451, Section 324.5503(b), and will remain in effect after termination of the consent decree.
⁴ Definitions specific to this condition can be found in Appendix 1-B, Definitions.

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**FG-EAF/LMF/VAD
FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Two (2) Electric Arc Furnaces, a ladle metallurgy furnace (LMF), and a vacuum arc degasser (VAD) with local and canopy hoods ducted to DV-BH03.

Emission Units: EU-EAF-01, EU-EAF-02, EU-LMF, EU-VAD

POLLUTION CONTROL EQUIPMENT

A positive pressure baghouse (DV-BH03) that has a long horizontal opening in the ceiling of the baghouse rather than a stack and a negative pressure Pulse Jet baghouse (DV-CASTBAG) with a stack.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM	0.0052 gr/dscf of exhaust gases ^{2, 3, 4}	Hourly	FG-EAF/LMF/VAD (DV-BH03 & DV-CASTBAG)	SC V.1	R 336.1331 40 CFR 52.21(j) 40 CFR 63.10686(b)(1) U.S. v Gerdau Specialty Steel North America, Civil Action No. 18-12228, Paragraph 10, and Act 451, Section 324.5503(b)
2. PM	24.7 pph ²	Hourly	FG-EAF/LMF/VAD (DV-BH03)	SC V.1	R 336.1331 40 CFR 52.21(j)
3. PM-10	0.0052 gr/dscf of exhaust gases ^{2, 3, 4}	Hourly	FG-EAF/LMF/VAD (DV-BH03 & DV-CASTBAG)	SC V.1	40 CFR 52.21(j) 40 CFR 63.10686(b)(1) U.S. v Gerdau Specialty Steel North America, Civil Action No. 18-12228, Paragraph 10, and Act 451, Section 324.5503(b)
4. PM-10	24.7 pph ²	Hourly	FG-EAF/LMF/VAD (DV-BH03)	SC V.1	40 CFR 52.21(j)
5. SO ₂	1.0 lb/ton ²	Daily average	FG-EAF/LMF/VAD (DV-BH03)	SC VI.3 & VI.7	40 CFR 52.21(j)

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Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
6. SO ₂	280 tpy ²	12-month rolling time period as determined at the end of each calendar month	FG-EAF/LMF/VAD (DV-BH03)	SC VI.3 & VI.7	40 CFR 52.21(j)
7. NO _x	0.53 lb/ton ²	Hourly	FG-EAF/LMF/VAD (DV-BH03)	SC V.1	40 CFR 52.21(j)
8. NO _x	148.4 tpy ²	12-month rolling time period as determined at the end of each calendar month	FG-EAF/LMF/VAD (DV-BH03)	SC VI.8	40 CFR 52.21(j)
9. CO	5 lb/ton ²	Hourly	FG-EAF/LMF/VAD (DV-BH03)	SC VI.3 & VI.7	40 CFR 52.21(j)
10. CO	1400 tpy ²	12-month rolling time period as determined at the end of each calendar month	FG-EAF/LMF/VAD (DV-BH03)	SC VI.3 & VI.7	40 CFR 52.21(j)
11. VOC	0.30 lb/ton ²	Hourly	FG-EAF/LMF/VAD (DV-BH03)	SC V.1	40 CFR 52.21(j) R 336.1702(a)
12. VOC	84 tpy ²	12-month rolling time period as determined at the end of each calendar month	FG-EAF/LMF/VAD (DV-BH03)	SC VI.8	40 CFR 52.21(j) R 336.1702(a)
13. Pb	0.28 pph ²	Hourly	FG-EAF/LMF/VAD (DV-BH03)	SC V.1	40 CFR 52.21(j) R 336.1224 R 336.1225
14. Manganese (Mn)	(0.39 mg/m ³) ¹	Hourly	FG-EAF/LMF/VAD (DV-BH03)	SC V.1	R 336.1224 R 336.1225 R 336.1226(d)
15. Mn	0.817 pph ¹	Hourly	FG-EAF/LMF/VAD (DV-BH03)	SC V.1	R 336.1224 R 336.1225 R 336.1226(d)
16. Mn	2.8 tpy ¹	12-month rolling time period as determined at the end of each calendar month	FG-EAF/LMF/VAD (DV-BH03)	SC VI.8	R 336.1224 R 336.1225 R 336.1226(d)
17. Hg	0.026 pph ¹	Hourly	FG-EAF/LMF/VAD (DV-BH03)	SC V.1	R 336.1224 R 336.1225
18. Hg	0.069 tpy ¹	12-month rolling time period as determined at the end of each calendar month	FG-EAF/LMF/VAD (DV-BH03)	SC VI.8	R 336.1224 R 336.1225

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Visible emissions from FG-EAF/LMF/VAD controlled by the DV-BH03 shall not exceed a 6-minute average of 6% opacity, except for one 6-minute average per hour of not more than 10% opacity. Compliance with this limit demonstrates compliance with 40 CFR Part 63, Subpart YYYYYY which limits opacity from the melt shop, due

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solely to the operations of the electric arc furnace to 6% opacity. Compliance with this limit shall be determined using USEPA Reference Method 9.² (40 CFR 63.10686(b)(2), 40 CFR 52.21(j), R 336.1301(c), R 336.1331, R 336.1362)

2. The permittee shall implement and maintain a written on-site screening procedure and material management plan as approved by the AQD District Supervisor. The on-site screening procedure and material management plan will facilitate the permittee’s efforts in controlling mercury and/or other toxics and VOC emissions by eliminating unacceptable scrap and eliminating or reducing scrap with mercury contaminated materials. The permittee shall require all supplier’s document that mercury-containing devices and switches have either been removed or not been removed from the scrap.² (R 336.1224, R 336.1225, R 336.1226(d), R 336.1702)

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate FG-EAF/LMF/VAD unless their associated exhaust capture systems and ventilation hoods and the DV-BH03 are installed and operating properly.² (40 CFR 52.21(j), R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1362, 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 verify CO, PM, PM-10, NOx, VOC, Pb, Mn, and Hg emission rates from FG-EAF/LMF/VAD by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM10/PM2.5	40 CFR Part 51, Appendix M
NOx	40 CFR Part 60, Appendix A
SO ₂	40 CFR Part 60, Appendix A
CO	40 CFR Part 60, Appendix A
VOC	40 CFR Part 60, Appendix A
Metals	40 CFR Part 60, Appendix A; 40 CFR Part 61, Appendix B; 40 CFR Part 63, Appendix A
Mercury	40 CFR Part 60, Appendix A; 40 CFR Part 61, Appendix B; 40 CFR Part 63, Appendix A
Visible Emission	40 CFR Part 51, Appendix M; 40 CFR Part 60, Appendix A and B

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. (R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)

2. The permittee shall conduct a performance emission test for PM, PM-10, NOx, VOC, Pb, Mn, and Hg emission rates, at a minimum, every five years from the date of the last test. The PM and metals performance test(s) shall run simultaneously. No less than 30 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. In addition, the report shall include, at a minimum, the following information:² (40 CFR 52.21, R 336.1224, R 336.1225, R 336.1226(d), R 336.1910, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d), R 336.1213(3))
 - a. A description of the type and amount of scrap steel (i.e. form-bundles, frag, coils, etc.) and other raw materials (i.e. carbon, coal, coke, lime, etc.) charged during each run of the performance emissions test(s) for metals.
 - b. A description of the FG-EAF operating parameters.
 - c. Mercury concentration of the raw material feed (carbon, coal, coke, lime, etc.), as provided by the supplier.

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VI. MONITORING/RECORDKEEPING

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

1. The amount of manganese alloy added to FG-EAF/LMF/VAD, in pounds, shall be determined and recorded during the stack test.¹ **(R 336.1224, R 336.1225, R 336.1226(d))**
2. The permittee shall obtain an acceptable analysis of the DV-BH03 hopper dust annually. The permittee shall record the concentration, in ppmw, or percentage of Pb, Mn, and Hg in the collected baghouse dust.² **(40 CFR 52.21, R 336.1224, R 336.1225, R 336.1226(d))**
3. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record SO₂ and CO emissions and exhaust flow from FG-EAF/LMF/VAD on a continuous basis. The exhaust flow shall be measured using either a flow monitor or fan speed by a method approved in writing by the AQD. The permittee shall install and operate each Continuous Emission Rate Monitoring System (CERMS) in accordance with the requirements detailed in Appendix 3-1 and shall use the CERMS data for determining compliance with SC I.5, I.6, I.9 and I.10.² **(40 CFR 52.21)**
4. The permittee shall calculate the SO₂ emission rates from FG-EAF/LMF/VAD in pounds per ton on a daily average basis and in tons per 12-month rolling time period basis at the end of each calendar month, by using the CERMS data and by using a method approved in writing by the AQD District Supervisor. The permittee shall calculate the CO emission rates from FG-EAF/LMF/VAD in pounds per ton on a monthly average basis and in tons per 12-month rolling time period basis at the end of each calendar month, by using the CERMS data and by using a method approved in writing by the AQD District Supervisor.² **(40 CFR 52.21, R 336.1224, R 336.1225, R 336.1226(d), R 336.1702)**
5. The permittee shall also calculate the NO_x, VOC, Mn and Hg emission rates from FG-EAF/LMF/VAD in tons per 12-month rolling time period basis at the end of each calendar month by using the tested NO_x, VOC, Mn, and Hg emission data and by using a method approved in writing by the AQD District Supervisor.² **(40 CFR 52.21, R 336.1224, R 336.1225, R 336.1226(d), R 336.1702)**
6. During times of operation, the permittee shall conduct non-certified visible emission reading(s) for FG-EAF/LMF/VAD from DV-BH03 especially during charging at least once per operating day. If the visible emissions are observed and/or are greater than the limit specified in SC III.1, then a certified Federal Reference Method 9 (40 CFR Part 60, Appendix A) visible emissions reader shall determine the opacity of the plume(s). If the visible emissions are observed and exceed the limit specified in SC III.1, an immediate investigation to determine cause, and initiate prompt corrective action and the time of completion of corrective action shall be done.² **(40 CFR 52.21, R 336.1301(c), R 336.1331, R 336.1362)**
7. The permittee shall record daily non-certified visual opacity observation as an indicator of proper operation of the dust collector, DV-CASTBAG. The indicator range is the presence of visible emissions. If visible emissions are noted during the VE observation check, a USEPA Method 9 observation is performed for at least 6 minutes. **(40 CFR 64.6(c)(1)(i) and (ii))**
8. The permittee shall keep, in a satisfactory manner, visible emissions reading from the DV-BH03. Records shall be kept only when visible emissions are observed using Method 9 and shall include the time of the visible emissions, cause of the visible emissions, corrective action taken and time of completion of corrective action. All records shall be kept on file for a period of at least five years and made available to the Department upon request.² **(40 CFR 52.21, R 336.1301, R 336.1331, R 336.1362)**
9. The pressure drop across DV-BH03 shall be maintained between 3 and 10 inches of water gauge, when the Melt Shop is in operation. The permittee shall monitor the pressure drop across the DV-BH03 on a continuous basis in a manner and with instrumentation as approved in writing by the AQD District Supervisor.^{2,3,4} **(40 CFR 52.21(j), R 336.1224, R 336.1225, R 336.1226(d), R 336.1301, R 336.1331, R 336.1362, R 336.1910, 40 CFR 64.6(c)(2), U.S. v Gerdau Specialty Steel North America, Civil Action No. 18-12228, Paragraph 19, and Act 451, Section 324.5503(b))**

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10. During times of operation, the permittee shall record the pressure drop across the DV-BH03. All such records shall be kept on file for a period of at least five years and made available to the Air Quality Division upon request.² **(40 CFR 52.21, R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1362, R 336.1910)**
11. The permittee shall continuously measure the pressure drop and record every 15 minutes for an hourly average as an indicator of proper operation of the dust collector, DV-BH03 controlling FG-EAF/LMF/VAD. The indicator range is between 3- and 10-inch water column across the DV-BH03. **(40 CFR 64.6(c)(1)(i) and (ii))**
12. The permittee shall continuously measure the pressure drop and record every 15 minutes for an hourly average as an indicator of proper operation of the dust collector, DV-CASTBAG controlling FG-EAF/LMF/VAD. The indicator range is between 0- and 10-inch water column across the DV-CASTBAG. **(40 CFR 64.6(c)(1)(i) and (ii))**
13. The pressure gauges for DV-BH03 and DV-CASTBAG shall continuously monitor the pressure differential of the baghouses. The readings are instantaneous. The monitor shall be calibrated annually. **(40 CFR 64.6(c)(1)(iii))**
14. The permittee shall record the specific information as required in the on-site screening procedures and material management plan. All such records shall be kept on file for a period of at least five years and made available to the Air Quality Division upon request.² **(40 CFR 52.21, R 336.1224, R 336.1225, R 336.1702)**
15. The permittee shall utilize its Computerized Maintenance Management System for documenting inspections and associated deadlines; stack testing and associated deadlines; and maintenance activities associated with DV-BH03.^{2, 3, 4} **(U.S. v Gerdau Specialty Steel North America, Civil Action No. 18-12228, Paragraph 18, and Act 451, Section 324.5503(b))**
16. The permittee is subject to the MACT requirements of 40 CFR Part 63, Subpart YYYYYY.² **40 CFR 63.10686, 40 CFR 63.10690)**
17. The permittee received approval on November 7, 2008 for the required 40 CFR Part 63, Subpart YYYYYY Pollution Prevention Plan dated October 16, 2008. A copy of the plan is located in Appendix 3-1.² **(40 CFR 63.10685, 40 CFR 63.10690)**
18. Baghouse operational inspections shall be performed as described in the Malfunction Abatement Plan. Records shall be maintained to document the daily inspection and required maintenance. **(40 CFR 64.6(c)(1)(iii))**
19. The parameters to be used as indicators for the CAM Plan are visible emissions, pressure drop and inspection and maintenance of the baghouse controlling FG-EAF/LMF/VAD. Daily observations and baghouse operational inspections will be performed to determine whether there is problem with opacity from the baghouse. The pressure drop is measured continuously. **(40 CFR 64.6(c)(1)(i) & (ii))**
20. The permittee shall implement the methods identified in the CAM Plan during all required periods. **(40 CFR 64.6(c)(3), 40 CFR 64.7(a))**
21. When a problem with the baghouse is detected during an inspection, the problem is recorded on the inspection log and corrective action is initiated immediately. **(40 CFR 64.7(d))**
22. For FG-EAF/LMF/VAD and DV-BH03, an excursion is defined as the presence of visible emissions in excess of 6% opacity based on USEPA Method 9 observations. **(40 CFR 64.6(c)(2))**
23. The permittee shall evaluate the capture efficiency of the capture system DV-BH03 by daily monitoring of the operation the three baghouse fans. This monitoring shall be recorded/logged manually daily. The indicator range is proper operation of each fan. **(40 CFR 64.3(a)(2))**

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- 24. The permittee shall evaluate the capture efficiency of the capture system for DV-CASTBAG by daily monitoring of the operation the baghouse fan. This monitoring shall be recorded/logged manually daily. The indicator range is proper operation of each fan. **(40 CFR 64.3(a)(2))**
- 25. An excursion is a departure from the indicator range of 3 to 10 inches water column for DV-BH03 and 0 to 10-inch water column for DV-CASTBAG for differential pressures. **(40 CFR 64.6(c)(2))**
- 26. For the DV-BH03 capture system, an excursion is defined as less than two baghouse fans operating. **(40 CFR 64.3(b)(4))**
- 27. For the DV-CASTBAG capture system, an excursion is defined as the baghouse fan not in operation. **(40 CFR 64.3(b)(4))**
- 28. 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 control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions (described below) to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). **(40 CFR 64.7(d))**

DV-BH03

Visible Emissions: Upon confirmation of an excursion, the facility will follow the requirements of FG-EAF/LMF/VAD, SC VI.4.

Differential Pressure: Upon confirmation of an excursion, the facility will conduct baghouse inspections as described in the Malfunction Abatement Plan. Records shall be kept for the daily inspection and required maintenance.

Capture System: Upon confirmation of an excursion, the facility will follow the requirements of FG-SHOP, SC III.2 and SC III.3.

DV-CASTBAG

Visible Emissions: Upon confirmation of an excursion, the facility will follow the requirements of FG-SHOP, SC VI.1.

Differential Pressure: Upon confirmation of an excursion, the facility will follow the relevant portions of the facility's Malfunction Abatement Plan.

Capture System: Upon confirmation that the baghouse fan is not operating, production at both EAFs will be suspended until the baghouse fan is operational.

- 29. 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 purposes of this part, 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))**
- 30. The permittee shall properly maintain the monitoring system, including keeping necessary parts for routine repair of the monitoring equipment. **(40 CFR 64.7(b))**

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31. 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))**

See Appendix 3-1

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 336.12001(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 report period, then this report shall include a statement that there were no periods of monitor downtime. **(40 CFR 64.9(a)(2)(ii))**
9. The permittee shall submit any performance tests report including RATA reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

See Appendix 8-1

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VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-BH03-STACK	NA	90 ²	R 336.1224, R 336.1225, 40 CFR 52.21 (c) & (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable requirements of 40 CFR Part 64. **(40 CFR Part 64)**
2. 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 ROP and 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))**
3. The permittee shall notify, in a satisfactory manner, the AQD District Supervisor within 180 days of the intent to restart FG-EAF/LMF/VAD. A new PTI application shall be required prior to start-up if FG-EAF/LMF/VAD is not operated for a period exceeding 18 months. **(R 336.1213(3))**

Footnotes:

- ¹ This condition is state-only enforceable and was established pursuant to Rule 201(1)(b).
- ² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).
- ³ This condition is federally enforceable and was originally established in the consent decree settling, “U.S. v Gerdau Specialty Steel North America Civil Action No. 18-12228” and also pursuant to Act 451, Section 324.5503(b), and will remain in effect after termination of the consent decree.
- ⁴ Definitions specific to this condition can be found in Appendix 1-B, Definitions.

**FG-SHOP (Roof Monitor)
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

The Melt Shop roof monitors have been permanently sealed. Fugitive emissions from all processes inside the Melt Shop such as EU-EAF-01, EU-EAF-02, EU-LMF, EU-VAD and the Caster process are all captured by canopy hood ventilation systems that are located just below the roof which direct these emissions to either a negative pressure pulse jet baghouse (DV-CASTBAG) or and a positive pressure baghouse (DV-BH03).

Emission Units: EU-ROOFMONITOR, EU-EAF-01, EU-EAF-02, EU-LMF, and EU-VAD

POLLUTION CONTROL EQUIPMENT

A positive pressure baghouse (DV-BH03) that has a long horizontal opening in the ceiling of the baghouse rather than a stack and a negative pressure pulse jet baghouse (DV-CASTBAG) with a stack.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Visible Emissions	6% Opacity ²	Six-minute average	FG-SHOP (Roof Monitor)	SC VI.1 SC VI.2	40 CFR 63.10686(b)(2), 40 CFR 52.21(j), R 336.1358
2. Visible Emissions	6% Opacity ^{2, 3, 4}	Six-minute average	FG-SHOP (Roof Monitor)	SC VI.6	U.S. v Gerdau Specialty Steel North America, Civil Action No. 18-12228, Paragraph 11, and Act 451, Section 324.5503(b), R 336.1301(1)(c)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall submit, implement, and maintain a Malfunction Abatement Plan (MAP) as described in Rule 911(2), for the positive pressure baghouse (DV-BH03) and the negative pressure pulse jet baghouse (DV-CASTBAG) within 60 days of permit issuance. The MAP shall, at a minimum, specify the following:^{2, 3, 4} **(R 336.1331, R 336.1910, R 336.1911, 40 CFR 52.21(c) and (d), U.S. v Gerdau Specialty Steel North America, Civil Action No. 18-12228, Paragraphs 16c and 19a, and Act 451, Section 324.5503(b), R 336.1201(3))**
 - a. A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
 - b. An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.

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- c. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.
 - d. The requirements in SC VI.3.
 - e. Quarterly inspections of all associated ductwork for signs of internal build-up using infrared technology.
 - f. The preventative maintenance tasks associated with the Caster Roof Monitor Capture and Control System, in accordance with manufacturer's recommendations.
 - g. The requirements in SC VI.6.
2. Unless and until the permittee successfully demonstrates compliance with the opacity limit in SC I.2 during a two fan operation pursuant to the first performance test as required by U.S. v Gerdau Specialty Steel North America, Civil Action No. 18-12228, Paragraph 13, and Act 451, Section 324.5503(b), the permittee shall not simultaneously operate EU-EAF-01 and EU-EAF-02 when only two DV-BH03 fans are online. If only two fans are operating and either EU-EAF-01 and/or EU-EAF-02 contains molten metal, the permittee shall operate in a staggered operations mode, with power to only one EAF at a time, until the heat at EU-EAF-01 or EU-EAF-02 can be tapped and the EAFs are emptied.^{2,3,4} **(U.S. v Gerdau Specialty Steel North America, Civil Action No. 18-12228, Paragraph 15a, and Act 451, Section 324.5503(b), R 336.1201(3))**
 3. When only two fans are operating at DV-BH03, the permittee shall operate the EAFs as follows:^{2, 3, 4} **(U.S. v Gerdau Specialty Steel North America, Civil Action No. 18-12228, Paragraph 15b, and Act 451, Section 324.5503(b), R 336.1201(3))**
 - a. At the beginning of the scenario, the permittee shall operate the EAFs in a staggered operation mode, with power to only one EAF at a time, until the heat at EU-EAF-01 can be tapped and the EAF emptied.
 - b. Once the heat at EU-EAF-01 is tapped and EU-EAF-01 is emptied, the permittee shall operate EU-EAF-02 normally, with the two remaining fans in operation at DV-BH03 and shall modify dampers to isolate EU-EAF-02 for the duration of the scenario. EU-EAF-01 shall remain idled until all three fans at DV-BH03 are back online and in operation.

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall install, operate, and maintain the Caster Roof Monitor Capture and Control System, consistent with the design plan in Appendix A of U.S. v Gerdau Specialty Steel North America, Civil Action No. 18-12228. The system shall consist of closure of the Caster Roof Monitor and routing of emissions to the New Baghouse (DV-CASTBAG).^{2, 3, 4} **(U.S. v Gerdau Specialty Steel North America, Civil Action No. 18-12228, Paragraph 12, and Act 451, Section 324.5503(b), R 336.1201(3))**
2. The permittee shall not operate FG-SHOP (Roof Monitor) unless a pressure drop between 3.0 and 10.0 inches of water column is maintained across DV-BH03.^{2, 3, 4} **(U.S. v Gerdau Specialty Steel North America, Civil Action No. 18-12228, Paragraph 19a, and Act 451, Section 324.5503(b), R 336.1201(3))**

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall keep, in a satisfactory manner, records of visible emissions readings from DV-CASTBAG. Records shall be kept only when visible emissions are observed using Method 9 and shall include the time of the visible emissions, cause of the visible emissions, corrective action taken and time of completion of corrective action. All records shall be kept on file for a period of at least five years and made available to the Department upon request.² **(40 CFR 52.21, R 336.1301, R 336.1331)**

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2. On a monthly basis, the permittee shall inspect the exterior building and ductwork from the east, south, and west side of the facility for signs of holes, wear, or other degradation that could result in visible emissions. The permittee must document and maintain records in connection with the monthly inspections, which include the following:
 - a. The inspection date and name of inspector.
 - b. The identification of any holes, wear, or other degradation observed during the inspection.
 - c. Whether any visible emissions were observed during the inspection.

The permittee shall address any holes, wear, or other degradation that is resulting, or could result, in visible emissions as soon as possible, and shall document and maintain records of any corrective actions that were taken.^{2, 3, 4} **(U.S. v Gerdau Specialty Steel North America, Civil Action No. 18-12228, Paragraph 16a, and Act 451, Section 324.5503(b), R 336.1201(3))**

3. The permittee shall timely conduct all inspections in accordance with the procedures delineated in Table 3 of the approved MAP. The permittee shall maintain records of inspection dates, times, performed preventative maintenance, identified issues, and any corrective actions taken (date, time, and description) for inspections required in Table 3 of the MAP and any additional inspections that may be performed on the equipment. The permittee shall maintain records for all additional inspections.^{2, 3, 4} **(U.S. v Gerdau Specialty Steel North America, Civil Action No. 18-12228, Paragraphs 16b and 16c, and Act 451, Section 324.5503(b), R 336.1201(3))**
4. The permittee shall conduct weekly visible emission observations at the Melt Shop, in accordance with EPA Method 22, for a minimum of ten minutes when at least one EAF is operating. At least two of the weekly Melt Shop visible emission observations per month shall cover a full Tapping cycle at EU-EAF-01. If EU-EAF-01 is not operating, the permittee shall conduct the two weekly Melt Shop visible emission observations per month to cover the full Tapping cycle at EU-EAF-02. The permittee shall conduct the observations from a Method 9 sun compliant location where both the EAF portion and the Caster portion of the Melt Shop are visible. If visible emissions are observed during the weekly Method 22 observations, the permittee shall immediately conduct a Method 9 opacity reading for a minimum of six minutes. Notwithstanding the results of the opacity reading pursuant to the weekly Method 22 observations, if visible emissions are observed, the permittee shall investigate the cause of the emissions and implement corrective actions, if any, to stop the emissions as soon as possible. The permittee shall maintain the following records:
 - a. The cause and corrective actions, if any.
 - b. The date the cause was identified.
 - c. The date the corrective actions, if any, were implemented.
 - d. The dates and reason why the weekly visible emissions observation occurred on EU-EAF-02.

Once the investigation is complete and corrective actions, if any, have been implemented, the permittee shall conduct another set of Method 22 or Method 9 readings, if applicable, to verify that the corrective actions have addressed the visible emissions.^{2, 3, 4} **(U.S. v Gerdau Specialty Steel North America, Civil Action No. 18-12228, Paragraphs 20a, 20b and 20c, and Act 451, Section 324.5503(b), R 336.1201(3))**

5. The permittee shall maintain a record of all visible emissions observations. The record shall include:^{2, 3, 4} **(U.S. v Gerdau Specialty Steel North America, Civil Action No. 18-12228, Paragraph 20d, and Act 451, Section 324.5503(b), R 336.1201(3))**
 - a. The start time of observations.
 - b. The end time of observations.
 - c. Whether any visible emissions were observed.
 - d. The results of any Method 9 opacity readings.

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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 8-1

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-CASTBAG	88 ²	50 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).
- ³ This condition is federally enforceable and was originally established in the consent decree settling, “U.S. v Gerdau Specialty Steel North America, Civil Action No. 18-12228” and also pursuant to Act 451, Section 324.5503(b), and will remain in effect after termination of the consent decree.
- ⁴ Definitions specific to this condition can be found in Appendix 1-B, Definitions.

**FG-STEELMILL
FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

All equipment at the facility including the FG-EAF, FG-EAF/LMF/VAD and the equipment covered by other permits, grand-fathered equipment and exempt equipment.

Emission Units: EU-EAF-01, EU-EAF-02, EU-LMF, EU-VAD, EU-HTOV001, EU-AF01, EU-AF02, EU-binfilter, EU-limeBH, EU-COLDCLEANERS, EU-ROOFMONITOR, EU-ENGINE1, EU-ENGINE2, EU-ENGINE3, EU-ENGINE4, EU-ENGINE5, EU-ENGINE6

POLLUTION CONTROL EQUIPMENT

A positive pressure baghouse (DV-BH03) serving EU-EAF-01, EU-EAF-02, EU-LMF and EU-VAD that has a long horizontal opening in the ceiling of the baghouse rather than a stack and a Caster Roof Monitor Capture and Control System with baghouse (DV-CASTBAG).

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate FG-STEELMILL unless the Malfunction Abatement Plan (MAP) and maintenance procedures and schedules for FG-EAF/LMF/VAD, including control equipment, and all monitoring and recording equipment approved in writing by the AQD District Supervisor, is implemented and maintained. If the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the MAP within 45 days after such an event occurs. The revised plan shall include procedures for maintaining and operating in a satisfactory manner, FG-EAF/LMF/VAD, add-on air pollution control device, or monitoring equipment during malfunction events, and a program for corrective action for such events.² **(40 CFR 52.21, R 336.1911)**
2. The permittee shall not operate FG-STEELMILL unless the program for continuous fugitive emissions control for all plant roadways, the plant yard, all material storage piles, and material handling operations, or an alternate plan approved in writing by the AQD District Supervisor, is implemented and maintained.² **(40 CFR 52.21)**

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))**

NA

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VI. MONITORING/RECORDKEEPING

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

NA

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 8-1

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).

³This condition is federally enforceable and was originally established in the consent decree settling, "U.S. v Gerdau Specialty Steel North America, Civil Action No. 18-12228" and also pursuant to Act 451, Section 324.5503(b), and will remain in effect after termination of the consent decree.

⁴Definitions specific to this condition can be found in Appendix 1-B, Definitions.

**FG-RICE
FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Four (4) Compression Ignition Emergency Generators and two (2) Spark Ignition Emergency Generators subject to the requirements applicable to area source RICE MACT Standards (40 CFR Part 63, Subpart ZZZZ).

Emission Units: EU-ENGINE1, EU-ENGINE2, EU-ENGINE3, EU-ENGINE4, EU-ENGINE5, EU-ENGINE6

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

1. Beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in SC III.2.b or III.2.c or that operates for the purpose specified in SC III.3 you must use diesel fuel that meets the requirements in 40 CFR 80.501(b) for non-road diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted. **(40 CFR 63.6604)**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee may operate FG-RICE as necessary during emergencies with no time limit. **(40 CFR 63.6640(f)(1))**
2. The permittee may operate FG-RICE for any combination of the purposes specified below for a maximum of 100 hours per calendar year. Any operation for non-emergency situation as allowed in SC III.3 counts as part of the 100 hours per calendar year allowed operation. **(40 CFR 63.6640(f)(2))**
 - a. The permittee may operate FG-RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the engine manufacturer or vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engines. 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 calendar year. **(40 CFR 63.6640(f)(2)(i))**
 - b. The permittee may operate FG-RICE for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies, or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3. **(40 CFR 63.6640(f)(2)(ii))**
 - c. The permittee may operate FG-RICE for periods where there is a deviation of voltage or frequency of 5% or greater below standard voltage or frequency. **(40 CFR 63.6640(f)(2)(iii))**
3. The permittee may operate FG-RICE for up to 50 hours per engine per calendar year in non-emergency situation. The 50 hours are counted as part of the 100 hours of operation allowed under SC III.2 for maintenance and

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testing and emergency demand. The 50 hours per year for nonemergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. **(40 CFR 63.6640(f)(4))**

4. The permittee shall operate and maintain FG-RICE according to manufacturer’s emission-related written instructions or develop a 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 63.6625(e), 40 CFR 63.6640(a))**
5. The permittee shall comply with the applicable management requirements in 40 CFR Part 63, Subpart ZZZZ, Table 2d, Item 4 for CI-RICE and Item 5 for SI-RICE. **(40 CFR 63.6603)**
 - a. Change oil and filter every 500 hours of operation or annually, whichever comes first, except as allowed in SC III.6
 - b. Inspect air cleaner every 1000 hours of operation or annually, whichever comes first, and replace as necessary (compression ignition only).
 - c. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary (spark ignition only).
 - d. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

If FG-RICE is being operated during an emergency and it is not possible to shut down an engine to perform the management practice on the required schedule, the management practice can be delayed until the emergency is over. The work practice should be performed as soon as practicable after the emergency has ended. The permittee must report any failure to perform the work practice on the schedule required. **(40 CFR Part 63, Subpart ZZZZ, Table 2d, Footnote 2)**

6. The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in SC III.5. The oil analysis must be performed at the same frequency specified for changing the oil in SC III.5. The oil analysis shall test for the following limits:
 - a. Total Acid Number or Total Base Number
 - i. For SI engines, the Total Acid Number has increased by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new.
 - ii. For CI engines, the Total Base Number is less than 30% of the Total Base Number of oil when new.
 - b. Viscosity of the oil has changed by more than 20% from the viscosity of the oil when new.
 - c. Percent Water Content (by volume) is greater than 0.5%.

If any of the limits are exceeded, the permitted must change the oil within 2 business days of receiving the results of the analysis. If the engine is not in operation when the results of the analysis are received, the permittee must change the oil within 2 business days or before commencing operation, whichever is later. The analysis program must be part of the maintenance plan for FG-RICE. **(40 CFR 63.6625(i) and (j))**

7. The permittee shall minimize each engine’s time spent at idle during startup and minimize the engine’s startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. **(40 CFR 63.6635(h))**
8. The permittee must be in compliance with the emission limitations and operating limitation that apply to FG-RICE at all times. **(40 CFR 63.6605(a))**

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9. The permittee at all times must operate and maintain FG-RICE in a manner consistent with safety and good air pollution control practices for minimizing emissions. **(40 CFR 63.6605(b))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip each engine in FG-RICE with a non-resettable hour meter. **(40 CFR 63.6625(f))**

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 keep the following records: **(40 CFR 63.6655)**
 - a. A copy of each notification and report submitted to comply with Subpart ZZZZ of 40 CFR Part 63, including all documentation supporting any Initial Notification or Notification of Compliance status in accordance with 40 CFR 63.10(b)(2)(xiv)
 - b. Records of the occurrence and duration of each malfunction of the engines of FG-RICE.
 - c. Records of the actions taken during period of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning equipment to its normal or usual manner of operation.
 - d. Records to demonstrate continuous compliance with the applicable management requirements in SC III.5.
 - e. Records of the maintenance conducted on FG-RICE in order to demonstrate that FG-RICE is operated and maintained according to manufacturer's emission related written instructions the facility maintenance plan.
 - f. Records of hours of operation recorded through the non-resettable hour meter. The permittee shall document how many hours were spent during emergency operation; including what classified the operation as emergency and how many hours were spent during non-emergency operation. If the engine is used for the purposes specified in SC III.2.b or III.2.c, the permittee must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for those purposes.
2. If the optional oil analysis program is used to extend the specific oil change requirements, the permittee must keep records of the parameters that are analyzed as part of the oil analysis program in SC III.6 the results of the analysis and the oil changes for the engine. **(40 CFR 63.6625(i) and (j))**

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 must report any failure to perform the required engine maintenance practices on the schedule required. **(40 CFR Part 63, Subpart ZZZZ, Table 2d, Footnote 2)**

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5. If the permittee operates an engine in FG-RICE with a site rating of more than 100 brake HP that is contractually obligated to be available for more than 15 hours per calendar year for purposes specified in SC III.2.b or III.2.c or that operates for the purpose specified in SC III.3, you must submit an annual report. **(40 CFR Part 63, Subpart ZZZZ)**
 - a. The report must contain the following information:
 - i. Company name and address where the engine is located.
 - ii. Date of the report and beginning and ending dates of the reporting period.
 - iii. Engine site rating and model year.
 - iv. Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.
 - v. Hours operated for the purpose of SC III.2.b or III.2.c, including the date, start time, and end time for engine operation.
 - vi. Number of hours the engine is contractually obligated to be available for the purposes specified in SC III.2.b or III.2.c.
 - vii. Hours spent for operation for the purpose specified SC III.3, including the date, start time, and end time. The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.
 - viii. If there were no deviations from the fuel requirements in SC II.1 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.
 - ix. If there were deviations from the fuel requirements in SC II.1 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.
 - b. The first annual report must cover the calendar year 2015 and must be submitted not later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.
 - c. The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA’s Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in 40 CFR 63.13.

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable requirements of the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 63, Subparts A and ZZZZ for Stationary Reciprocating Internal Combustion Engines. **(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).

FG-COLDCLEANERS FLEXIBLE GROUP CONDITIONS
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DESCRIPTION

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

Emission Unit: EU-COLDCLEANERS

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

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

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Cleaned parts shall be drained for no less than 15 seconds or until dripping ceases. **(R 336.1611(2)(b), R 336.1707(3)(b))**
2. The permittee shall perform routine maintenance on each cold cleaner as recommended by the manufacturer. **(R 336.1213(3))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The cold cleaner must meet one of the following design requirements:
 - a. The air/vapor interface of the cold cleaner is no more than ten square feet. **(R 336.1281(2)(h))**
 - b. The cold cleaner is used for cleaning metal parts and the emissions are released to the general in-plant environment. **(R 336.1285(2)(r)(iv))**
2. The cold cleaner shall be equipped with a device for draining cleaned parts. **(R 336.1611(2)(b), R 336.1707(3)(b))**
3. All new and existing cold cleaners shall be equipped with a cover and the cover shall be closed whenever parts are not being handled in the cold cleaner. **(R 336.1611(2)(a), R 336.1707(3)(a))**
4. The cover of a new cold cleaner shall be mechanically assisted if the Reid vapor pressure of the solvent is more than 0.3 psia or if the solvent is agitated or heated. **(R 336.1707(3)(a))**

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5. If the Reid vapor pressure of any solvent used in a new cold cleaner is greater than 0.6 psia; or, if any solvent used in a new cold cleaner is heated above 120 degrees Fahrenheit, then the cold cleaner must comply with at least one of the following provisions:
 - a. The cold cleaner must be designed such that the ratio of the freeboard height to the width of the cleaner is equal to or greater than 0.7. **(R 336.1707(2)(a))**
 - b. The solvent bath must be covered with water if the solvent is insoluble and has a specific gravity of more than 1.0. **(R 336.1707(2)(b))**
 - c. The cold cleaner must be controlled by a carbon adsorption system, condensation system, or other method of equivalent control approved by the AQD. **(R 336.1707(2)(c))**

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

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

1. For each new cold cleaner in which the solvent is heated, the solvent temperature shall be monitored and recorded at least once each calendar week during routine operating conditions. **(R 336.1213(3))**
2. The permittee shall maintain the following information on file for each cold cleaner: **(R 336.1213(3))**
 - a. A serial number, model number, or other unique identifier for each cold cleaner.
 - b. The date the unit was installed, manufactured or that it commenced operation.
 - c. The air/vapor interface area for any unit claimed to be exempt under Rule 281(2)(h).
 - d. The applicable Rule 201 exemption.
 - e. The Reid vapor pressure of each solvent used.
 - f. If applicable, the option chosen to comply with Rule 707(2).
3. The permittee shall maintain written operating procedures for each cold cleaner. These written procedures shall be posted in an accessible, conspicuous location near each cold cleaner. **(R 336.1611(3), R 336.1707(4))**
4. As noted in Rule 611(2)(c) and Rule 707(3)(c), if applicable, an initial demonstration that the waste solvent is a safety hazard shall be made prior to storage in non-closed containers. If the waste solvent is a safety hazard and is stored in non-closed containers, verification that the waste solvent is disposed of so that not more than 20 percent, by weight, is allowed to evaporate into the atmosphere shall be made on a monthly basis. **(R 336.1213(3), R 336.1611(2)(c), R 336.1707(3)(c))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**

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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 8-1

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).

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APPENDICES

Appendix 1A-1. Acronyms and Abbreviations

Common Acronyms		Pollutant / Measurement Abbreviations	
AQD	Air Quality Division	acfm	Actual cubic feet per minute
BACT	Best Available Control Technology	BTU	British Thermal Unit
CAA	Clean Air Act	°C	Degrees Celsius
CAM	Compliance Assurance Monitoring	CO	Carbon Monoxide
CEM	Continuous Emission Monitoring	CO ₂ e	Carbon Dioxide Equivalent
CEMS	Continuous Emission Monitoring System	dscf	Dry standard cubic foot
CFR	Code of Federal Regulations	dscm	Dry standard cubic meter
COM	Continuous Opacity Monitoring	°F	Degrees Fahrenheit
Department/ department	Michigan Department of Environment, Great Lakes, and Energy	gr	Grains
EGLE	Michigan Department of Environment, Great Lakes, and Energy	HAP	Hazardous Air Pollutant
EU	Emission Unit	Hg	Mercury
FG	Flexible Group	hr	Hour
GACS	Gallons of Applied Coating Solids	HP	Horsepower
GC	General Condition	H ₂ S	Hydrogen Sulfide
GHGs	Greenhouse Gases	kW	Kilowatt
HVLP	High Volume Low Pressure*	lb	Pound
ID	Identification	m	Meter
IRSL	Initial Risk Screening Level	mg	Milligram
ITSL	Initial Threshold Screening Level	mm	Millimeter
LAER	Lowest Achievable Emission Rate	MM	Million
MACT	Maximum Achievable Control Technology	MW	Megawatts
MAERS	Michigan Air Emissions Reporting System	NMOC	Non-methane Organic Compounds
MAP	Malfunction Abatement Plan	NO _x	Oxides of Nitrogen
MSDS	Material Safety Data Sheet	ng	Nanogram
NA	Not Applicable	PM	Particulate Matter
NAAQS	National Ambient Air Quality Standards	PM10	Particulate Matter equal to or less than 10 microns in diameter
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter
NSPS	New Source Performance Standards	pph	Pounds per hour
NSR	New Source Review	ppm	Parts per million
PS	Performance Specification	ppmv	Parts per million by volume
PSD	Prevention of Significant Deterioration	ppmw	Parts per million by weight
PTE	Permanent Total Enclosure	%	Percent
PTI	Permit to Install	psia	Pounds per square inch absolute
RACT	Reasonable Available Control Technology	psig	Pounds per square inch gauge
ROP	Renewable Operating Permit	scf	Standard cubic feet
SC	Special Condition	sec	Seconds
SCR	Selective Catalytic Reduction	SO ₂	Sulfur Dioxide
SNCR	Selective Non-Catalytic Reduction	TAC	Toxic Air Contaminant
SRN	State Registration Number	Temp	Temperature
TEQ	Toxicity Equivalence Quotient	THC	Total Hydrocarbons
USEPA/EPA	United States Environmental Protection Agency	tpy	Tons per year
VE	Visible Emissions	µg	Microgram
		µm	Micrometer or Micron
		VOC	Volatile Organic Compounds
		yr	Year

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

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Appendix 1B-1. Definitions Applicable to Specified Permit Conditions.

Terms used in this Consent Decree that are defined in the CAA or in federal and state regulations promulgated pursuant to the CAA shall have the meaning assigned to them in the CAA or such regulations, unless otherwise provided in this Decree. Whenever the terms set forth below are used in this Consent Decree, including attached appendices, the following definitions shall apply:

- “ACFM” shall mean actual cubic feet per minute.
- “Caster” shall mean the piece of equipment used to convert molten steel into a semi-finished billet for subsequent finishing.
- “Caster Roof Monitor” shall mean the opening in the Melt Shop located above the Caster designed for natural ventilation.
- “Caster Roof Monitor Capture and Control System” shall mean a system designed to capture emissions currently exhausted from the Caster Roof Monitor and route those emissions to the New Baghouse.
- “Charging” shall mean the phase of the steel production cycle in which iron and steel scrap or other materials are added into the top of either Electric Arc Furnace.
- “Complaint” shall mean the complaint filed by the United States in this action
- “Consent Decree” or “Decree” shall mean this Consent Decree and all appendices hereto.
- “Day” shall mean a calendar day. In computing any period of time under this Consent Decree, where the last day would fall on a Saturday, Sunday, or federal holiday, the period shall run until the close of business of the next working day.
- “Effective Date” shall have the definition provided in Section XIV (Effective Date).
- “Electric Arc Furnace” or “EAF” shall mean a furnace that produces molten steel and heats the charge materials with electric arcs from carbon electrodes. An electric arc furnace consists of the furnace shell, roof, and the transformer. There are two EAFs at the Facility, described as EAF No. 1 and EAF No. 2 in the Permit.
- “EPA” shall mean the United States Environmental Protection Agency and any successor departments or agencies.
- “Existing Baghouse” shall mean the existing air pollution control device at the Facility that uses fabric filter bags for the removal of Particulate Matter and PM10, referred to as Baghouse No. 3 in the Permit.
- “Facility” shall mean the steel mini mill at 3100 Brooklyn Road in Jackson, Michigan, owned and operated by Gerdau.
- “Hold Fire” shall mean a portion of the melting phase of the steel production cycle during which the burner is operated in stand-by mode and supplied with a limited and controlled flow of fuel and/or oxidant. This mode is used to prevent burner plugging from splashing molten steel or slag.
- “Malfunction Abatement Plan” shall mean a written document prepared by Gerdau to prevent, detect, and correct malfunctions or equipment failures resulting in emissions exceeding any applicable emission limitation.
- “Melt Shop” shall mean the building that houses EAF No. 1 and EAF No. 2.

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- “New Baghouse” shall mean the air pollution control device at the Facility that uses fabric filter bags for the removal of Particulate Matter and PM10 from air routed from the Caster Roof Monitor to the new device. The New Baghouse has been designated as Baghouse No. 4.
- “Paragraph” shall mean a portion of this Consent Decree identified by an Arabic numeral.
- “Particulate matter” or “PM” emissions shall mean all finely divided solid or liquid material, other than uncombined water, emitted to the ambient air as measured by applicable reference methods, or an equivalent or alternative method, specified in 40 C.F.R. Chapter 1, or by a test method specified in the Michigan State Implementation Plan.
- “Parties” shall mean the United States and Gerdau.
- “Permit” shall mean Gerdau’s Title V Permit, No. MI-ROP-B4306-2015, and all revisions, modifications, renewals, and successors to this permit.
- “Section” shall mean a portion of this Consent Decree that has a heading identified by an upper-case Roman numeral.
- “Tapping” shall mean the phase of the steel production cycle during which the EAF pours molten steel into a ladle.
- “United States” shall mean the United States of America, acting on behalf of EPA.

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Appendix 2-1. 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 3-1. Monitoring Requirements

The following monitoring procedures, methods, or specifications are the details to the monitoring requirements identified and referenced in FG-EAF/LMF/VAD.

Compliance Method: Performance emission test results shall be used to determine the NOx and VOC emission rates and continuous emission rate monitoring system (CERMS) data and baghouse exhaust air flow rate shall be used to verify the SO₂ and CO emission rates in terms of pound(s) of pollutant per ton of scrap steel charged and tons per year.

Performance emission test results for NOx, VOC, Mn and Hg in pounds per hour shall be used in conjunction with the formula below to determine the emission rate(s) in tons per year.

Annual NOx, VOC, Mn and Hg emissions (tons/12 month rolling time period as determined at the end of each calendar month)	=	$\frac{\sum_{i=1}^{12} (EF \text{ (lb/ton)} \times A \text{ (ton/month)})}{2000 \text{ lb/ton}}$
EF (lb/ton) = The NOx, VOC, Mn and Hg emission rates as determined by performance tests		

**SO₂ and CO Monitoring
 Continuous Emission Rate Monitoring System (CERMS) Requirements**

1. Within 30 calendar days of the issuance of this permit, the permittee shall submit two copies of a Monitoring Plan to the AQD, for review and approval. The Monitoring Plan shall include drawings or specifications showing proposed locations and descriptions of the required CERMS. The permittee completed this requirement on December 12, 2006.
2. Within 150 calendar days of the issuance of this permit, the permittee shall submit two copies of a complete test plan for the CERMS to the AQD for approval. The permittee completed this requirement on April 13, 2007.
3. Within 180 calendar days of the issuance of this permit, the permittee shall complete the installation and testing of the CERMS. The permittee completed this requirement on June 8, 2007.
4. Within 60 days of completion of testing, the permittee shall submit to the AQD two copies of the final report demonstrating the CERMS complies with the requirements of the corresponding Performance Specifications (PS) in the following table. The permittee completed this requirement on July 9, 2007.

Pollutant	Applicable PS
Sulfur Dioxide (SO ₂)	2
Carbon Monoxide (CO)	4
CERMS	6

5. The span value shall be 2.0 times the lowest emission standard or as specified in the federal regulations.
6. The CERMS shall be installed, calibrated, maintained, and operated in accordance with the procedures set forth in 40 CFR 60.13 and PS 2, 4 and 6 of Appendix B, 40 CFR Part 60.

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7. Each calendar quarter, the permittee shall perform the Quality Assurance Procedures of the CERMS set forth in Appendix F of 40 CFR Part 60. Within 30 days following the end of each calendar quarter, the permittee shall submit the results to the AQD in the format of the data assessment report (Figure 1, Appendix F)
8. In accordance with 40 CFR 60.7(c) and (d), the permittee shall submit two copies of an excess emission report (EER) and summary report in an acceptable format to the AQD, within 30 days following the end of each calendar quarter. The Summary Report shall follow the format of Figure 1 in 40 CFR 60.7(d). The EER shall include the following information:
 - a. A report of each exceedance above the limits specified in the conditions of this permit. This includes the date, time, magnitude, cause and corrective actions of all occurrences during the reporting period.
 - b. A report of all periods of CERMS downtime and corrective action.
 - c. A report of the total operating time of the FG-EAF/LMF/VAD during the reporting period.
 - d. A report of any periods that the CERMS exceeds the instrument range.
 - e. If no exceedances or CERMS downtime occurred during the reporting period, the permittee shall report that fact.

All monitoring data shall be kept on file for a period of at least five years and made available to the AQD upon request.

Appendix 4-1. 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 5-1. Testing Procedures

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

Appendix 6-1. 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-B4306-2015. 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-B4306-2015 is being reissued as Source-Wide PTI No. MI-PTI-B4306-2020.

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
118-19	NA	It incorporates certain requirements established in U.S. v Gerdau Specialty Steel North America, Civil Action No. 18-12228, between Gerdau and USEPA into a Michigan Permit to Install as specifically required by the U.S. v Gerdau Specialty Steel North America, Civil Action No. 18-12228.	EU-ROOFMONITOR, EU-EAF-01, EU-EAF-02, EU-LMF, EU-VAD, FG-SHOP

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Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
174-18	NA	Four natural gas torches. PTI became void on March 31, 2019 so it is not being incorporated into this ROP renewal.	EU-TOHCUT1, EU-TORHCUT2, EU-TORHCUT3, EU-TORHCUT4, FG-TORHCUT

Appendix 7-1. Emission Calculations

Specific emission calculations to be used with monitoring, testing or recordkeeping data are detailed in the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, this appendix is not applicable.

Appendix 8-1. Reporting

A. Annual, Semiannual, and Deviation Certification Reporting

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

B. Other Reporting

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

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SECTION 2 – TMS International, LLC

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))**

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6. A challenge by any person, the Administrator of the USEPA, or the department to a particular condition or a part of this ROP shall not set aside, delay, stay, or in any way affect the applicability or enforceability of any other condition or part of this ROP. **(R 336.1213(1)(f))**
7. The permittee shall pay fees consistent with the fee schedule and requirements pursuant to Section 5522 of Act 451. **(R 336.1213(1)(g))**
8. This ROP does not convey any property rights or any exclusive privilege. **(R 336.1213(1)(h))**

Equipment & Design

9. Any collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2).² **(R 336.1370)**
10. Any air cleaning device shall be installed, maintained, and operated in a satisfactory manner and in accordance with the Michigan Air Pollution Control rules and existing law. **(R 336.1910)**

Emission Limits

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

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

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

Testing/Sampling

13. The department may require the owner or operator of any source of an air contaminant to conduct acceptable performance tests, at the owner's or operator's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001(1).² **(R 336.2001)**
14. Any required performance testing shall be conducted in accordance with Rule 1001(2), Rule 1001(3) and Rule 1003. **(R 336.2001(2), R 336.2001(3), R 336.2003(1))**
15. Any required test results shall be submitted to the Air Quality Division (AQD) in the format prescribed by the applicable reference test method within 60 days following the last date of the test. **(R 336.2001(5))**

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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 state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. **(R 336.1213(3)(c))**
19. A Responsible Official shall certify to the appropriate AQD District Office and to the USEPA that the stationary source is and has been in compliance with all terms and conditions contained in the ROP except for deviations that have been or are being reported to the appropriate AQD District Office pursuant to Rule 213(3)(c). This certification shall include all the information specified in Rule 213(4)(c)(i) through (v) and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete. The USEPA address is: USEPA, Air Compliance Data - Michigan, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, Illinois 60604-3507. **(R 336.1213(4)(c))**
20. The certification of compliance shall be submitted annually for the term of this ROP as detailed in the special conditions, or more frequently if specified in an applicable requirement or in this ROP. **(R 336.1213(4)(c))**
21. The permittee shall promptly report any deviations from ROP requirements and certify the reports. The prompt reporting of deviations from ROP requirements is defined in Rule 213(3)(c)(ii) as follows, unless otherwise described in this ROP. **(R 336.1213(3)(c))**
 - a. For deviations that exceed the emissions allowed under the ROP, prompt reporting means reporting consistent with the requirements of Rule 912 as detailed in Condition 25. All reports submitted pursuant to this paragraph shall be promptly certified as specified in Rule 213(3)(c)(iii).
 - b. For deviations which exceed the emissions allowed under the ROP and which are not reported pursuant to Rule 912 due to the duration of the deviation, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe reasons for each deviation and the actions taken to minimize or correct each deviation.
 - c. For deviations that do not exceed the emissions allowed under the ROP, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe the reasons for each deviation and the actions taken to minimize or correct each deviation.

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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))**

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- 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))**

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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(9))**

Stratospheric Ozone Protection

36. If the permittee is subject to Title 40 of the Code of Federal Regulations (CFR), Part 82 and services, maintains, or repairs appliances except for motor vehicle air conditioners (MVAC), or disposes of appliances containing refrigerant, including MVAC and small appliances, or if the permittee is a refrigerant reclaimer, appliance owner or a manufacturer of appliances or recycling and recovery equipment, the permittee shall comply with all applicable standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F.
37. If the permittee is subject to 40 CFR Part 82 and performs a service on motor (fleet) vehicles when this service involves refrigerant in the MVAC, the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term “motor vehicle” as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed by the original equipment manufacturer. The term MVAC as used in Subpart B does not include the air-tight sealed refrigeration system used for refrigerated cargo or an air conditioning system on passenger buses using Hydrochlorofluorocarbon-22 refrigerant.

Risk Management Plan

38. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall register and submit to the USEPA the required data related to the risk management plan for reducing the probability of accidental releases of any regulated substances listed pursuant to Section 112(r)(3) of the CAA as amended in 40 CFR 68.130. The list of substances, threshold quantities, and accident prevention regulations promulgated under 40 CFR Part 68, do not limit in any way the general duty provisions under Section 112(r)(1).
39. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall comply with the requirements of 40 CFR Part 68, no later than the latest of the following dates as provided in 40 CFR 68.10(a):
- 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))**

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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, EGLE.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, EGLE, 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.

C. EMISSION UNIT SPECIAL 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
EU-PROCESS	Slag processing plant consisting of feeders, screens, and stackers. Emissions are controlled through water spray.	1989	FG-SLAGPLANT
EU-DROPBALL	Large slag pieces broken into smaller pieces by "dropballing." Emissions are controlled through water spray.	1989	FG-SLAGPLANT
EU-ROADS	Emissions resulting from the transfer of slag on unpaved roadways and through other areas within the plant yard. Emissions are controlled through water spray.	1989	FG-SLAGPLANT
EU-STOCKPILES	Slag stockpiles of various sizes. Emissions are controlled through water spray.	1989	FG-SLAGPLANT
EU-SLAGPITDIG	Transferring of slag from pits to processing operations. Emissions are controlled through water spray.	1989	FG-SLAGPLANT

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
FG-SLAGPLANT	Slag processing plant consisting of material handling equipment and associated operations. Fugitive dust emissions are controlled by water spray.	EU-PROCESS, EU-DROPBALL, EU-ROADS, EU-STOCKPILES, EU-SLAGPITDIG

**FG-SLAGPLANT
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Slag processing plant consisting of material handling equipment and associated operations. Fugitive dust emissions are controlled by water spray.

Emission Units: EU-PROCESS, EU-DROPBALL, EU-ROADS, EU-STOCKPILES, EU-SLAGPITDIG

POLLUTION CONTROL EQUIPMENT

Water Spray.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Fugitive Dust	10% opacity ²	6-minute average	FG-SLAGPLANT (Drop points and transfer points)	SC V.1	R 336.1301, R 336.1331, 40 CFR 52.21(c) &(d)
2. Fugitive Dust	5% opacity ²	3-minute average ^{a, b}	FG-SLAGPLANT (Slag storage piles)	SC V.1	R 336.1205, R 336.1301, Act 451 324.5524(2), 40 CFR 52.21(c) & (d)
3. Fugitive Dust	5% opacity ²	3-minute average ^a	EU-ROADS (Wheel loaders and truck traffic)	SC V.1	R 336.1205, R 336.1301, Act 451 324.5524(2), 40 CFR 52.21(c) & (d)

^a In accordance with Test Method 9D at Act 451, Section 5525, Paragraph (j)

^b The provisions of this subsection shall not apply to storage pile material handling activities when wind speeds are in excess of 25 miles per hour. (40.2 kilometers per hour)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Slag processed	150,000 tpy ²	Based on a 12-month rolling time period as determined at the end of each calendar month	FG-SLAGPLANT	SC VI.1	R 336.1205, R 336.1331, 40 CFR 52.21(c) & (d)

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2. The permittee shall not process any asbestos tailing or asbestos containing waste materials in FG-SLAGPLANT pursuant to the National Emission Standards for Hazardous Air Pollutants, 40 CFR Part 61, Subpart M.² **(40 CFR Part 61, Subpart M)**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall utilize water spray systems, as needed, in order to minimize the fugitive dust emissions from FG-SLAGPLANT. The water spray systems shall be maintained and operated in a satisfactory manner.² **(R 336.1301, R 336.1331, Act 451 324.5524(4), 40 CFR 52.21(c) & (d))**
2. The permittee shall not operate FG-SLAGPLANT unless a Nuisance Minimization Plan (NMP) for fugitive dust for all plant roadways, the plant yard, all material storage piles, and all material handling operations, as specified in Appendix A, has been implemented and is maintained. The permittee shall amend the NMP within 45 days upon request from the District Supervisor. The permittee shall submit the NMP and any amendments to the NMP to the AQD District Supervisor for review and approval. The permittee may also propose revisions to the NMP by submitting a request to the AQD District Supervisor. If the AQD does not notify the permittee within 90 days of submittal, the NMP or amended NMP shall be considered approved. The permittee shall keep all records on file and make them available to the Department upon request.² **(R 336.1301, R 336.1331, Act 451 324.5524(4) through (7), 40 CFR 52.21 (c) & (d))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate FG-SLAGPLANT unless the water spray systems are maintained and operated in a satisfactory manner in order to minimize fugitive dust emissions.² **(R 336.1301, R 336.1910, Act 451 324.5524(4), 40 CFR 52.21(c) & (d))**

V. TESTING/SAMPLING

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

1. At the request of the AQD District Supervisor, the permittee shall evaluate visible emissions from FG-SLAGPLANT, at the owner's expense. When visible emissions from FG-SLAGPLANT are observed, the observations shall be performed using Test Method 9D as defined in Section 324.5525(j) of Part 55, Air Pollution, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451).² **(R 336.1205, R 336.1301, 40 CFR 52.21(c) & (d), R 336.2001, R 336.2003, R 336.2004)**
2. At the request of the AQD District Supervisor, the permittee shall sample the slag processed, in FG-SLAGPLANT, and have it analyzed for arsenic, barium, beryllium, cadmium, chromium, hexavalent chromium, lead, manganese, mercury, nickel, and selenium, at the owner's expense. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the tests.² **(R 336.1205, R.336.1224, R 336.1225, R 336.2001, R 336.2003, R 336.2004)**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall keep, in a satisfactory manner, monthly records of the amount of slag processed in FG-SLAGPLANT. On the last day of each month, the permittee shall calculate the amount of slag processed during the preceding 12-month rolling time period. The permittee shall keep all records on file at the facility and make them available to the Department upon request.² **(R 336.1205, R 336.1331, 40 CFR 52.21(c) & (d))**
2. The permittee shall keep records of all watering/dust suppressant applications for the site roadways, plant yard and stockpiles as required by the Nuisance Minimization Plan (NMP) for fugitive dust. The permittee shall keep all records on file and make them available to the Department upon request.² **(R 336.1371)**

See Appendix 3-2

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 8-2

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall label all equipment with company ID numbers, according to a method acceptable to the AQD District Supervisor. Labels shall be in a conspicuous location on the equipment. The permittee shall keep records of each piece of equipment with the corresponding ID numbers on file at the facility and make them available to the Department upon request. **(R 336.1201(3))**
2. The permittee shall notify, in a satisfactory manner, the AQD District Supervisor within 180 days of the intent to restart FG-SLAGPLANT. A new PTI application shall be required prior to start-up if FG-SLAGPLANT is not operated for a period exceeding 18 months. **(R 336.1213(3))**

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).

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 1-2. Abbreviations and Acronyms

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

Common Acronyms		Pollutant / Measurement Abbreviations	
AQD	Air Quality Division	acfm	Actual cubic feet per minute
BACT	Best Available Control Technology	BTU	British Thermal Unit
CAA	Clean Air Act	°C	Degrees Celsius
CAM	Compliance Assurance Monitoring	CO	Carbon Monoxide
CEM	Continuous Emission Monitoring	CO ₂ e	Carbon Dioxide Equivalent
CEMS	Continuous Emission Monitoring System	dscf	Dry standard cubic foot
CFR	Code of Federal Regulations	dscm	Dry standard cubic meter
COM	Continuous Opacity Monitoring	°F	Degrees Fahrenheit
Department/ department	Michigan Department of Environment, Great Lakes, and Energy	gr	Grains
EGLE	Michigan Department of Environment, Great Lakes, and Energy	HAP	Hazardous Air Pollutant
EU	Emission Unit	Hg	Mercury
FG	Flexible Group	hr	Hour
GACS	Gallons of Applied Coating Solids	HP	Horsepower
GC	General Condition	H ₂ S	Hydrogen Sulfide
GHGs	Greenhouse Gases	kW	Kilowatt
HVLP	High Volume Low Pressure*	lb	Pound
ID	Identification	m	Meter
IRSL	Initial Risk Screening Level	mg	Milligram
ITSL	Initial Threshold Screening Level	mm	Millimeter
LAER	Lowest Achievable Emission Rate	MM	Million
MACT	Maximum Achievable Control Technology	MW	Megawatts
MAERS	Michigan Air Emissions Reporting System	NMOC	Non-methane Organic Compounds
MAP	Malfunction Abatement Plan	NO _x	Oxides of Nitrogen
MSDS	Material Safety Data Sheet	ng	Nanogram
NA	Not Applicable	PM	Particulate Matter
NAAQS	National Ambient Air Quality Standards	PM10	Particulate Matter equal to or less than 10 microns in diameter
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter
NSPS	New Source Performance Standards	pph	Pounds per hour
NSR	New Source Review	ppm	Parts per million
PS	Performance Specification	ppmv	Parts per million by volume
PSD	Prevention of Significant Deterioration	ppmw	Parts per million by weight
PTE	Permanent Total Enclosure	%	Percent
PTI	Permit to Install	psia	Pounds per square inch absolute
RACT	Reasonable Available Control Technology	psig	Pounds per square inch gauge
ROP	Renewable Operating Permit	scf	Standard cubic feet
SC	Special Condition	sec	Seconds
SCR	Selective Catalytic Reduction	SO ₂	Sulfur Dioxide
SNCR	Selective Non-Catalytic Reduction	TAC	Toxic Air Contaminant
SRN	State Registration Number	Temp	Temperature
TEQ	Toxicity Equivalence Quotient	THC	Total Hydrocarbons
USEPA/EPA	United States Environmental Protection Agency	tpy	Tons per year
VE	Visible Emissions	µg	Microgram
		µm	Micrometer or Micron
		VOC	Volatile Organic Compounds
		yr	Year

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

Appendix 2-2. 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 3-2. Monitoring Requirements

The following monitoring procedures, methods, or specifications are the details to the monitoring requirements identified and referenced in FG-SLAGPLANT.

Nuisance Minimization Plan (NMP) for Fugitive Dust

1. Site Maintenance
 - a. The unpaved travel surfaces shall be treated with water, or other acceptable dust control agents, as needed on a frequency sufficient to meet the visible emission opacity standard of 5% opacity, as specified in Act 451, Section 5524.
 - b. Steel slag will be watered as necessary to minimize emissions.
 - c. Piles shall be maintained to prevent fugitive dust by using water.
 - d. Spillage of slag around processing equipment and in the yard area will be cleaned up to minimize fugitive dust emissions.
2. Dust Control Activities
 - a. TMS shall pre-water or add water as needed to control emissions from each emission unit. Emissions from FG-SLAGPLANT shall be controlled with water sprays as needed. A water truck shall be utilized on all roads and a sweeper truck shall sweep paved roads on an as-needed basis to control emissions resulting from EU-ROADS.
3. Management of Front-end Loader Operations
 - a. The front-end loader operation shall be directed to avoid overfilling the bucket of the loader and the feed hopper to prevent spillage and to minimize the drop height of the material when loading the feed hoppers or transferring material to stockpiles.
4. Recordkeeping
 - a. Records of dust control activities on storage piles, travel surfaces, and other surfaces where fugitive dust emissions occur shall be kept on-file for a period of at least five (5) years and made available to EGLE staff upon request. The records shall indicate the date, time, what was observed or the reason for the dust control activity (routine or other), and what corrective action was taken.

Appendix 4-2. 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 5-2. Testing Procedures

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

Appendix 6-2. Permits to Install

Section 2 – TMS International, LLC

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Expiration Date: September 10, 2025
PTI No: MI-PTI-B4306-2020

The following table lists any PTIs issued or ROP revision applications received since the effective date of the previously issued ROP No. MI-ROP-B4306-2015. 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-B4306-2015 is being reissued as Source-Wide PTI No. MI-PTI-B4306-2020.

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
146-18	NA	Slag processing plant consisting of material handling equipment and associated operations. Fugitive dust emissions are controlled by water spray.	EU-PROCESS EU-DROBALL EU-ROADS EU-STOCKPILES EU-SLAGPITDIG FG-SLAGPLANT

Appendix 7-2. Emission Calculations

Specific emission calculations to be used with monitoring, testing or recordkeeping data are detailed in the appropriate Source-Wide, Emission Unit and/or Flexible group Special Conditions. Therefore, this appendix is not applicable.

Appendix 8-2. Reporting

A. Annual, Semiannual, and Deviation Certification Reporting

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

B. Other Reporting

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