



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
TRUMBULL COUNTY**

CERTIFIED MAIL

Street Address:

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov.
Center

Application No: 02-14116

DATE: 5/23/2002

WCI Steel, Inc
Thomas Shepker
1040 Pine Ave SE
Warren, OH 44483

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
236 East Town Street, Room 300
Columbus, Ohio 43215

Very truly yours,

Thomas G. Rigo
Field Operations and Permit Section
Division of Air Pollution Control

CC: USEPA

NEDO



Permit To Install

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

FINAL PERMIT TO INSTALL 02-14116

Application Number: 02-14116
APS Premise Number: 0278000463
Permit Fee: **\$4000**
Name of Facility: WCI Steel, Inc
Person to Contact: Thomas Shepker
Address: 1040 Pine Ave SE
Warren, OH 44483

Location of proposed air contaminant source(s) [emissions unit(s)]:
1040 Pine Ave SE
Howland Twp, Ohio

Description of proposed emissions unit(s):
A hot metal desulfurization station and a pellet/ore receiving and handling system.

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency



Director

Part I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install General Terms and Conditions

1. Monitoring and Related Recordkeeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
 - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the appropriate Ohio EPA District Office or local air agency. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous

calendar quarters. See B.10 below if no deviations occurred during the quarter.

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
- iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

2. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

3. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

4. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b. 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 federally enforceable terms and conditions of this permit.
- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

7. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit To Install fees within 30 days after the issuance of this Permit To Install.

8. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are

required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

9. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
 - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

10. Permit To Operate Application

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).
- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within thirty (30) days after commencing operation of the source(s) covered by this permit.

11. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

12. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

B. State Only Enforceable Permit To Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

4. Termination of Permit To Install

This permit to install shall terminate within eighteen months of the effective date of the permit to install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

5. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

6. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

7. Applicability

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

8. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit To Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

9. **Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)**

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

C. **Permit To Install Summary of Allowable Emissions**

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

**SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS**

<u>Pollutant</u>	<u>Tons Per Year</u>
Particulate emissions	42 TPY

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions

None

B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**A. State and Federally Enforceable Section****I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>
F012 - Hot metal desulfurization station equipped with a baghouse for particulate control	OAC rule 3745-31-05(A)(3)
	OAC rule 3745-17-07(B)
	OAC rule 3745-17-08(B)
	OAC rule 3745-17-11(B)(1)
	OAC rule 3745-17-07(A)(1)

Applicable Emissions
Limitations/Control
Measures

Visible particulate emissions from the baghouse outlet shall not exceed twenty percent opacity as a six-minute average.

Visible fugitive particulate emissions from the hot metal desulfurization process shall not exceed twenty percent opacity as a three-minute average from any building openings.

Particulate emissions from the baghouse outlet from the hot metal desulfurization process shall not exceed 0.01 grain per dry standard cubic foot of exhaust gases, 0.0023 pounds per ton of hot metal desulfurized, and 2.3 tons per year. See A.I.2.c below.

Fugitive particulate emissions from the hot metal desulfurization process shall not exceed 32.2 tons per year. See A.I.2.d below.

Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust from this emissions unit.

See A.I.2.e below.

None. See A.I.2.a below.

None. See A.I.2.b below.

The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

The requirements of this rule are equivalent to the requirements established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a** Pursuant to OAC rule 3745-17-07(B)(11), OAC rule 3745-17-07(B)(1) through (9) shall not apply to any fugitive dust source which is not located within the geographical areas identified in "Appendix A" of OAC rule 3745-17-08. The hot metal desulfurization station is not located within the areas identified in "Appendix A" of the rule.
- 2.b** Pursuant to OAC rule 3745-17-08(A)(1), OAC rule 3745-17-08(B) shall apply to any fugitive dust source which is located within the areas identified in "Appendix A" of the rule. The hot metal desulfurization station is not located within the areas identified in "Appendix A" of the rule.
- 2.c** The particulate emission limitation of 2.3 tons per year includes the PM10 emissions of 1.7 tons per year.
- 2.d** The fugitive particulate emission limitation of 32.2 tons per year includes fugitive PM10 emissions of 6.1 tons per year.
- 2.e** Reasonably available control measures shall be the use of existing hoods, fans, and baghouse to adequately enclose, contain, capture, vent, and control the fugitive dust. The collection efficiency of such equipment shall be sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.

II. Operational Restrictions

- 1. The pressure drop across the baghouse shall be maintained within the range of 3 to 7 inches of water while the emissions unit is in operation.

III. Monitoring and/or Recordkeeping Requirements

- 1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.
- 2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any abnormal visible fugitive particulate emissions from the building containing this emissions unit. The presence or absence of any abnormal visible emissions shall be

Emissions Unit ID: F012

noted in an operations log. If abnormal visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any abnormal visible emission incident; and
- e. any corrective actions taken to eliminate the abnormal visible emissions.

If abnormal visible emissions are not observed within the first six months of monitoring, the permittee may submit a written request to the Ohio EPA Northeast District Office to reduce the frequency of monitoring.

3. The permittee shall maintain records of the quantity of hot metal desulfurized in this emissions unit, in tons per year.

IV. Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
2. The permittee shall submit semiannual written reports which (a) identify all days during which any abnormal visible fugitive particulate emissions were observed escaping from the building containing this emissions unit and (b) describe any corrective actions taken to eliminate the abnormal visible fugitive particulate emissions. These reports shall be submitted to the Ohio EPA Northeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emissions limitations in Section A.I of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

Visible particulate emissions from the baghouse outlet shall not exceed twenty percent opacity as a six-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

b. Emission Limitation:

Visible fugitive particulate emissions from the hot metal desulfurization process shall not exceed twenty percent opacity as a three-minute average from any building openings.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the modifications listed in paragraph (B)(3)(b) of OAC rule 3745-17-03.

c. Emission Limitation:

Particulate emissions from the baghouse outlet from the hot metal desulfurization process shall not exceed 0.01 grain per dry standard cubic foot of exhaust gases and 0.0023 pounds per ton of hot metal desulfurized.

Applicable Compliance Method:

If required, compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

d. Emission Limitation:

Particulate emissions from the baghouse outlet from the hot metal desulfurization process shall not exceed 2.3 tons per year.

Applicable Compliance Method:

The following equation shall be used to demonstrate compliance with the annual particulate emission limitation:

$$E \text{ (TSP)} = 0.01 \text{ gr/dscf} \times 48,000 \text{ cf/min} \times 5 \text{ min/148 tons} \times 1 \text{ lb/7000 gr} \times 1 \text{ ton/2000 lbs} \times$$

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amt. of hot metal desulfurized tons/yr

Where

E (TSP) = particulate emission rate (tons/yr);

0.01 gr/dscf = allowable particulate emission rate (grains/dry standard cubic feet);

48,000 acf/min = baghouse flow rate with a grain loading of 0.01 gr/dscf (cubic feet/minute);

5 min/148 tons = maximum desulfurization cycle time of 5 minutes per 148 tons of metal;

1 lb/7000 gr = one pound per 7000 grains;

1 ton/2000 lbs = one ton per 2000 pounds; and

amt. of hot metal desulfurized tons/yr = the total amount of hot metal desulfurized annually in Section A.III.3 (tons/yr).

e. Emission Limitation:

Fugitive particulate emissions from the hot metal desulfurization process shall not exceed 32.2 tons per year.

Applicable Compliance Method:

The following equation shall be used to demonstrate compliance with the annual fugitive particulate emission limitation:

FE (TSP) = amt. of hot metal desulfurized (tons/yr) x 1.09 lbs/ton x 0.03 x 1 ton/2000 lbs;

Where

FE (TSP) = fugitive particulate emission rate (tons/yr);

amt. of hot metal desulfurized tons/yr = the total amount of hot metal desulfurized annually in Section A.III.3 (tons/yr);

1.09 lbs/ton = emission factor for uncontrolled hot metal desulfurization outlined in AP-42, Section 12.5, Table 12.5-1, 1/95 (Fifth Edition);

0.03 = based upon 97% control efficiency of the baghouse for the hot metal

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desulfurization process (3% of particulate emissions from the hot metal desulfurization process are not captured by the baghouse); and

1 ton/2000 lbs = conversion of pounds to tons.

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VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
F012 - Hot metal desulfurization station with baghouse	None	None

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- 1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>
P905 - Pellet/ore receiving and handling (including unloading, conveying, transfer, and screening)	OAC rule 3745-31-05(A)(3)
	OAC rule 3745-17-07(B)
	OAC rule 3745-17-08(B)
	OAC rule 3745-17-11(B)(1)
	OAC rule 3745-17-07(A)(1)

Applicable Emissions
Limitations/Control
Measures

Visible particulate emissions from the baghouse outlets associated with pellet ore rail car unloading, pellet ore transfer at the transfer station, and pellet ore screening shall not exceed twenty percent opacity as a six-minute average.

Particulate emissions from the baghouse outlet associated with pellet ore rail car unloading shall not exceed 0.015 pound per hour and 0.063 ton per year.

Particulate emissions from the baghouse outlet associated with pellet ore transfer at the transfer station shall not exceed 0.016 pound per hour and 0.07 ton per year.

Particulate emissions from the baghouse outlet associated with pellet ore screening shall not exceed 0.021 pound per hour and 0.092 ton per year.

Fugitive particulate emissions from all operations associated with this emissions unit shall not exceed 7.3 tons per year. See A.I.2.a below.

Visible fugitive particulate

emissions from any enclosures associated with this emissions unit shall not exceed twenty percent opacity as a three-minute average.

Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust from this emissions unit. See A.I.2.b and A.I.2.c below.

The requirements of this rule are less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3).

The requirements of this rule are equivalent to the requirements established pursuant to OAC rule 3745-31-05(A)(3).

The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

The requirements of this rule are equivalent to the requirements established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a** The fugitive particulate emission limitation of 7.3 tons per year includes fugitive particulate emissions from the following operations: pellet ore rail car unloading, pellet ore conveying to the ore yard stacker (3 emission points), pellet ore transfer at the transfer station, pellet ore transfer from the yard belt to the stacker boom conveyor, pellet ore yard belt conveyor loading from the reclaim hopper and unloading from conveyor belt P3 to the pellet surge bin (2 emission points), pellet ore conveying from the yard belt conveyor to the surge bin (2 emission points), pellet ore transfer including conveyor belt unloading/loading through the screening station to the surge bin (2 emission points), and pellet ore screening.
- 2.b** Pellet ore rail car unloading, pellet ore transfer at the transfer station, and pellet ore screening operations shall be adequately enclosed and vented to baghouses. The enclosures shall be sufficient to eliminate or minimize, at all times, any visible emissions of fugitive dust from the enclosures.
- 2.c** Pellet ore conveying to the ore yard stacker, pellet ore transfer from the yard belt transfer to the stacker boom conveyor, pellet ore yard belt conveyor loading from the reclaim hopper and unloading from conveyor belt P3 to the pellet surge bin, pellet ore conveying from the yard belt conveyor to the surge bin, and pellet ore transfer from conveyor belt unloading/loading through the screening station to the surge bin operations shall be adequately enclosed. The enclosures shall be sufficient to eliminate or minimize, at all times, any visible emissions of fugitive dust from the enclosures.

II. Operational Restrictions

1. The pressure drop across the baghouse associated with pellet ore rail car unloading shall be maintained within the range of 3 to 7 inches of water while pellet ore is being unloaded.
2. The pressure drop across the baghouse associated with pellet ore transfer at the transfer station shall be maintained within the range of 3 to 7 inches of water while pellet ore is being transferred.
3. The pressure drop across the baghouse associated with pellet ore screening shall be maintained within the range of 3 to 7 inches of water while pellet ore is being screened.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drops across the baghouses associated with pellet ore rail car unloading, pellet ore transfer at the transfer

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station, and pellet ore screening. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturers' recommendations, instructions, and operation manuals. The permittee shall record the pressure drops across each baghouse on a daily basis when material handling operations associated with each baghouse are occurring.

2. The permittee shall perform weekly checks when the emissions unit is in operation and when the weather conditions allow, for any abnormal visible particulate emissions from any non-stack egress point (e.g., windows, doors, roof monitors, conveyors, hoppers, etc.) and from the baghouse outlets associated with this emissions unit. The presence or absence of any abnormal visible particulate emissions shall be noted in an operations log. If abnormal visible particulate emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible particulate emission incident; and
 - e. any corrective actions taken to eliminate the visible particulate emissions.

If abnormal visible emissions are not observed within the first six months of monitoring, the permittee may submit a written request to the Ohio EPA Northeast District Office to reduce the frequency of monitoring.

3. The permittee shall collect and record, for each control system, the downtime of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.
4. The permittee shall maintain records of the quantity, by weight, of all materials processed in this emission unit during each calendar year. The records may be maintained in computerized form.

IV. Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drops across the baghouses associated with pellet ore rail car unloading, pellet ore transfer at the transfer station, and pellet ore screening did not comply with the allowable ranges specified above.
2. The permittee shall submit semiannual written reports which (a) identify all days during which any abnormal visible PE from any stacks serving this emission unit or any abnormal visible fugitive PE escaping from any enclosures associated this emissions unit were observed and (b) describe any

corrective actions taken to eliminate the abnormal visible emissions. These reports shall be submitted to the Ohio EPA Northeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emissions limitations in Section A.I of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

Visible particulate emissions from the baghouse outlets associated with pellet ore rail car unloading, pellet ore transfer at the transfer station, and pellet ore screening shall not exceed twenty percent opacity as a six-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

- b. Emission Limitation:

Particulate emissions from the baghouse outlet associated with pellet ore rail car unloading shall not exceed 0.015 pound per hour and 0.063 ton per year.

Applicable Compliance Method:

- i. If required, compliance with the hourly emission limitation shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).
- ii. The following equation shall be used to demonstrate compliance with the annual particulate emission limitation for the baghouse outlet associated with pellet ore rail car unloading:

$$E \text{ (TSP)} = \text{amt. of pellet/ore processed in tons/yr} \times 0.005 \text{ lb/ton} \times 0.85 \times 0.01 \times 1 \text{ ton/2000 lbs}$$

Where

$E \text{ (TSP)}$ = particulate emission rate (tons/yr);

amt. of pellet/ore processed in tons/yr = the total amount of pellet/ore processed in this emissions unit annually in Section A.III.4 (tons/yr);

0.005 lb/ton = emission factor for uncontrolled pellet unloading/transfer from AP-42, Section 13.2.4, Equation 1;

0.85 = 85% TSP capture efficiency;

0.01 = 99% TSP control device efficiency; and

1 ton/2000 lbs = one ton per 2000 pounds.

- c. Emission Limitation:

Particulate emissions from the baghouse outlet associated with pellet ore transfer at the transfer station shall not exceed 0.016 pound per hour and 0.07 ton per year.

Applicable Compliance Method:

- i. If required, compliance with the hourly emission limitation shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).
- ii. The following equation shall be used to demonstrate compliance with the annual particulate emission limitation for the baghouse outlet associated with pellet ore

transfer at the transfer station:

$$E (\text{TSP}) = \text{amt. of pellet/ore processed in tons/yr} \times 0.005 \text{ lb/ton} \times 0.95 \times 0.01 \times 1 \text{ ton/2000 lbs}$$

Where

$$E (\text{TSP}) = \text{particulate emission rate (tons/yr);}$$

amt. of pellet/ore processed in tons/yr = the total amount of pellet/ore processed in this emissions unit annually in Section A.III.4 (tons/yr);

0.005 lb/ton = emission factor for uncontrolled pellet unloading/transfer from AP-42, Section 13.2.4, Equation 1;

0.95 = 95% TSP capture efficiency;

0.01 = 99% TSP control device efficiency; and

1 ton/2000 lbs = one ton per 2000 pounds.

d. Emission Limitation:

Particulate emissions from the baghouse outlet associated with pellet ore screening shall not exceed 0.021 pound per hour and 0.092 ton per year.

Applicable Compliance Method:

- i. If required, compliance with the hourly emission limitation shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).
- ii. The following equation shall be used to demonstrate compliance with the annual particulate emission limitation for the baghouse outlet associated with pellet ore screening:

$$E (\text{TSP}) = \text{amt. of pellet/ore processed in tons/yr} \times 0.0065 \text{ lb/ton} \times 0.95 \times 0.01 \times 1 \text{ ton/2000 lbs}$$

Where

E (TSP) = particulate emission rate (tons/yr);

amt. of pellet/ore processed in tons/yr = the total amount of pellet/ore processed in this emissions unit annually in Section A.III.4 (tons/yr);

0.0065 lb/ton = emission factor for uncontrolled pellet screening from AP-42, Section 13.2.4, Equation 1;

0.95 = 95% TSP capture efficiency;

0.01 = 99% TSP control device efficiency; and

1 ton/2000 lbs = one ton per 2000 pounds.

e. Emission Limitation:

Fugitive particulate emissions from all operations associated with this emissions unit shall not exceed 7.3 tons per year.

Applicable Compliance Method:

The following equation shall be used to demonstrate compliance with the annual particulate emission limitation from all operations associated with this emissions unit:

$$EA \text{ (TSP)} = ERCU + ECOY + ETTS + ETYB + ELU + ECYB + ETCB + EPS$$

Where

EA (TSP) = total annual particulate emission rate from all operations (tons/yr).

$ERCU$ = particulate emission rate from rail car pellet/ore unloading (tons/yr), calculated using the following equation:

amt. of pellet/ore processed in tons/yr x 0.005 lb/ton x 0.15 x 0.30 x 1 ton/2000 lbs

Where

amt. of pellet/ore processed in tons/yr = the total amount of pellet/ore processed in this

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emissions unit annually in Section A.III.4 (tons/yr);

0.005 lb/ton = emission factor for uncontrolled pellet unloading/transfer from AP-42, Section 13.2.4, Equation 1;

0.15 = 15% fugitive TSP with 85% TSP capture efficiency;

0.30 = 70% TSP building/enclosure capture efficiency; and

1 ton/2000 lbs = one ton per 2000 pounds.

ECOY = particulate emission rate from pellet/ore conveying to ore yard stacker (tons/yr), calculated using the following equation:

amt. of pellet/ore processed in tons/yr x 0.0011 lb/ton x 0.10 x 1 ton/2000 lbs x 3

Where

amt. of pellet/ore processed in tons/yr = the total amount of pellet/ore processed in this emissions unit annually in Section A.III.4 (tons/yr);

0.0011 lb/ton = emission factor for uncontrolled pellet conveying from AP-42, Section 13.2.4, Equation 1;

0.10 = 90% TSP building/enclosure capture efficiency;

1 ton/2000 lbs = one ton per 2000 pounds; and

3 = number of emission points for pellet/ore conveying to ore yard stacker.

ETTS = particulate emission rate from pellet/ore transfer at the transfer station (tons/yr), calculated using the following equation:

amt. of pellet/ore processed in tons/yr x 0.005 lb/ton x 0.05 x 0.10 x 1 ton/2000 lbs

Where

amt. of pellet/ore processed in tons/yr = the total amount of pellet/ore processed in this emissions unit annually in Section A.III.4 (tons/yr);

0.005 lb/ton = emission factor for uncontrolled pellet unloading/transfer from AP-42, Section 13.2.4, Equation 1;

0.05 = 5% fugitive TSP with 95% TSP capture efficiency;

0.10 = 90% TSP building/enclosure capture efficiency; and

1 ton/2000 lbs = one ton per 2000 pounds.

ETYB = particulate emission rate from pellet/ore transfer from yard belt conveyor to boom conveyor (tons/yr), calculated using the following equation:

amt. of pellet/ore processed in tons/yr x 0.005 lb/ton 0.20 x 1 ton/2000 lbs

Where

amt. of pellet/ore processed in tons/yr = the total amount of pellet/ore processed in this emissions unit annually in Section A.III.4 (tons/yr);

0.005 lb/ton = emission factor for uncontrolled pellet/ore unloading/transfer from AP-42, Section 13.2.4, Equation 1;

0.20 = 80% TSP building/enclosure capture efficiency; and

1 ton/2000 lbs = one ton per 2000 pounds.

ELU = particulate emission rate from pellet/ore loading/unloading (tons/yr), calculated using the following equation:

amt. of pellet/ore processed in tons/yr x 0.005 lb/ton x 0.20 x 1 ton/2000 lbs x 2

Where

amt. of pellet/ore processed in tons/yr = the total amount of pellet/ore processed in this emissions unit annually in Section A.III.4 (tons/yr);

0.005 lb/ton = emission factor for uncontrolled pellet/ore unloading/transfer from AP-42, Section 13.2.4, Equation 1;

0.20 = 80% TSP building/enclosure capture efficiency;

1 ton/2000 lbs = one ton per 2000 pounds; and

2 = number of emission points for pellet/ore loading/unloading.

ECYB = particulate emission rate from pellet/ore conveying from yard belt to surge bin (tons/yr), calculated using the following equation:

amt. of pellet/ore processed in tons/yr x 0.0011 lb/ton x 0.10 x 1 ton/2000 lbs x 2

Where

amt. of pellet/ore processed in tons/yr = the total amount of pellet/ore processed in this emissions unit annually in Section A.III.4 (tons/yr);

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0.0011 lb/ton = emission factor for uncontrolled pellet/ore conveying from AP-42, Section 13.2.4, Equation 1;

0.10 = 90% TSP building/enclosure capture efficiency;

1 ton/2000 lbs = one ton per 2000 pounds; and

2 = number of emission points for pellet/ore conveying from yard belt to surge bin.

ETCB = particulate emission rate from pellet/ore transfer from conveyor belt unloading/loading (tons/yr), calculated using the following equation:

amt. of pellet/ore processed in tons/yr x 0.005 lb/ton x 0.10 x 1 ton/2000 lbs x 2

Where

amt. of pellet/ore processed in tons/yr = the total amount of pellet/ore processed in this emissions unit annually in Section A.III.4 (tons/yr);

0.005 lb/ton = emission factor for uncontrolled pellet/ore unloading/transfer from AP-42, Section 13.2.4, Equation 1;

0.10 = 90% TSP building/enclosure capture efficiency;

1 ton/2000 lbs = one ton per 2000 pounds; and

2 = number of emission points for pellet/ore transfer from conveyor belt unloading/loading.

EPS = particulate emission rate from pellet/ore screening (tons/yr), calculated using the following equation:

amt. of pellet/ore processed in tons/yr x 0.0065 lb/ton x 0.05 x 0.10 x 1 ton/2000 lbs

Where

amt. of pellet/ore processed in tons/yr = the total amount of pellet/ore processed in this emissions unit annually in Section A.III.4 (tons/yr);

0.006 lb/ton = emission factor for uncontrolled pellet unloading/transfer from AP-42, Section 13.2.4, Equation 1;

0.05 = 5% fugitive TSP with 95% TSP capture efficiency;

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0.10 = 90% TSP building/enclosure capture efficiency; and

1 ton/2000 lbs = one ton per 2000 pounds.

f. Emission Limitation:

Visible fugitive particulate emissions from any enclosures associated with this emissions unit shall not exceed twenty percent opacity as a three-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the modifications listed in paragraph (B)(3)(b) of OAC rule 3745-17-03.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P905 - Pellet/ore receiving and handling (including unloading, conveying, transfer, and screening)	None	None

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

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None